

TIME DECAY ATTRIBUTION

According to this model, the interaction closest to the consumer's conversion has the greatest weight. Therefore, the value of interactions over time decreases and the most recent interaction has the greatest importance.

For example, if a consumer sees an ad and then interacts with the same ad again a few days later, the second interaction will have more weight. However, as the time elapsed from the first interaction increases, the contribution of that interaction will decrease.

This model emphasizes the importance of interactions along the consumer's journey and gives more credit to the last interaction. However, this approach may ignore other important interactions that influence the consumer to make a turn. Each model has advantages and disadvantages and it is important to consider whether the chosen model is appropriate for the context of use and objectives.

Importance of Attribution in Digital Advertising

The dynamic landscape of digital advertising, surpassing traditional channels like broadcast TV, has significantly reshaped the advertising industry. The surge in Internet usage and the ability to track user interactions have made digital advertising a powerful tool for targeted and effective campaigns. Advertising campaigns often employ multiple formats and delivery channels, such as search, display, social media, mobile, and video, to reach diverse audiences.

Challenges of Last Touch Attribution

Last Touch Attribution, a widely adopted model, assigns full credit to the last ad seen before a conversion. While simple, it fails to recognize the cumulative effect of multiple ads and tends to overemphasize certain types, like Search ads initiated by user queries and in our case web analytics.

Time Decay Attribution recognizes that the impact of advertisements fades over time. The most recent interactions are given the highest weights in this model, reflecting the idea that closer interactions have a greater impact on user actions. Time Decay Attribution considers the entire journey, giving due credit to each touchpoint based on its recency, as opposed to Last Touch Attribution, which gives all credit to the final touchpoint.

- Advantages of Time Decay Attribution
- Granularity: Time Decay Attribution captures the nuanced influence of each touchpoint, considering the temporal aspect of user interactions.
- Realistic Impact: Recognizes the cumulative effect of advertisements, providing a more accurate representation of their contribution to conversions.
- Balanced Attribution: Avoids overemphasizing the last touchpoint and gives due credit to all relevant touchpoints in the user journey.

References

Kadyrov, T., & Ignatov, D. I. (2019, September 23). Attribution of Customers' Actions Based on Machine Learning Approach. National Research University Higher School of Economics, Russian Federation, St. Petersburg Department of Steklov Mathematical Institute of Russian Academy of Sciences, Russia.

Pahm, A. (2023). Time Decay Attribution: What It Is & How to Use It. TrueProfit. Retrieved from <https://trueprofit.io/blog/time-decay-attribution/>

Y. Zhang, Y. Wei and J. Ren, "Multi-touch Attribution in Online Advertising with Survival Theory," 2014 IEEE International Conference on Data Mining, Shenzhen, China, 2014, pp. 687-696, doi: 10.1109/ICDM.2014.130.