Decision-Making Processes in Marketing Mix Modelling: A Survey of MMM Providers

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Abstract
This article presents directional findings of an exploratory survey conducted with n=7 Marketing Mix Modelling (MMM) providers that are part of Meta's MMM badged partner program[1], exploring factors influencing their model selection processes. Responses were gathered to understand the decision-making criteria used when choosing the final model, especially in cases when the final model differs from the one with highest statistical fit. This small sample survey also examined how regularly these MMM providers would evaluate MMM decomposition against business plausibility and logic and whether specific formulas or heuristics were utilized for this purpose.

Introduction
Marketing Mix Modelling (MMM) remains an important tool in contemporary marketing analytics, providing valuable insights into the effectiveness of various marketing strategies and tactics. Understanding the nuances of model selection and the parameters considered therefore is crucial for enhancing the precision and applicability of MMM outcomes. A short qualitative survey (see Appendix) was answered by n=7 MMM experts, all of whom are part of Meta's MMM badged partner program. The survey was designed to find responses about their practices for model selection and the evaluation of MMM results against business plausibility. Participants were also asked about the prevalence of specific formulas or heuristics guiding their assessment of business logic.

Results
The results are derived from a small sample but yield a highly consistent picture. Contrary to an often found emphasis on statistical fit, *all* of the respondents prioritize evaluating the model against business logic and plausibility.

Five out of seven respondents stress the importance of ensuring consistency of results with previous models. Additionally, two of the partners consider client confidence, experiments, and industry-specific norms when choosing the final model, while one always seeks further expert opinions before selecting the final model.

Moreover, six out seven regularly evaluate MMM decomposition against business plausibility and logic, even if it implies selecting a model with lower statistical fit. MMM decomposition refers to a key output of MMM, detailing model attribution of outcomes to individual variables, typically presented as a stacked chart showing absolute contributions of each variable over time. Interestingly, three out of seven respondents employ specific formulas or heuristics for evaluating model output against business logic, whereas the remaining four (out of seven) rely on a blend of expertise and experience.

Conclusion
This small exploratory survey sheds light on the multifaceted decision-making processes of MMM providers, emphasizing the importance of business logic and practical applicability of models. Results suggest that expert practitioners are inclined to prioritize business plausibility well above statistical precision and fit.

1 - Meta MMM partner directory [link] accessed in October 2023

Survey Instrument and Responses

1. Which factors do you typically consider when selecting the final model, especially if it differs from the best fitting model (with the best statistical quality)?	*Provider 1*	*Provider 2*	*Provider 3*	*Provider 4*	*Provider 5*	*Provider 6*	*Provider 7*	Sum (n=7)	*%*
A: We always choose the model with the best statistical quality								0	*0%*
B: Compare it to experiments or other more accurate non-MMM measurements (if available) and choose model closer to it	1						1	2	*29%*
C: Evaluate the business logic and assess the plausibility of the results, including the signs and magnitudes of coefficients	1	1	1	1	1	1	1	7	*100%*
D: Ensure consistency of results with previous models (if available)		1	1	1	1		1	5	*71%*
E: Consider the client's confidence in the results			1	1				2	*29%*
F: Consider our own norms and values that are typical in specific industry				1			1	2	*29%*
G: Seek expert opinions from senior modelers or field experts				1				1	*14%*
H: Other factors (please specify)	1				1			2	*29%*
2. How frequently do you evaluate the MMM decomposition result against business plausibility and logic, even if it would mean selecting a slightly less statistically superior model?									*93%*
A: Always (100%)	1	1		1		1	1	5	
B: Mostly (75%)			1		1			2	
C: At least half of the models (50%)								0	
D: Rarely (25%)								0	
E: Never (0%)								0	
3. Do you utilize any specific formula or heuristic for evaluating business logic?									
A: Yes, we use a specific formula or heuristic	1					1	1	3	*43%*
B: No, it's a combination of expertise and experience		1	1	1	1			4	*57%*

1 - Meta MMM partner directory [link] accessed in October 2023