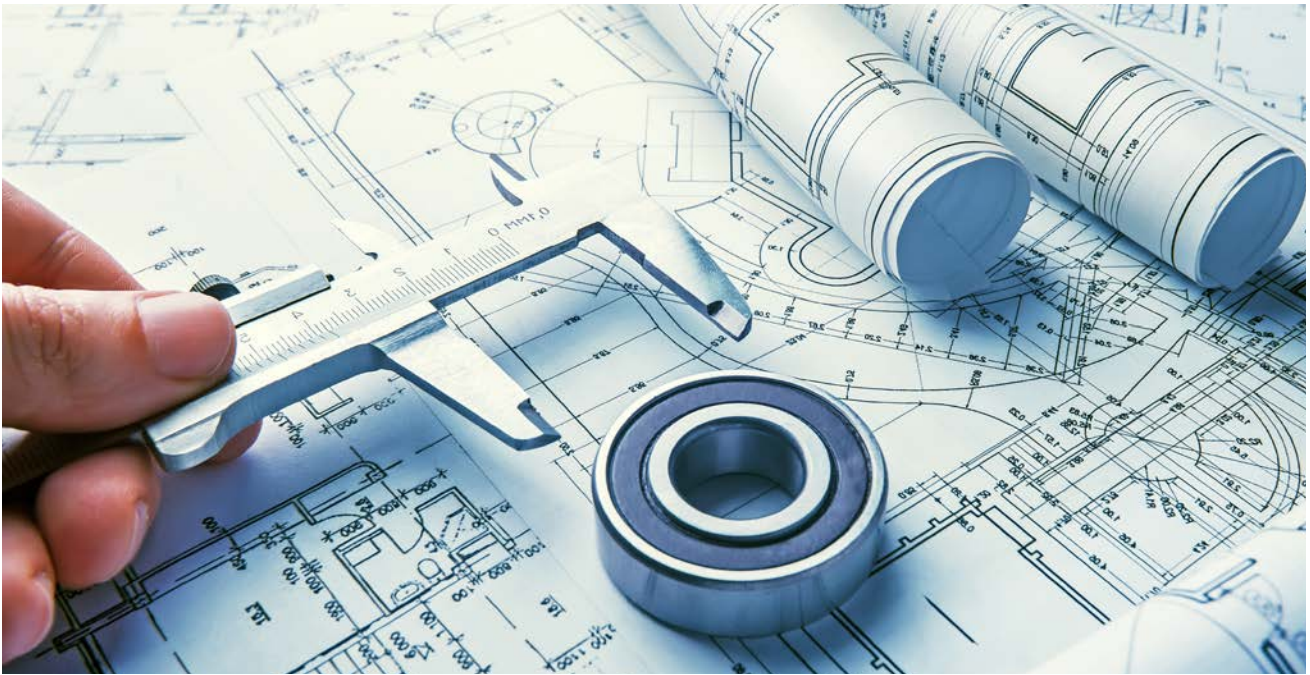


# Incorporating MMM into your Measurement Program for Better Marketing Decisions

A white paper by Analytic Edge







## Introduction

Marketing Mix Modeling (MMM) has been used by CPG and consumer goods and services brands for decades and was, before the digital age, one of the main tools available for holistic marketing measurement. Attribution modeling sprang up with the advent of digital marketing and soon became the preferred technique for digital-native verticals such as e-commerce and mobile app based services where most or all of the user journey takes place online. Attribution was able to provide a very granular, user-level view of which online marketing channels delivered the most conversions. In addition, it was also real-time making it extremely attractive for user acquisition teams to make quick, tactical decisions on allocating marketing spends.

However, both MMM and attribution had their own limitations. Traditional MMM was constrained by the amount of time it took from start to finish – often several months – to generate or update models and derive useful insights. It was not sufficiently “real-time” and did not align with marketing and user acquisition teams’ planning cycles, making the insights unactionable. Brands were also dependent on specialists such as large consulting firms or analytics providers to run MMM, making the process more complex and time-intensive.

Attribution has its own limitations. While it is real-time and granular and can deliver insights on a daily or even an hourly basis, it mostly uses a last-touch model that attributes the entire credit for a conversion to the last media exposure the user had. It is therefore not an accurate measure of the marketing effectiveness of the various channels that are part of a user’s purchase journey. In addition, it is an online-only tool and not suitable for brands whose marketing campaigns straddle both offline and online. But the biggest limitation for attribution in recent times has been the signal loss due to increasing privacy regulations such as the California Consumer Protection Act (CCPA) and General Data Protection Regulation (GDPR), the gradual phasing out of cookies on the world’s most popular browsers, and most recently Apple’s restrictions on IDFA on all iOS devices. These changes have significantly altered the digital advertising landscape, heralding significant disruptions in the way advertisers measure and attribute impact. Without the benefit of granular user-level data, techniques such as attribution will become significantly less accurate than they used to be.

What all this means is that the methods most mobile gaming companies have been using to measure their media spend and its impact (click-throughs, purchases, ROAS) will no longer work as they used to. They will need to move beyond digital-focused attribution models and start measuring their media contribution holistically.



## Next-Generation MMM

The good news is that MMM is evolving and next-generation MMM now addresses many of the shortcomings of earlier solutions.

- Technology, automation and application of AI/ML techniques have made it possible to **update MMM models more frequently** as well as provide a **deeper level of granularity** by combining it with in-market testing.
- Features like automated data ingestion and dashboard reporting have made **MMM results easier for advertisers to understand and digest**.
- MMM is also considered more accurate and holistic than attribution as it **measures incrementality** thereby addressing the flaws of last touch attribution methodology.
- In addition, it **gives digital advertisers insights they have not seen before** such as 'base' sales (from loyal users who will purchase the app or product regardless of advertising), as well as insights into the effect of competition or macro-economic factors on their sales.
- And **perhaps most importantly**, in an era of increasing privacy concerns and regulations, **MMM is a privacy-safe technique** as it uses de-identified and aggregated data only.

All in all, MMM can today be considered a compelling alternative to attribution, even for digital-native or mobile-only brands. In fact, new cost-efficient open source MMM solutions are now emerging which can lower the entry barriers for even smaller companies and apps.

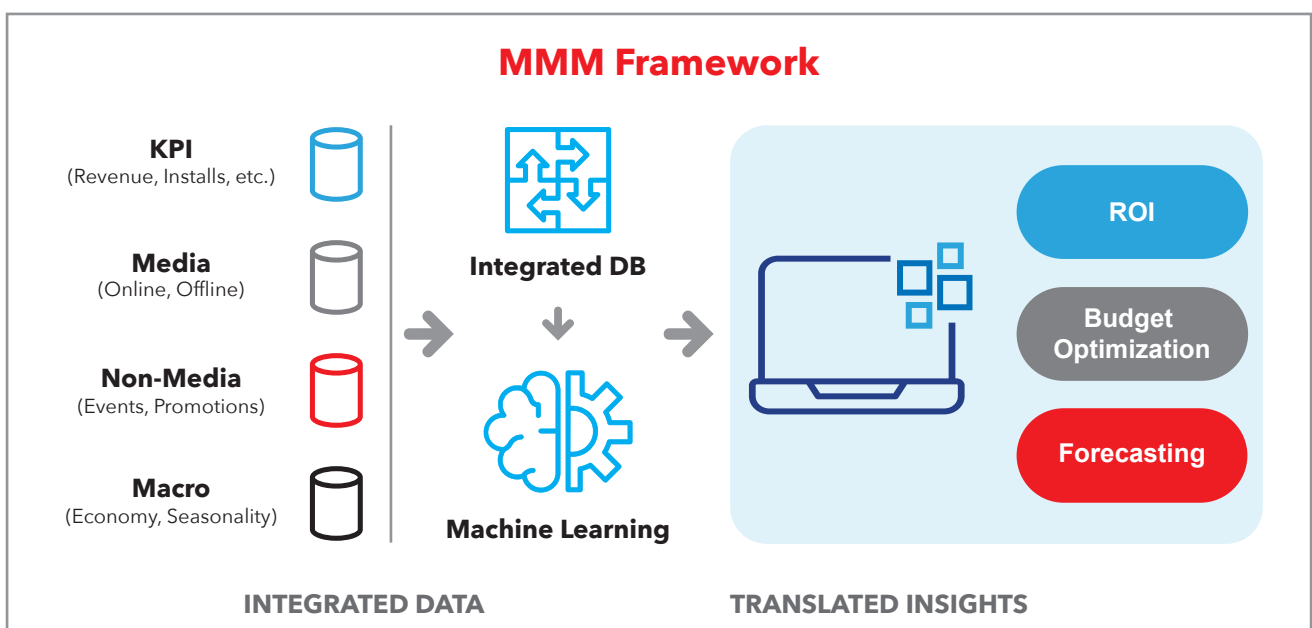


Figure 1: Factors that can be input for MMM



“MMM has been a great help. After iOS14, we could only adjust the budget allocation across channels based on our past experience, which has risk and uncertainty. Now budget allocations can be made based on MMM results, which has increased the accuracy of decisions. Based on MMM results, cross-channel advertising effects can also be measured and we can identify which channels have higher ROI and should get more investments to maximize revenue.”

**Elise Ma**

Advertising Manager, Gume



## The Way Forward for Measurement for Digital Natives

MMM and attribution have so far existed in their own silos. Until now, the choice of which solution to use for measurement was largely driven by the industry you were in. Digital-native advertisers typically opted for the speed and granularity of attribution, while more traditional or omnichannel advertisers opted for the accuracy and wider view that MMM delivered. However, with the improvements that next-gen MMM now offers, digital advertisers can now have the best of both worlds. They can combine and leverage the benefits of both attribution and MMM for much more comprehensive measurement and insights through a future-proof measurement stack.

With access to a holistic measurement stack including MMM, conversion/geo-lift and attribution, digital advertisers are now gaining insights into performance that give them new perspectives on their business. The question that naturally arises is – how should digital advertisers operationalize these insights? While geo-lift is still being explored, there are already examples of how MMM and attribution are being leveraged as part of a unified measurement program. Here are some ways in which digital advertisers using attribution can incorporate and operationalize MMM into their measurement program.

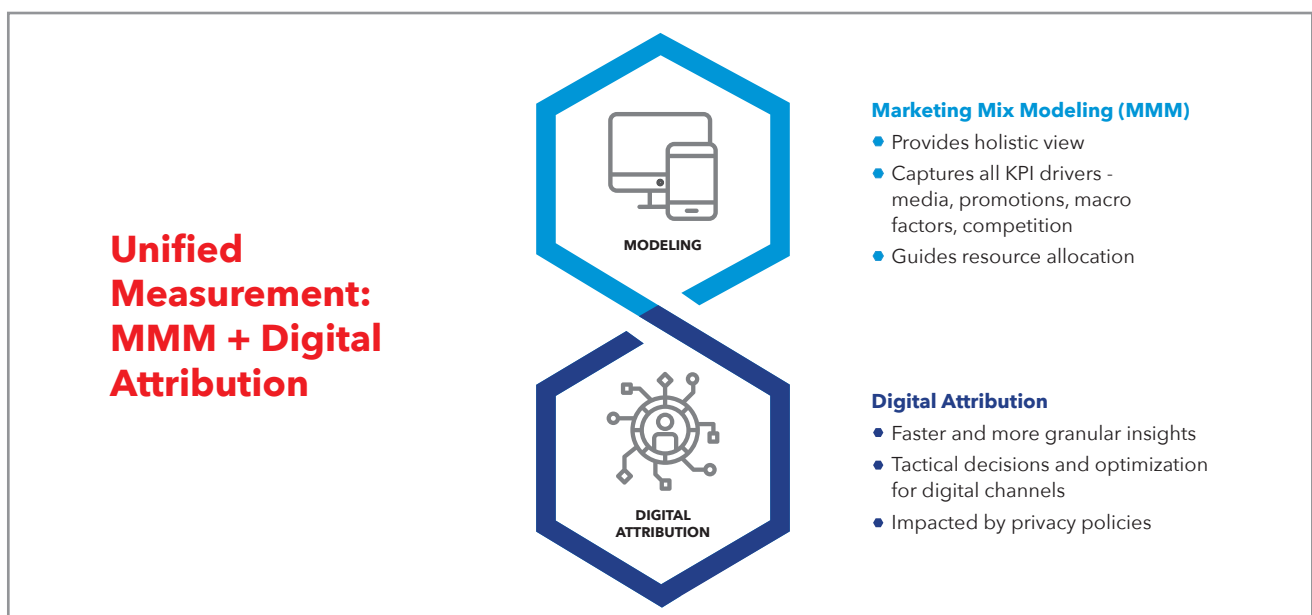


Figure 2: Unified measurement with Modeling and Digital Attribution





## For user acquisition teams



UA teams get daily insights from attribution on how to optimize their media budget. With MMM, they might get a slightly different result in terms of recommendations. UA teams can run tests using MMM recommendations to validate these and check if they translate into incremental revenue. If they do, the question then is how do they apply them on a daily basis? They can do this by calibrating attribution results and deriving the necessary multipliers. Until the next set of MMM insights are available, channel-wise spending can be reallocated along the lines recommended by MMM to observe the results. Another scenario could be when attribution and MMM deliver contradictory insights. This could happen, for example, due to the impact of competitive insights that MMM considers, but are not taken into account by last-touch methodologies. In such cases, UA planners can make informed decisions on spending – taking into account the additional data points from MMM rather than going purely with attribution insights. These are some ways to operationalize the accuracy and holistic view from MMM into daily spending decisions.

## For the marketing organization



The marketing organization can also leverage MMM for the more strategic perspective it provides vis-à-vis attribution. Marketing has a much broader view that covers different game titles, apps, product lines etc. that a brand offers. MMM can be used for portfolio optimization by running it for different products to decide how to allocate budgets across the entire portfolio. It can also help CMOs make a stronger case for increased investment in marketing versus avenues like product updates which may be competing for the same budget. Since MMM takes into account non-media factors such as competition and macro factors, it can better inform the more strategic decisions that marketing must take.

## For the CFO organization



One of the primary objectives of the CFO organization is taking a macro view of resource allocation and maximizing ROI on all spends across functions. MMM can be a valuable solution here as it provides data-based ROI information on marketing spends and investments. CFOs must start thinking about leveraging ROI insights based on MMM to plan better and smarter. MMM can help in not only measuring but also maximizing ROI of every marketing investment. – enabling the kind of data-driven investment decisions that CFOs insist on.

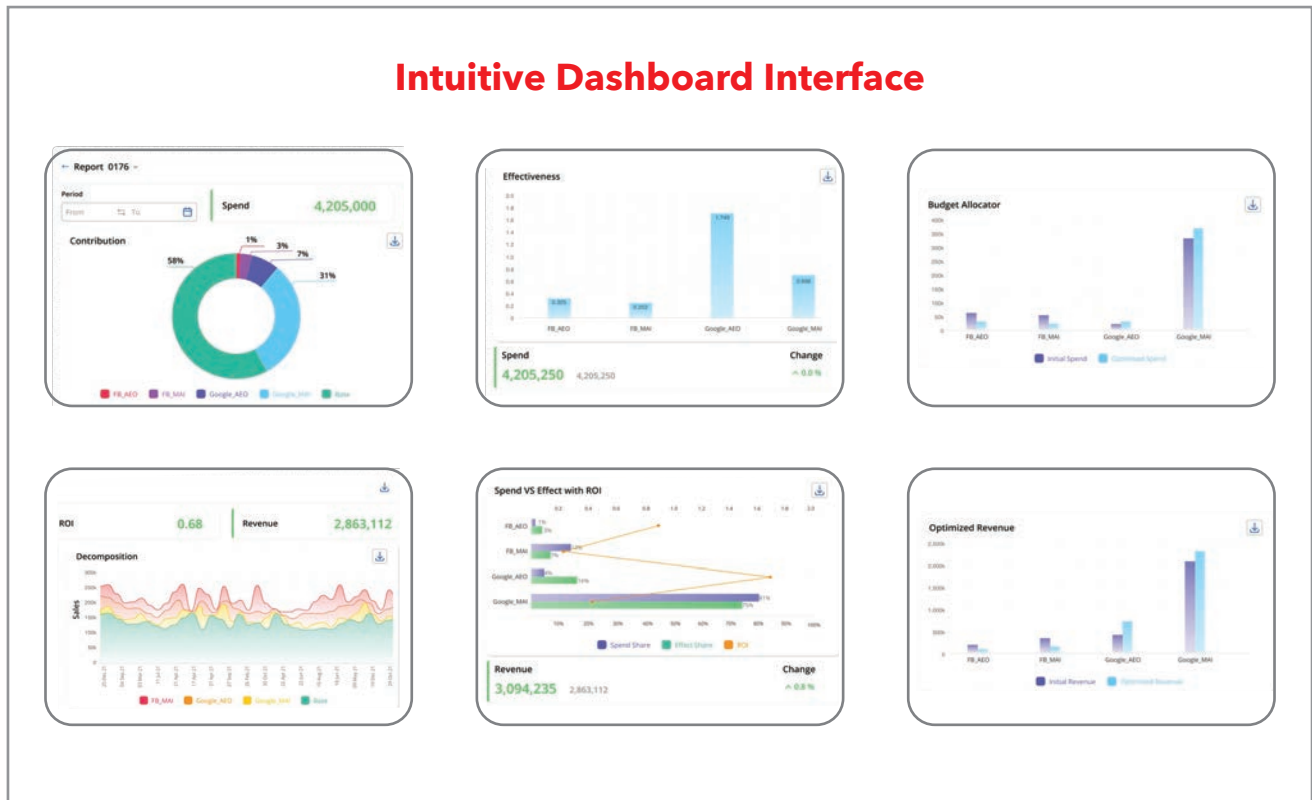


Figure 3: MMM dashboard

## Taking a Unified Measurement Approach

With increasing privacy changes and other factors, digital-native businesses are now looking for alternative measurement methods that are not impacted by these changes. MMM is one such approach because it uses aggregated data, and not user-level data. Additionally, advertisers discovering MMM for the first time are also realizing its broader benefits - measuring offline media investments and the impact of non-media drivers such as promotions, holidays, seasonality, macro factors, base sales and competitor activity.

MMM is a cornerstone of the new future-proof holistic measurement stack. As attribution becomes less effective due to increasing privacy restrictions and more users opt out of tracking, digital advertisers would do well to leverage complementary measurement techniques such as MMM to benefit from a more comprehensive and inclusive view of marketing returns across all their marketing mix activities.

To learn how Analytic Edge can help you build a more effective measurement program that combines the benefits of MMM with attribution, write to us at [info@analytic-edge.com](mailto:info@analytic-edge.com)



“Media mix models (MMM) are here to stay. The evolution in technology and ecosystem changes pushing for higher user-privacy are transforming the traditional MMM. There is a stronger product market fit among performance heavy marketers, who are leaning on it more than ever to find a solution to their measurement challenges.”

**Martina Yordanova**

Manager, Marketing Science  
Gaming APAC, Meta



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## About Analytic Edge

Analytic Edge is a global analytics company that leverages technology and advanced analytics to help companies make data-based marketing decisions.

Our flagship product Demand Drivers™ is a Marketing Mix Modeling (MMM) solution that analyses the historical relationship between companies' marketing spend and sales performance and helps determine where and how to spend in the future to maximize sales. Analytic Edge works with clients across industry verticals such as e-commerce, mobile apps, gaming, consumer packaged goods, retail, automotive and many others. The company has offices in Singapore, India, US, Mexico, Brazil, UK, China, Japan, South Korea, UAE and Australia.

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