Remarking An Analisation

From Search to Conversion : Adopting Intelligent Attribution Modeling by E-Tailers for Competitive Edge

Mukti Prakash Behera
Assistant Professor,
Deptt.of Business Administration,
C V Raman College of Engineering,
Bhubaneswar

Abstract

Today, E-tailers are facing the challenge of allocating budgets between different channels to find the appropriate marketing mix to gain revenue and hence market share. Understanding of different attribution models helps E-tailers to decide how, when and where to spend across the customer journey, during an online transaction.

E-tailers are now investing significant resources to drive traffic to their website through multiple marketing interventions and channels. Given today's challenging economic scenario, where technology coupled with the understanding of Consumer Behavior, is gaining importance, analysis of attribution modeling is critically important for E-tailers as it helps them to understand and unravel the stages where a customer makes a purchase decision.With the interactive nature of online marketing, knowledge of various attribution models helps to provide best practices guidelines to companies for adjusting online marketing channels according to the results of a given attribution model.

This paper serves to compare today's most popular attribution model–the last-click model – with more advanced attribution models that have emerged in recent years, and to provide best practice guidelines foradjusting online marketing channels according to the results of a given attribution model.

Keywords: Attribution, Model, E-Tailers, Online Marketing

Introduction

AttributionModeling is the process or the practice of attributing credit to all marketing exposures that lead to a product selection and result in a conversion event by a Customer.Multi-touch attribution is a way to allocate credit towards marketing touchpoints that preceded a conversion within a customer journey.

TusharKanta Pany
Professor,
Deptt.of Commerce,
Ravenshaw University,
Cuttack
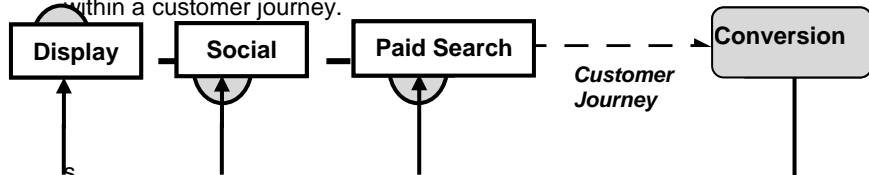
The process is gaining importance as it enables thee E-tailers spend marketing capital more effectively. With the evolution of online and social media marketing, adoption of an attribution model is critically important as organizations are questioning the value of their outbound marketing activities. It is about time that marketers start measuring multi campaign attribution before it becomes a mandate.

Earlier, most website decision makers ignored the opportunity because they believed attribution is never precise and therefore it is not worth measuring. But with the rapid emergence of E-retail in India, attribution modeling is receiving renewed interest. Accurate metrics derived from appropriate attribution framework provide decisions on critical marketing expenditure, which help avoid blind decisions. Marketers and E-tailers must embrace the attribution challenge now, to quantify their direct marketing efforts and instill a process for measurement that extends from online marketing, to offline, to interactive and social media marketing.

Effective marketing attribution requires calculation of customer exposures to marketing campaigns, which typically store data within disparate solutions. Yet, each marketing point solution along the

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conversion path holds a piece of the truth that must be consolidated to form a complete picture. This consolidation requires technology to integrate and join disparate data sources to provide a cohesiveness whereby the attribution tool becomes an anchor for the conjoined data. Attribution requires integration of data, customer tracking, and joining of data sets, so technology selection is an important consideration.

Framework for Quantifying Marketing Attribution

First and foremost, attribution is an exercise that must take place at the individual customer level. Many analytics tools are capable of reporting aggregate data illustrating which pages led to conversions, or which keywords contributed to success. Yet to perform attribution modeling, sites must be able to quantify interaction at the customer level to determine specifically which ads, searches, emails, and clicks led to an individual's conversion event.

On-site conversions, whether they are financial transactions, information downloads or leads to action, are the currency for attribution modeling. Customers who participated in a conversion event took the desired action, and tracing the series of marketing exposures that led to this event will provide insight that might lead to repeat behavior. By understanding which campaigns contributed to the overall success, investment decisions can be made and influential campaigns can receive their just reward.

Given that the average conversion rate of an online retail site is between 2% and 3%, 97% of visitors won't fall into the attribution model. But plan to revisit this group to compare the overall effectiveness of marketing campaigns in an exercise independent of attribution modeling.

Quantifying the Attribution

The levers indicate values within the attribution framework that must be included, yet their relative importance is flexible There are three standard levers used in the base framework, with the opportunity to add more levers if additional complexity is desired. The levers are:

Frequency

This lever identifies the number of times a customer was exposed to a specific marketing channel (or campaign) and clicked through to the site. Each exposure within the allotted time frame should be awarded equal credit in the attribution framework.
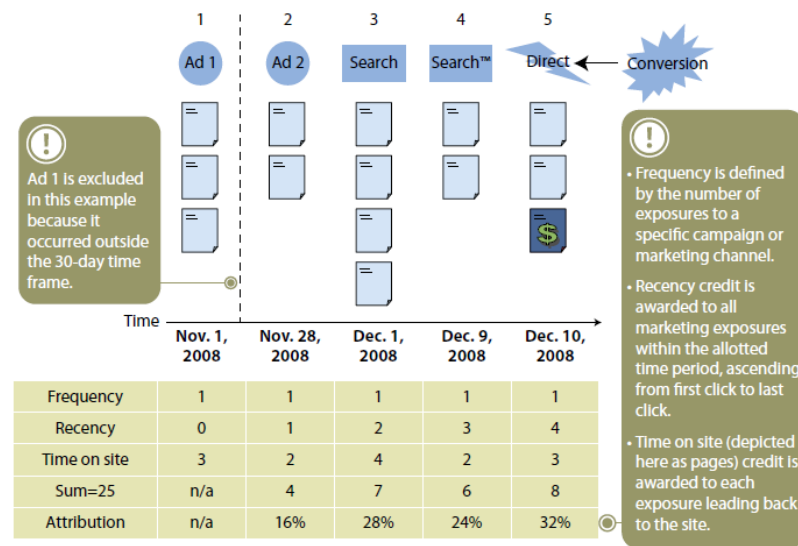
Recency

Again, working within the allotted time frame, marketing exposures that occur furthest from the conversion event should receive the lowest attribution, while gradually increasing to the most recent exposure.

Time on Site

It may not be the ideal metric for capturing interaction on a Web site, within the attribution framework, "time on site" serves as a proxy for interest and intent. Since each marketing exposure within the attribution framework led to the Web site, time spent during these sessions should be used to assign value to each visit.

Figure 3 A Framework For Quantifying Multicampaign Attribution

	Nov. 1, 2008	Nov. 28, 2008	Dec. 1, 2008	Dec. 9, 2008	Dec. 10, 2008
Frequency	1	1	1	1	1
Recency	0	1	2	3	4
Time on site	3	2	4	2	3
Sum=25	n/a	4	7	6	8
Attribution	n/a	16%	28%	24%	32%

Source: Forrester Research, Inc.

Integrating Attribution Modelingfor leveraging CLV (Customer Lifetime Value)

The concept reflects an organization's view of the value that a customer brings in over the entire duration of the customer's relationship with the organization. It is applied in a wide variety of industries including banking, insurance, telecom and retail.

It is predominantly used in marketing to execute targeted campaigns focused on high value customers. CLV plays a pivotal role in steering the various marketing efforts through the customer lifecycle. It enables marketing teams to run cross-selling and up-selling campaigns with a view to sell and go deep and wide into their existing customer base. The metric helps them select customers with

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high value, and focus their marketing investments on them.

The classical definition of CLV may not hold true in today's digital world. With the advent of the digital age, customers and companies are interacting over multiple channels including online and social media. These media are being used both for selling products and services, as well as for providing customer service and mechanisms to facilitate bi-directional communication. With the mushrooming of various sites for product reviews and comparison, customers are proactively sharing their opinions ofproducts and services. With the use of appropriate attribution modeling, marketers can carefully strategize to quantify which marketing channel/activity gets the appropriate credit, for leveraging CLV.

Defining the Accurate Metrics for the Attribution Model

Referral

A "referral" is like a recommendation from one website to another.

Paid Search

You advertise within the sponsored listings of a *search* engine or a partner site by paying either each time your ad is clicked (pay-per-click - PPC) or less commonly, when your ad is displayed (cost-per-impression - CPM).

Organic Search

Are listings on search engine results pages that appear because of their relevance to the search terms, as opposed to their being advertisements.

Social Network

A social networking service is a platform to build social networks or social relations among people who share similar interests, activities, backgrounds or real-life connections.

Direct

Direct to Websites.

The "Last Click" Attribution Model

In the last interaction model (also known as last touch or last click), the whole credit for a conversion is given to the last click that got your customer to your site. In the example below, all credit would be given to direct traffic as if the visitor had magically woken up one morning and typed the URL on his computer without having heard about the company before.
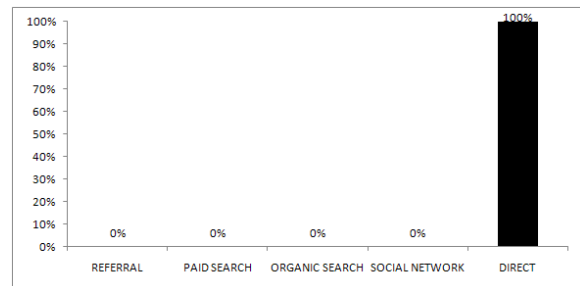

Figure 1

The dilemma with this model is the fact that a visitor who converted arrived to your site through direct traffic does not mean the previous channels in his conversion path did not contribute to the conversion. In fact, since this user's first visit was referred by another site, had it not been for that link, the user might have never heard of our company.

Similarly, when a landing page does not convert, the problem is not necessarily in the landing page. Maybe the ad linking to that landing page is misleading and when the user arrives at the landing page finds out that the offer is not really as he thought when he decided to click on the ad.But no matter what, there is something definitely right about this model and it is the fact that when the visitor converted, he did by arriving directly and, therefore, direct is the only channel that we know for sure contributed to the conversion. The previous steps in his conversion path may have been completely irrelevant and he may have finally typed in your site's URL because a friend recommended him to do so.

Usefulness of the Model

If the ads and campaigns are designed to attract people at the moment of purchase, or your business is primarily transactional with a sales cycle that does not involve a consideration phase, the Last Interaction model may be appropriate.

The "First Interaction" Attribution Model

In the first interaction model, the whole credit is given to the first click that got your customer to your site. In the example below, all credit hasbe given to Referral.
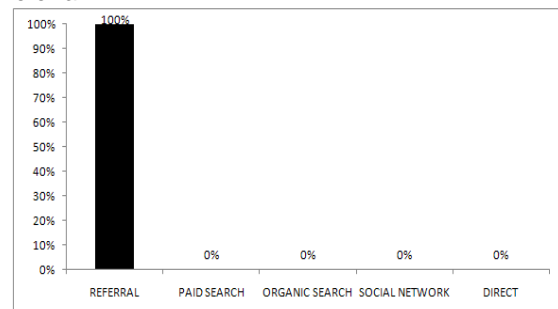

Figure 2

This model is the opposite of "Last Click" Attribution Model. Though this model may get it right for specific individual conversions, it is, after all, possible that the visitors already decided to purchase after the first impact, it is simply not realistic to think that the first hit was the one.

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Usefulness of the Model

This model is appropriate if ads or campaigns run to create initial awareness. For example, if the brand is not well known, you may place a premium on the keywords or channels that first exposed customers to the brand.

The "Last non-direct click" Attribution Model

In the last non-direct click, the whole credit is given to the last click, except for direct traffic. In the example above, all credit would be given to social traffic. This is the default Model provided by Google Analytics. Google defines a campaign as anything but direct traffic. Therefore, to Google, the last campaign in the conversion path is not the last click, but the last non-direct click.
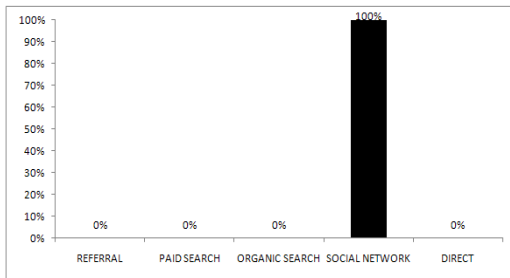

Figure 3

This model has the disadvantages of the last click model, plus it underestimates the contribution of direct visits and, consequently, brand awareness too.

Usefulness of the Model

Because the Last Non-Direct Click model is the default model used for non-Multi-Channel Funnels reports, it provides a useful benchmark to compare with results from other models.In addition, if you consider direct traffic to be from customers who have already been won through a different channel, then you may wish to filter out direct traffic and focus on the last marketing activity before conversion.

The "Last Ad-Words click"Attribution Model

In the last Ad-Words click model, the whole credit is given to the last Ad-Words click that got your customer to your site. In the example above all credit would be given to paid search.
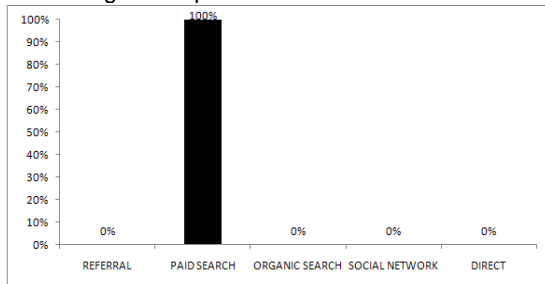

Figure 4

Usefulness of the Model

If you want to identify and credit the AdWords ads that closed the most conversions, use the Last AdWords Click model.

The "Linear attribution" Attribution Model

In the linear attribution model, the credit is equally divided among all channels. In the example above, referral, paid search, organic search, social network and direct would all be credited for 20% of each conversion.
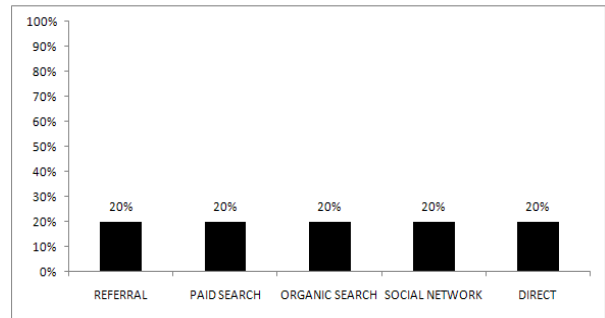

Figure 5

This model values all channels, which is an improvement over the previous models, but it simply avoids the question of how much each channel contributes to conversions.

Usefulness of the Model

This model is useful if your campaigns are designed to maintain contact and awareness with the customer throughout the entire sales cycle. In this case, each touchpoint is equally important during the consideration process.

The "Time decay" Attribution Model

In a time decay attribution model, the credit is divided among all channels, giving more credit to those clicks closer to conversion. In the example above, direct would be given more credit for a conversion than social network, which would be given more credit than organic search, etc.
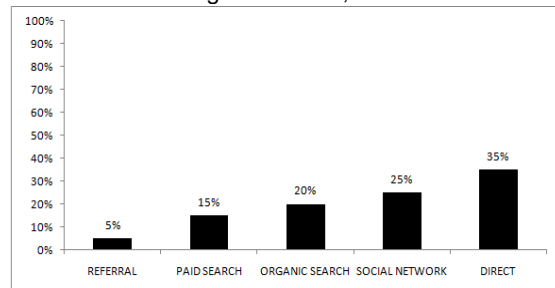

Figure 6

Like linear models, time decay models value all channels, but it does tackle the difficult question of how much each channel contributes to conversions. And the answer is: the closer in time a touch point is to the conversion, the more it contributes.

The way this model assigns credit is based on a judgement call: the fact that a channel intervened in the latter stages of the conversion path does not necessarily mean that it influenced the purchase decision more than other channels.This method requires you to go one step further and :

1. Decide the time period of decay, that is, how far back you want to assign the credit for conversion,
2. Decide how you want to distribute credit over time.

Overall, the time decay model required some extra effort, but it is by far the most accurate model reviewed until now.Finding the right attribution model takes time and lots of experimentation. Time decay model is recommended because the closer a touch point is to conversion, the more credit it gets, while, at the same time, touch point at the beginning of the conversion path still get a fair credit.

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Usefulness of the Model

If you run one-day or two-day promotion campaigns, you may wish to give more credit to interactions during the days of the promotion. In this case, interactions that occurred one week before have only a small value as compared to touchpoints near the conversion.

The "Position based" Attribution Model

In a position-based attribution model, credit is assigned to channels depending on their position in the conversion path. By default, 40% credit is assigned to each the first and last interaction, and the remaining 20% credit is distributed evenly to the middle interactions. In the example above, referral and direct would get 40% credit each, while the remaining 20% credit would be shared by paid search, organic search and social network, that is, each would receive 6.7% (rounded off to 7% in chart) credit.
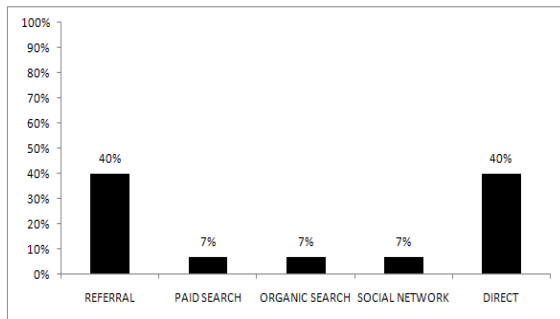

Figure 7

This model is the only contender to time decay, but it requires further judgement and some experimentation to find the right credit distribution. This model will probably require lots of testing and progressive adjustments.

Usefulness of the Model

If you most value touchpoints that introduced customers to your brand and final touchpoints that resulted in sales, use the Position Based model.

Conclusion

As online marketing grows more advanced and more complex marketers can capitalize on the unique opportunity of online advertising to attribute their marketing spend more precisely than before. The implementation of a more intelligent attribution model may seem daunting, but ultimately a customer-journey and CLV driven attribution strategy will help set apart the marketers who are driving the impact from their digital channels.Since the dawn of online advertising, marketers have faced the challenge of allocating budgets between different channels to find the perfect marketing mix to increase their revenues. An attribution strategy helps advertisers to decide how, when, and where best to spend their dollars across the customer journey for maximum results.

Better tracking and analytics tools have enabled advertisers to allocate their budgets more effectively, attributing credit for each transaction among dozens of channels. Today's most aggressive advertisers have even moved beyond optimizing for just the next transaction, instead refining their attribution models and optimization based on the potential Customer Lifetime Value (CLV) of each user. Whether optimizing for the next transaction or for the CLV,an intelligent attribution strategy is the key to discovering the optimal marketing budget allocation.

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