REPRISE

Attribution is (almost) dead, MMM to the rescue

Why do we need Attribution?

In football (soccer), the striker gets all the glory, but in order to win, every player on the field plays a role in their team's success. Was it the striker's fine finish that accomplished the win on their own? Or the midfielder's through-ball that set them up for the goal?

The same is true for marketing Attribution. Just because one touchpoint (like a click) gets a lot of attention doesn't mean this particular touchpoint is the most important of all. In the same way, it may seem obvious to give all the conversion's credit to the last ad a person saw, but what about the brand awareness campaign from months ago? Or perhaps it was the well-timed email blast that reignited your brand's offerings and back to top of mind?

When done correctly, Attribution can help marketers understand which channels are most effective at driving conversions.

Attribution then and now.

As the internet became more sophisticated in the early 2000s, cookies began to play a role in online marketing.

Cookies and personal identifiers such as IDFA (a random device identifier assigned by Apple to a user's device) used to store consumers' digital footprint across the web and gave attribution tools an end-to-end view. However, these technologies are no longer the bedrock of digital advertising made clear in January 2020 with Google's announcement to change how Chrome handles privacy, with further updates in March 2021 and July 2022. Apple also evolved their position on privacy, doubling down on their App Tracking Transparency framework along with the anticipated iOS14.5 update in the first half of 2021.

Consumers' privacy and rights to choose how their data is shared takes precedent in all of these changes, forming the basis for regulations such as GDPR and ePrivacy regulations in Europe, CCPA in California, and Brazil General Data Protection Law, all aimed at further protecting consumers' privacy.

As a result, existing attribution solutions have an increasingly incomplete view of the sequence of touches that leads to conversion. If unprepared, advertisers risk having to rely on antiquated techniques (i.e., last touch attribution) and lose perception of the top of the funnel.

However, this also presents an opportunity for marketers to rethink attribution in a cookieless world.

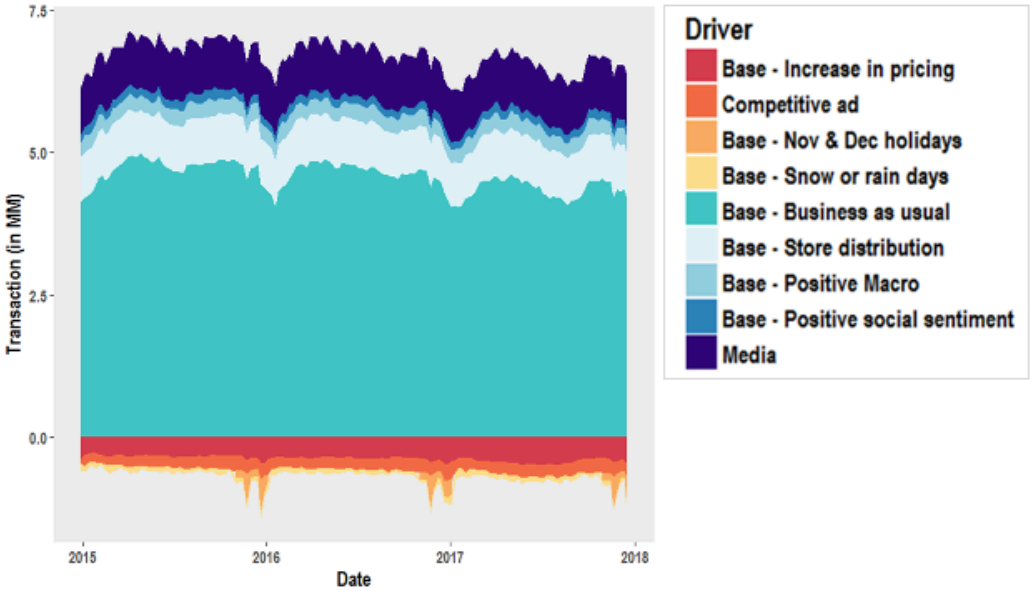
Marketing Mix Modelling to the rescue.

In the early days of marketing, campaigns were planned and executed without much data to support decision making. Marketers relied on their intuition and experience to make decisions about which channels to use, and what message to communicate. This approach may have been effective in a world where there were few channels and little competition for budget.

As the number of channels increased and competition became fiercer, marketers needed a more systematic way to plan and optimize their campaigns. They turned to marketing mix modelling (MMM), an approach invented in the 1960's that uses historical data to identify the most effective combination of channels, budget, and message for a given campaign.

Decades later, MMM is still the backbone of tactical decisions for traditional media. With the growing signal loss in digital media, advertisers are grasping back at this age-old technique to give answers where digital attribution is increasingly falling short.

What is MMM?



MMM uses statistical techniques to isolate the relationship between media activity and sales. The objective is to replicate historical business metrics by building an equation using available data on underlying drivers over time. This allows us to pull apart and quantify the impact of media versus other influences (e.g., seasonality, promotions, etc.).

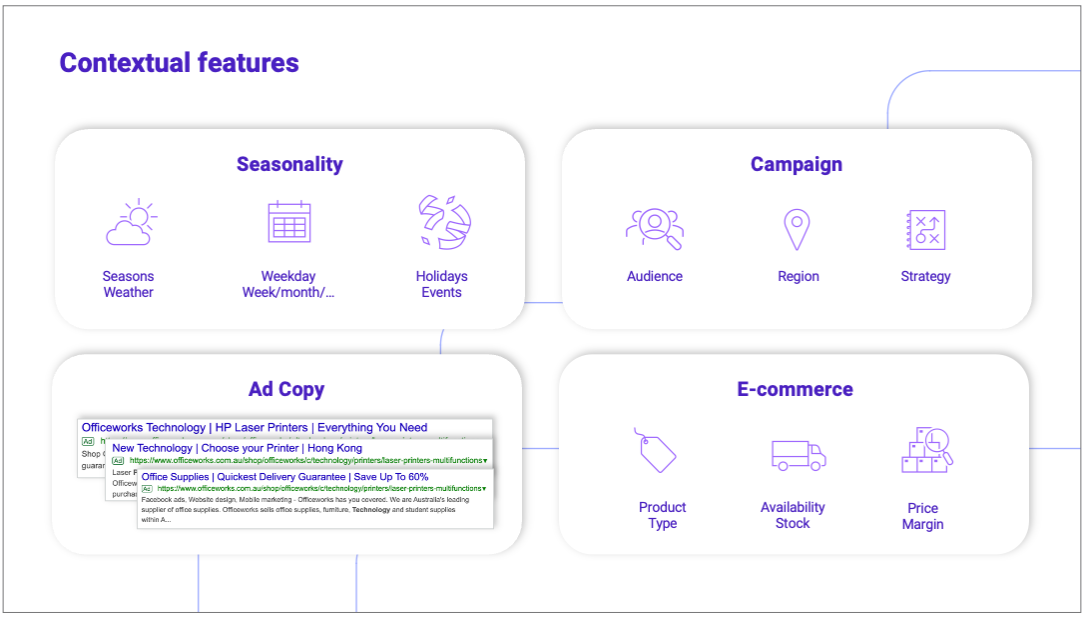
MMM in today's dynamic world.

Traditionally, marketing mix modelling is a strenuous process as it requires analysts to comb over multiple data sources to understand the relationships between different marketing activities and sales outcomes. MMM often relies significantly on the expert & domain knowledge of these analysts.

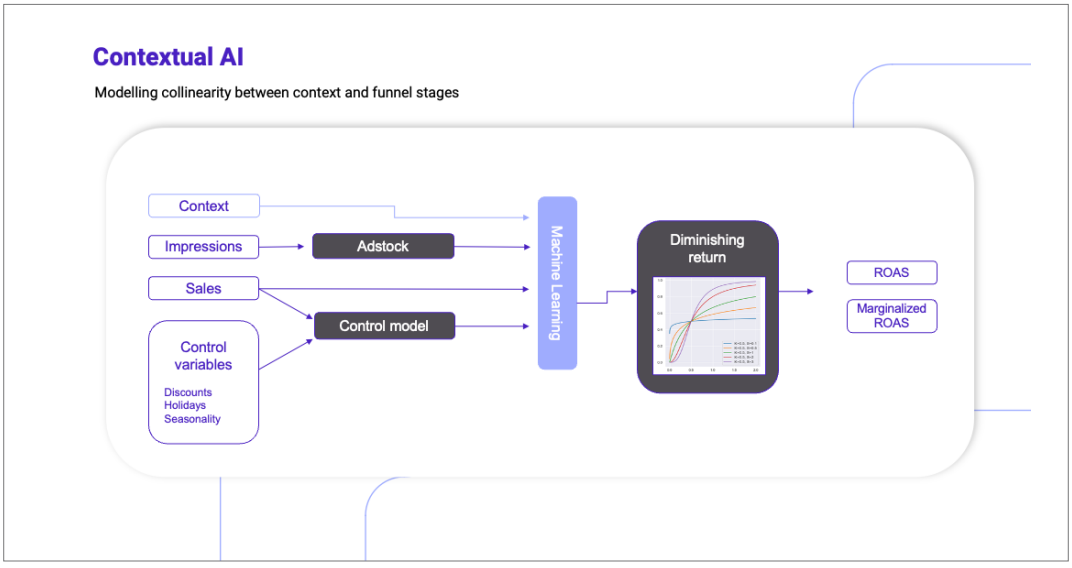
MMM's were not initially designed to answer the granular rapid-fire questions that digital marketers face day-in-day-out. Several successful efforts have been made in recent years to advance and speed up MMM modelling.

Introducing contextual AI.

Given sufficient amounts of historical data, recent efforts have significantly reduced the required manual modelling to get MMMs right. As the dynamics at play within a marketing mix evolves, so too must the model we use to understand it. A single MMM can't be expected to capture all dynamics, which is why multiple statistically valid models can be found to explain the same.



There are many different dynamics, or contexts as we call them, that can impact our marketing efficiency as you can see above. The geographical area of a campaign is an obvious factor, but so is the audience that is being targeted and the digital strategy employed (e.g., conversion, consideration, or awareness). For e-commerce we might also think about product stock – it's hard to buy when there's no supply – or even the price and product type.



In order to model these new contextual features we have augmented a common econometrics model used for MMM with AI, i.e. machine learning.

Instead of learning one model, machine learning will learn many different models for each context. This makes it more efficient at learning from historical data, even when the world has changed a lot since (hello pandemic). While it won't be directly incorporating expert knowledge, it will learn from the variations in media allocation in the past, thus learning from past expert decisions.

This allows us to bring the accelerating advances of the AI industry to marketing attribution. The input data doesn't have to be limited to one market or a single business unit either. By training cross market and product categories, the requirements on historical data can be significantly reduced. Normally you'd need to have a few winters to learn how winters impact your marketing, but with AI we can take these different winters from different markets and learn the core impact behind it.

The contextual AI also ensures the process is completely automated. We can now update the model every week or even every day.

Conclusion.

The world of digital advertising is evolving, attribution needs to evolve with it. Attribution is in a downward trend, making it harder to quantify the true effectiveness of marketing spend. We believe contextual AI is a first step back of many. Contextual AI requires less data, has a quicker turn-around while reducing manual effort significantly! By bringing back a picture of the digital upper funnel, advertisers can rest easy that it's there to stay.

Contextual AI enhances but doesn't replace existing MMM. When combined with classic MMM, you really have the best of both worlds: frequent automated insights and long-term strategic expert knowledge.

At Reprise we have incorporated contextual AI on top of Meta's MMM framework called Robyn in our new Attribution product called Balance. Project Robyn is an open-source code semi-automated MMM package developed by Meta's Marketing Science team to perform end-to-end experiment-calibrated MMM.

Reach out to us for more information on how Balance can help solve your attribution needs!

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