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Marketing Attribution

How to measure the contribution of a channel?

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Report RUGCIC 201901
 ISBN 978-94-034-1571-0





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Summary





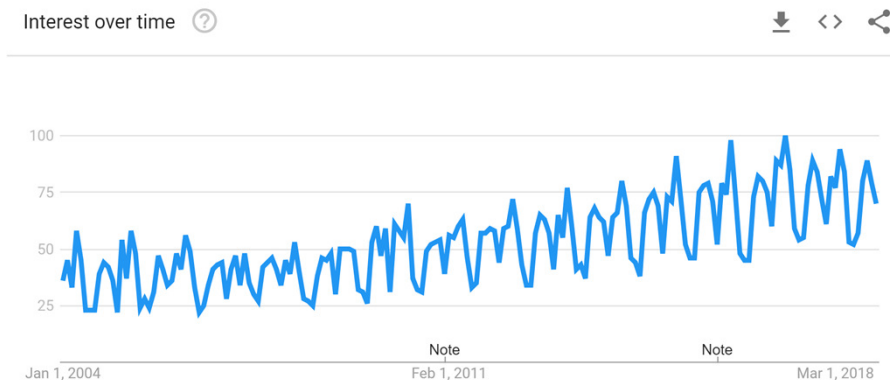
What is attribution?

- › Attribution is defined as “giving proportional credit to the channels which have contributed to a certain outcome”.
- › In other words: to what extent a purchase (or other outcome) has been established due to a specific channel (or combination of channels).
- › A question which you can ask yourself: “how likely is it that a purchase would still have been conducted without a specific channel?”
- › Or an alternative question: “how many purchases would there be without this channel?”
- › In this report we will for each attribution method discuss to what extent it indeed provides an answer to these two questions.



How popular is attribution?

- › In the period 2011-2019 the amount of search queries for ‘attribution’ has doubled.
- › The biggest challenges for marketing managers are generating traffic and leads and measuring the ROI of marketing... this all strongly relates to attribution!
- › The international journal of research in marketing (IJRM) has in 2016 published a special issue on marketing attribution.



What are your company's top marketing challenges?





What does ... mean? (1/2)

- › **A/B-testing:** test, through a randomized experiment, two variations of a concept, e.g. two different versions of a commercial or banner, where participants are randomly exposed to one version. By comparing the different reactions to the two concepts, the relative effectiveness is estimated.
- › **Attribution:** giving proportional credit to a channel which has contributed to a certain outcome.
- › **Before-after analysis:** analyze how a dependent variable changes before- and after a certain event takes place, for example turning on- or off a channel.
- › **Click-based attribution:** giving credit to a channel purely based on if a customer did or did not click on the channel (e.g. banner or link).
- › **Difference-in-differences analysis:** comparable with a before-after analysis, but extended with a control group where no change has taken place.



What does ... mean? (2/2)

- › **Experimental attribution:** with a randomized experiment test the added value of a channel. This randomization can take place at the individual customer level, but also at the regional or product (category) level.
- › **Last-click attribution:** the last clicked on channel gets all credits for a purchase or other form of transaction.
- › **Model-based attribution:** attribution where an econometrical model is estimated on empirical data in order to answer the attribution question.
- › **Shapley values:** a solution concept in the operative game theory, named after Lloyd Shapley, which can be used for attribution.
- › **Field experiment:** a randomized experiment which takes place in practice (in the field), for example to see how customer differ in purchase likelihood if they are or are not exposed to a certain channel.



Why is attribution important for managers?

- › Firms spend a lot of money on different forms of advertising and other (marketing-, communication-, and sales-) channels.
- › Customer encounter on their ‘path to purchase’ many of these ‘touch points’ of a firm.
- › Managers often don’t know how they can measure which touch point is responsible for a certain (change in the) action of a customer.
- › What is nowadays well known is that the most used (click-based) methods are not valid for good attribution.
- › Good attribution can help with:
 - Setting the marketing budget
 - Dividing this budget across the different channels
 - Optimize the channels in terms of content
 - Better targeting of individual and groups of customers



Overview of (new) insights on attribution

- › With attribution it is **not** about which channel is used for a certain action!
- › Click- (or touch-) based attribution are **not correct forms of attribution!**
- › The right question is if an outcome would still have occurred without channel x.
- › Field experiment are ideal for this, but there are also good alternative methods available when this isn't possible or desirable.
- › From the scientific literature we know that:
 - Search engine advertising for the own brand has a low effectiveness.
 - Pull channels are more effective than push channels.
 - Mobile has a low ROI when you look at the last-click attribution, but is very important when you start looking at the entire path to purchase!



Recommendations for marketing managers

- › Don't make use of oversimplified (click based) attribution methods.
- › Analyze first existing data to find out the effectiveness of different channels.
- › Based on this conduct (field) experiments:
 - On individual customer level to derive the effectiveness of a channel and to see if this is customer dependent, or;
 - Vary across regions and/or time to find out the overall effectiveness of a channel.
- › The outcomes of the experiment can be used to set and allocate the marketing budgets and to optimize the channels.
- › After this again look at the (new) data, get new insights from this, conduct a new experiment, and make further adjustments.
- › Attribution and optimization is a continuous process!



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Which channel is responsible?

