

Spend Recommender + KPI forecaster build on behalf of a performance branding company for its clients.

Introduction

Our client, world's first performance branding company collapses the silos between performance and brand to unify marketing objectives, targets, & strategy. Our client's clientele includes US, UK and Canada regions with brands spanning across industries like FMCG, Clothing, Jewellery, Healthcare, Watches, Lifestyle, Pet Foods etc.

Client wanted to build a tool that measures the media impact on business level metrics using statistical analysis and machine learning. It should assist brands in gaining insights into the impact of

media spend on overall business performance metrics. This valuable insight empowers them to efficiently allocate media channel budgets and obtain forecasts for future values of these business metrics.

The developed tool offers the flexibility to optimize for specific KPIs at different stages of the sales funnel, whether they are related to raising awareness or driving conversions.

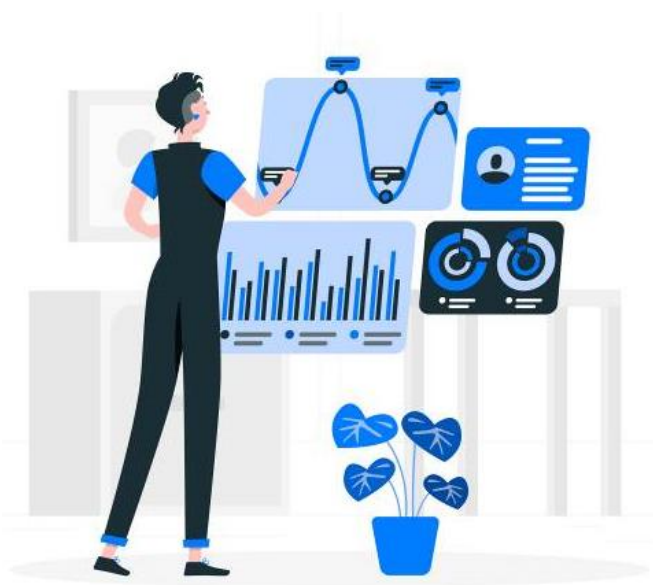
Implementation

Transorg Analytics (on behalf of our client) developed a market mix model and a KPI forecaster (both embedded in one end to end framework) on top of it by using advanced analytics and machine learning techniques covering at least 8 brands across US, UK and Canada regions to provide granular level insights at the 'Country X Brand X Sub-brand X level and at the 'Channel (platform plus audience) X' level.

Models are refreshed weekly to remain calibrated with updated spend budgets and most recent actuals.

For each brand the input data used for building the models included:

- Channel wise spend on a weekly basis.



- Weekly total business revenue
- Promotional Periods
- Monthly spend budgets.
- Monthly revenue goals (just for comparison)

Modelling (MMM)

1. Analyse historical spend distributions and their contribution towards total business revenue.
2. Manual weights can be assigned towards specific channels and months based on previous year data.
3. Output the spend recommendations based on MMM model on a monthly/daily level.

Modelling (Forecasting)

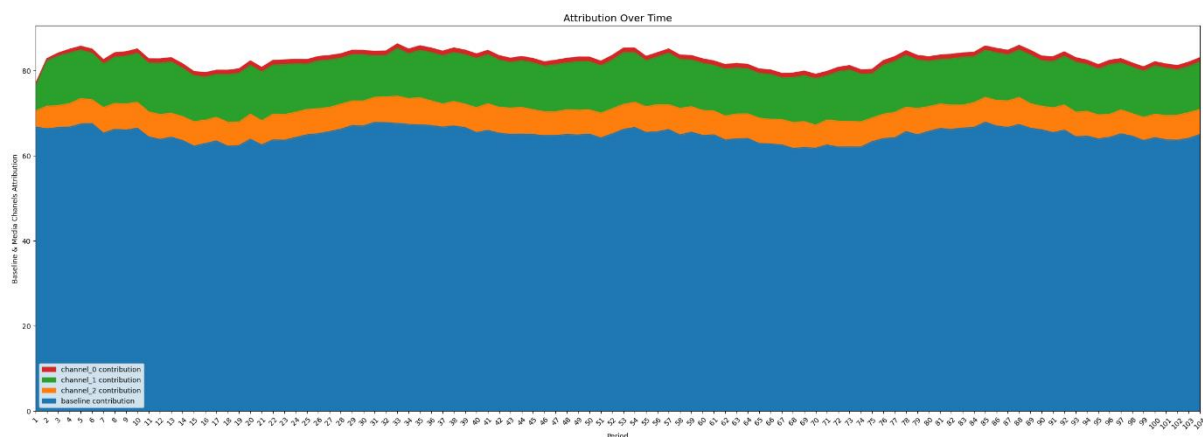
1. Take the spend recommendations of MMM model as an input.
2. Generate weekly revenue forecasts with in-built cross validation.
3. Interpolate forecasts into monthly and daily level.

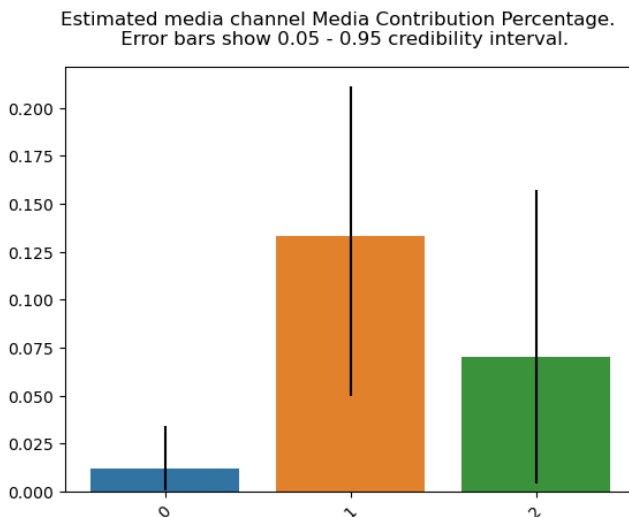
Detailed Analytics Approach

A Marketing Mix Modelling (MMM) solution was built using advanced ML to measure advertising effectiveness and inform budget allocation decisions across media channels.

This allowed us to below these 3 questions.

- Estimate the optimal budget allocation across media channels.
- Understand how media channels perform with a change in spend.
- Investigate effects on your target KPI (such as revenue) by media channel.





The output of MMM is a recommended spend distribution which acts as an input to forecasting model. Brands provide their monthly recommended budgets as well. These two things are factored in while building forecasting model. The forecasting model uses advanced forecasting methodologies to generate projections of KPIs like revenue, traffic etc. over spend distributions. Other exogenous variables include promotional periods and holidays.

The forecasting model has inbuilt cross validation approach which makes very accurate for future projections.

The final output is put into a dashboard for consumption of brands. It has a wholesome view which shows channel wise recommended spend patterns as well as KPI forecasts they can expect based on the spend budgets they gave provided earlier.

Impact

Below are the scenarios where the tool would have a tremendous impact and can be used effectively: -

- Scenarios wherein long-term monthly budget planning by channel (platform plus audience) is required.
- Performing gap analysis i.e. assessing whether the media spend budget, if allocated optimally, is good enough to meet the monthly/quarterly business goals.
- In terms of KPI forecasts, giving a view of most ambitious (upper bound), most conservative (lower bound) and average goal, giving them a flexibility to make more accurate decisions.