# Google Attribution 360 incorporates external data to improve attribution and optimization models

Offset the non-marketing factors that impact your marketing



#### Variable Definitions:

t

= time of year

#### Co(t)

- baseline conversion volume with seasonality
- = seasonality index \* Constant

This index should not change much year to year. The constant can be specific for each year and reflect year over year growth.

#### Cm(t)

- = incremental conversion volume due to marketing
- = a function of marketing spend

#### C(t)

= total conversion volume = Co(t) + Cm(t)

Normalized Conversion Volume = conversion volume for that day/ average daily conversion volume

#### Normalized Spend

= total spend for a day/ average daily spend

One could use multiple years' conversion and marketing spend data to estimate Co and the weight for each marketing channel or dimension.

Marketers struggle to understand how uncontrollable, non-marketing factors influence marketing effectiveness. It is difficult enough to see the big picture of the customer journey across online and offline channels. Taking outside influencers into account makes the picture even more complex.

What external factors might be impacting your marketing? The usual suspects are:

- Seasonality
- · Economic indices
- Weather
- Monetary exchange rates

Google Attribution 360, part of the Google Analytics 360 Suite, can help. External data sets regarding non-marketing factors like those listed above can be incorporated in attribution analysis. Measuring and offsetting the impact of non-marketing factors gives you better optimization recommendations.

## Measuring external factors is critical

External factors can have profound effect on marketing effectiveness, efficiency, and resulting revenue. Accounting for these impacts can offer optimization recommendations.

Consider a tax software company that spends hundreds of millions on reaching consumers each year. Tax preparation is top-of-mind before and during tax season, so 90% of this brand's ad spend is concentrated into just one quarter.

Though the company knows seasonality drives conversion, the marketing team needs to understand whether their strategy is sound, and whether their efforts are increasing market share versus competitors. With Attribution 360, data from previous years can concretely improve this year's spending strategy.

# Finding trends and correlations

To handle external data such as seasonality, Attribution 360 simply correlates an index with a defined key performance indicator (KPI). This correlation may be direct or inverse.

In the case of the tax software company, the data index is seasonality and the KPI is total conversions. Attribution 360 creates a seasonality index by dividing normalized conversion volume by normalized spend.

Seasonality Index (t) = normalized conversion volume (t) / normalized spend (t)

Then, the calculation is averaged across several years worth of data, taking into account year-over-year growth. When using data from multiple years, the time of year must be aligned at least by week, and sometimes by date (such as a holiday).

Our tax software company analyzed three years' worth of data with Attribution 360. They found overall patterns to be similar year over year, except for some small yearly growth. Marketing spends were following seasonality closely.

But, marketing volumes changed based on seasonality. At times when there were more people in the market, the company tended to increase spend in order to convert people at the same rate—even across a larger audience. Attribution 360 can help determine whether seasonal spending increases are the best strategy.

### Refining optimization recommendations

The inclusion of seasonality data enables Attribution 360 to determine a constant "weight" for marketing activities. This baseline conversion credit can help measure all marketing efforts, both in and out of the busy tax season.

With a baseline credit defined, Analytics 360 provides more accurate recommendations. The constant weight offsets seasonal shifts so the marketing team gets a more accurate read of marketing performance all year.

In the same way, the company could include additional relevant external data, such as economic indices or monetary exchange rates to refine optimization recommendations from Attribution 360 even further.

#### About the Google Analytics 360 Suite

The Google Analytics 360 Suite offers powerful and integrated analytics solutions for today's biggest enterprises. Measure and improve the impact of your marketing across every screen, channel and moment in today's customer journey. It's easy to use, and makes data accessible for everyone so the "aha" moments are simple to discover and share. Move from insight to impact faster with the Analytics 360 Suite.

For more information, visit g.co/360suite

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