



Customer Experience

**Understand the impact of media on customer web traffic and sales**

## The Big Picture

An online marketplace uses cross-media network models to understand how media drives web visits.

A regional division of a global online peer-to-peer marketplace wanted to understand the impact of media and trade spending on customer visits (traffic) on the website and what drove subsequent sales. The company wanted to quantify the non-linear impact of various marketing touchpoints in driving traffic and sales. The challenge was to capture the real market phenomenon in terms of customer journeys and subsequently identify the impact of each touchpoint in the journey.

The company was also looking for guidance on measuring the impact of 'above the line (ATL)' marketing after accounting for all the other factors effecting the business, guidance on collaboration with retailers and promotion type to be offered, and quantification of competitors' impact on their own sales.

## Transformative Solution

A Bayesian Belief Network based approach was developed to model cross-media effects and understand complex network relationships between marketing channels. These models depicted the customer journey across all marketing touchpoints.

The team discovered the linkage between paid, owned, and earned media and the overall interconnecting that impacts website traffic and sales. It was learned that the paid media like TV and Display had a significant indirect effect through search engine, partner network, and other online marketing activities. Decay and saturation levels for TV, Radio, and Magazine advertising were also evaluated, helping optimize the flighting strategy (i.e., a time-interval advertising strategy).

The entire modeling process was automated to enable standardization across business lines and regions as well as to operationalize at scale.

## The Change

With the understanding and quantification of interactions among various paid, earned, and owned media, and their overall impact on driving traffic and sales, the budget allocation was optimized (with same overall budget) potentially leading to additional \$23MM in annual customer traffic and incremental \$8MM in annual revenue. The automation of the measurement solution also reduced overall time to measure ad effectiveness by more than 80%.