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Marketing Mix Models “On Demand”

In-house marketing measurement for scale, cost effectiveness and most importantly - inclusivity!

Meta

meta.com

Contents

Introduction

A new generation of Marketing Mix Modelling SaaS (Software as a Service) solutions enables marketers to address major challenges of this technique and bring MMM in-house for better speed, scalability and cost effectiveness. There is one more aspect that self-serve tools bring to the MMM space - much higher inclusivity.

Many studies and research provide strong proof points on the better performance of diverse teams*. As long as MMM is a statistical technique that is used to quantify the impact of marketing and non-marketing activities on sales, revenues, margins or other business outcomes it was limited to those who could use R or Python. The SaaS model can change that for good by opening doors for non-statisticians to build and use this advanced measurement technique for better decision making.

See HBR Teams Solve Problems Faster When They’re More Cognitively Diverse by Alison Reynolds and David Lewis

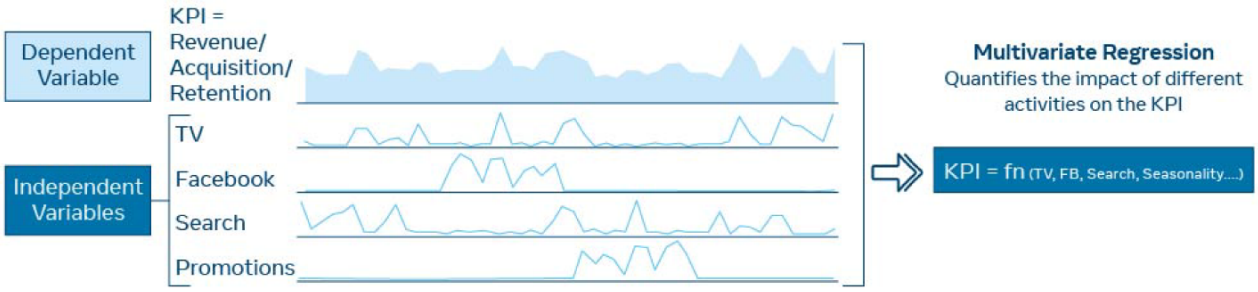
Background

Marketers and brands today have an urgent need for solutions to help them quantify the impact of all of their marketing activities and optimize marketing spends. Marketing Mix Modeling (MMM) is a technique which can address this need. It is a statistical technique that can help marketers quantify the impact of marketing and non marketing activity on sales. In addition, it is privacy-friendly and highly resilient to the changes occurring in the digital advertising ecosystem.

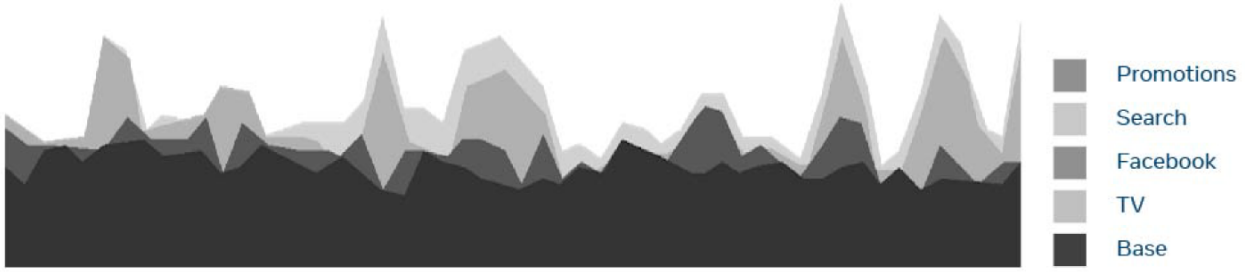
However, a limitation of traditional MMM was the complete dependence of brands on external specialists such as large consulting firms or analytics providers. This was time consuming and expensive, resulting in organizations restricting themselves to running it less frequently and only for their largest brands and markets. Scaling MMM across the organization or updating models regularly was not financially feasible and resource intensive.

With many brands having their own data science teams along with significant investments in cloud computing and data analytics, these solutions allow internal teams to run MMM models in-house and on-demand. It also allows them to scale MMM programs with less effort, to cover more of their overall marketing budget by keeping costs down, and to analyze their own data and keep it in-house.

Marketing Mix Model Overview



Attribute sales to different marketing activities



Quantify marketing contribution to Sales and ROAS

Use MMM outcomes for future planning

While MMM has been used by consumer brands for decades, there are challenges which limit its viability for brands looking for speed, scale and cost-effectiveness in their marketing measurement and planning solution.

TIME AND RESOURCE INTENSIVE

Marketing Mix Models can be very resource intensive both from an investment as well as time-to-insights perspective. The high levels of investment can make it very difficult to scale to a large part of the business.

NOT ‘ALWAYS-ON’

The time required to run a traditional MMM can be as much as 3-6 months. Since they have traditionally been prohibitively expensive to update regularly, they are often used as an annual exercise and cannot keep pace with the business where decisions need to be made rapidly.

COMPLEXITY AND VALIDITY

MMMs use complex econometric modeling to arrive at the outcomes and as such it may seem like a black box approach.

LEAD TIMES AND IMPACT

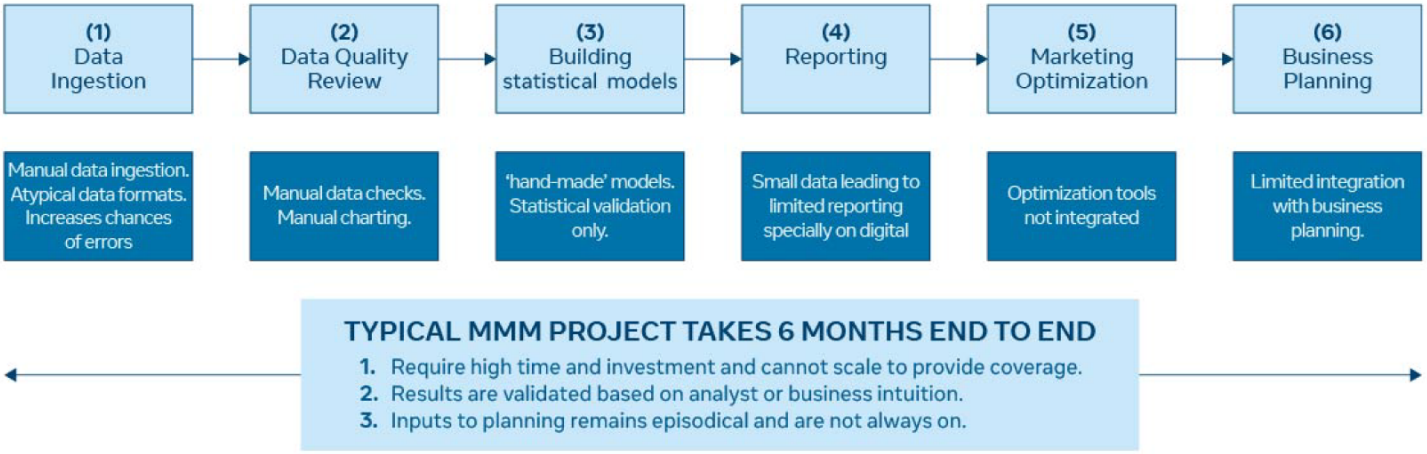
Given the long lead time from project to results, MMMs can lag behind and not get integrated into the business planning process.

LIMITED TO ANALYSTS

Being a complex statistical technique based on data sets, MMM was originally limited to analysts and data scientists as it required programming skills in R or Python.

The next generation of MMM solutions that are now available have evolved to address these specific challenges. With the increase in data science resources and computing power, new MMMs now offer capabilities to develop and run models in-house and on demand making it feasible to scale MMM across the organization.

Marketing Mix Model Stages



MMM SaaS (Software as a Service)

The MMM Software as a Service (MMM SaaS) program from Meta is specifically designed to help advertisers accelerate their journey in this space. This program helps advertisers adopt an incrementality based planning process through the integration of self-serve MMM platforms or tools. The program enables the following:

AUTOMATION

The tools are designed for automatic integration into the advertiser and publisher data ecosystem to allow seamless flow of data reducing effort.

SPEED

The MMM processes are automated and scheduled allowing for faster project turnaround and resource management.

OPEN BOX APPROACH

The analytics team has a full view of the workings in the box increasing transparency and trust.

FORWARD LOOKING

The tools will have inbuilt scenario planning tools which allow businesses to use the outcomes for future planning.

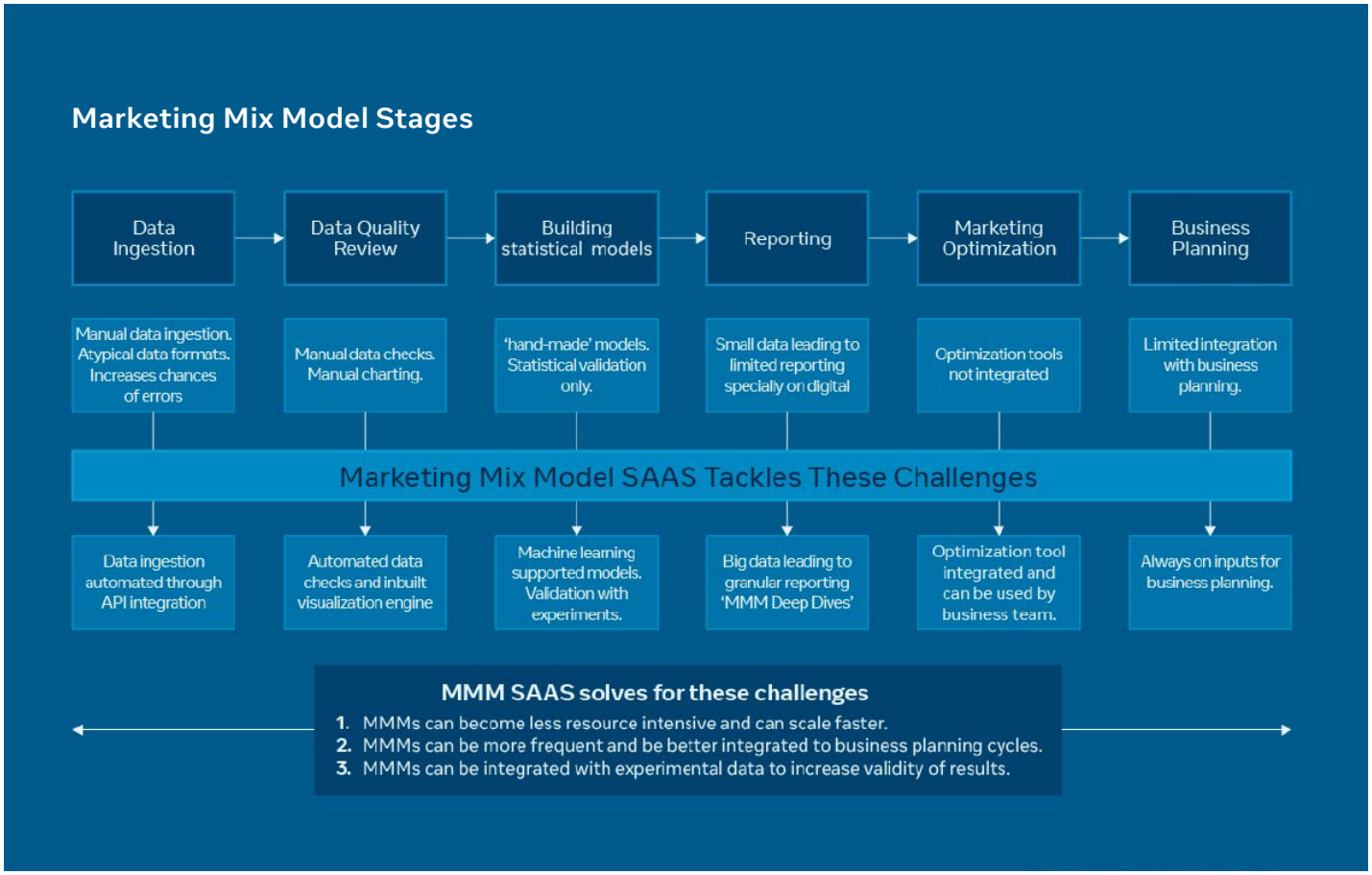
INTELLIGENT

The integration of machine learning techniques reduces analyst effort in decisions increasing speed to insights.

AND INCLUSIVE

User interface-based platforms make modeling much more democratic and inclusive. A wider set of teams such as marketers with analytical skills can participate in modeling, improving the process as well as the results. This also opens up new growth areas for marketers and analysts in the teams.

In summary, the key objective for MMM SaaS is to help advertisers move towards always- on, scalable X-publisher measurement and planning.



“As the Marketing Science team, our mission is to help businesses grow by transforming their marketing practices to be grounded in data and science. With increasing interest from advertisers to run Marketing Mix Modeling in-house, we are partnering with them to find solutions that address not only their business needs but also organizational challenges such as limited data science resources. MMM SaaS solutions with user interface-based models can unlock significant potential and make access to MMMs more democratized.”

Gabriel Matwiejczyk, Marketing Science Partner, Meta

MMM SaaS Application: Unilever Poland

Unilever is a British multinational consumer goods company with more than 400 brands across the categories of Foods & Refreshments, Home Care, and Beauty & Personal Care. With products sold in over 190 countries, the company is among the largest advertisers in the world.

Unilever Poland wanted to explore how the sales of various brands could be increased by leveraging MMM to optimize advertising spends. With a talented team of data scientists in-house already building MMM models, the company wanted to leverage the MMM platform to provide further capacity and standardization to the modeling process. The in-house team was then able to rapidly build capability, have full visibility of the modeling approach, and cost-efficiently scale MMM to be able to cover more of their brands and spend.

To help Unilever continue to scale marketing measurement using MMM technology, Meta and Unilever collaborated on the MMM SaaS program using Analytic Edge’s Marketing Mix Modeling SaaS platform. Using the Rexona women’s deodorant brand as a test case, Analytic Edge conducted a 15-hour training program for the Rexona brand team, covering all the modules of its platform and familiarizing them with the platform features and the MMM process. Analytic Edge also conducted hands-on marketing mix modeling training over a 6-week period with the Unilever Data Driven Marketing team using the platform. This gave the team actual hands-on experience in developing an MMM model using in-house brand data.

They were able to estimate the influence of different marketing activations on Rexona brand sales, resulting in media budget optimisation and increased sales.

MMM SaaS results for Unilever

The MMM for Rexona analyzed numerous variables including price, distribution, media, promotions, weather, holidays, seasonality, macroeconomics, competitors media activity and Covid influence. The work enabled decisive marketing investment decisions to be made for future advertising investment including:

01

Significant increase of digital spend’s share in total media mix vs TV

02

Recommended weekly laydown and weights by media type

03

Decay rates by media type

04

Confirmation that social media can deliver volume lift too, not just strong ROI

05

Overall forecasted brand sales lift of 1% and 16% increase in media-driven sales

Opportunities created for Unilever Poland by MMM SaaS

The MMM SaaS has created the following opportunities for Unilever Poland:

GREATER INCLUSIVITY

A user interface-based tool for running MMMs vis-à-vis earlier solutions that required programming skills, enables a wider and more diverse set of teams to participate in the modeling process, creating additional growth opportunities for these teams. Marketers with analytical skills can now build models without knowledge of programming languages. Unilever believes this democratization of MMM will help build competitive advantage.

IDENTIFY OPPORTUNITIES FOR MEDIA INVESTMENT

Post the MMM, the Unilever team was able to understand the media efficiency of different media channels and marketing spends with respect to Rexona. The budget split was changed significantly in favor of digital media with insights on optimal weekly weights. Insights were also gathered on the synergy between promotions and media.

SCALE

With the success of the MMM SaaS Rexona project, Unilever has started scaling and measuring marketing performance for many more of their top brands at an affordable cost. The company is also applying MMM SaaS based measurement and planning to other markets.

ANALYTICS EXPANSION

The value created by the MMM SaaS tool has enabled Unilever Poland to expand their analytics team and establish an in-house MMM team. This team will be the key POC of MMM SaaS and future data analytics and measurement work within the organization.

“The Demand Drivers platform unlocked new potential for people who have not been involved in statistical modeling before, but have analytical skills that they want to actively use on a bigger scale. Those individuals were able to learn how to conduct MMM without programming knowledge. The dedicated set of training sessions helped them get up to speed with the modeling concepts and data interpretation. I feel more confident that a wider team can successfully be included in data-modeling projects in the future and a technical entry-barrier has been almost removed for analytical thinkers.”

Justyna Bołtryk - Pieckowska, DDM Audience Activation Lead EE, Unilever

“From the perspective of a Data Analyst who has done a lot of MMMs in the past, I can say that the Demand Drivers platform has all the necessary features to conduct and implement the study. In addition, the basic and hands-on training allowed us to incorporate more people into the process and with that to broaden the knowledge of the whole team. The results were in line with what we are observing on other brands as well. Increasing the share of digital media in budgets yields higher media ROIs without losing incremental sales generated by marketing. Those results will be used as a leverage to go further into the digital world in the future.”

Piotr Kociszewski, Data Analyst EE, Unilever

The Future of MMM SaaS

Further innovations are underway that will make MMM on SaaS platforms simpler, automated and AI-driven. This will enable widespread adoption of MMM for both large and small companies, who couldn’t access MMM before or couldn’t scale MMM across their whole business.

And within those companies (big and small) a wider set of stakeholders of varying cognitive diversity, different educational background or skillsets can become a part of the modelling project and by that be included in the decision making process. As a result, more diverse teams can participate in modeling, improving the process, insights as well as the results.

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