

The Science of Audience and Attribution Modeling

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A person is shown from the side, playing a dark-colored electric guitar. The person's hand is visible on the neck of the guitar. The background is a large, out-of-focus crowd of people, suggesting a concert or festival setting. The lighting is bright, creating a bokeh effect in the background.

Attribution modeling defined

Attribution modeling defined

Attribution modeling is the science of understanding how different events come together to influence a consumer to take a desired action. It is also known as media mix modeling which is the analysis to estimate the impact of various marketing tactics on consumer actions. It enables companies to optimize budget allocation across various marketing channels and tactics.

Major attribution challenges

1

Online to offline

2

Across channels

3

Across devices

In this eBook, we will not focus on media mix modeling across various online/offline channels and the inherent “gap” challenges that come with it. Rather, we will be focusing on the attribution models within paid search and how you can leverage your internal data, specifically goals and Universal Event Tracking (UET), to make your own customized data model.

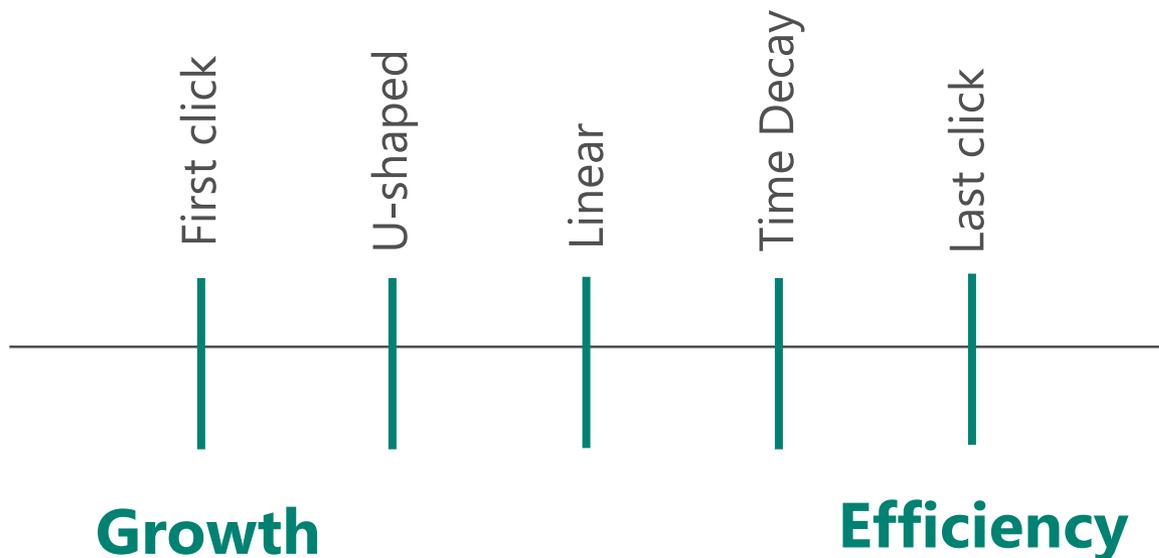


Leverage the power of goals and [UET](#) from Bing to gain additional granularity & insights into your paid search attribution modeling.

In this section, we will introduce and evaluate the most popular attribution models within paid search. It is important to note that there are no right or wrong attribution models. Each model will have unavoidable pros and cons that impact your business. Models that value top-of-funnel activity (TOFU) will likely result in higher volume and faster growth. Models that value bottom-of-funnel activity (BOFU) will likely result in less volume, but higher efficiency. Businesses should begin their attribution strategy by envisioning their company along a growth to efficiency spectrum.

Is your attribution strategy to promote growth or efficiency?

When creating a paid search attribution model, companies should first determine where they fit on the spectrum.



First click

Defined: The first touchpoint receives 100% credit for a sale. This model heavily favors top-of-funnel activity.

Pros: Promotes awareness and acquisition

Cons: Favors competitive terms, likely to result in low ROI



U-shaped or position-based

Defined: The first and last touchpoints each receive 40% credit for a sale. The remaining 20% is distributed evenly across interior touchpoints.

Pros: Emphasizes key touchpoints while distributing value

Cons: May overvalue a term's position and undervalue a term's actual worth

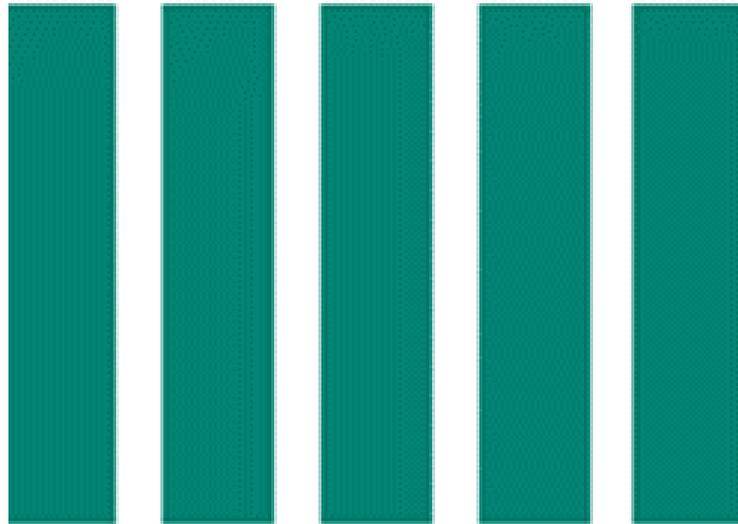


Linear

Defined: Each touchpoint receives equal credit for a sale

Pros: Every touchpoint is considered and valued

Cons: May overvalue a term's position and undervalue a term's actual worth

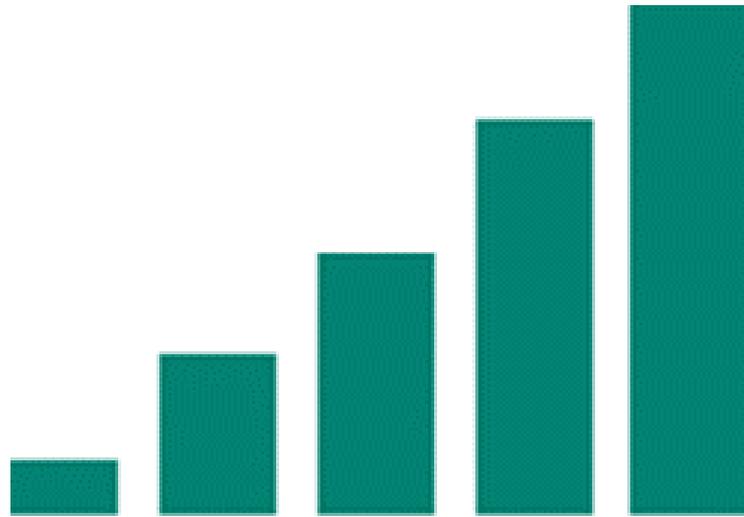


Time decay

Defined: The touchpoints closest to the time of a sale get the most credit

Pros: High efficiency while attributing some value to TOFU

Cons: Overvaluing BOFU, could slow volume and growth



Last click

Defined: The last touchpoint receives 100% credit for a sale. This model heavily favors bottom-of-funnel activity. Variations include last non-direct click and last paid click which consider slightly different factors.

Pros: High efficiency, strong ROI

Cons: Ignores TOFU value and will limit volume and slow growth



A photograph of a large crowd of people at a night festival or concert. The scene is illuminated by warm, glowing string lights that create a bokeh effect in the background. In the foreground, the back of a woman's head with long dark hair is visible on the left, and the profile of a man's head is on the right. The overall atmosphere is festive and social.

5 steps to creating a custom data driven model

5 steps to creating a custom data driven model

Your attribution goal should be to create a custom model that best captures your business philosophy and translates into desired results. Although Google AdWords does provide a data driven model, it has limitations. It restricts users to a narrow, single-channel view of their Adwords data set and pre-determines set weights. Companies should extrapolate off of the Adwords data driven model to create a custom digital fingerprint specific to their performance data. Your custom attribution model will be a living ideology that speaks directly to your company's current needs, evolves in alignment with your business goals and reflects the changing preferences of your customer base.

Custom data driven model

Defined: Assigns custom weighting to each touchpoint to create a model unique to your business

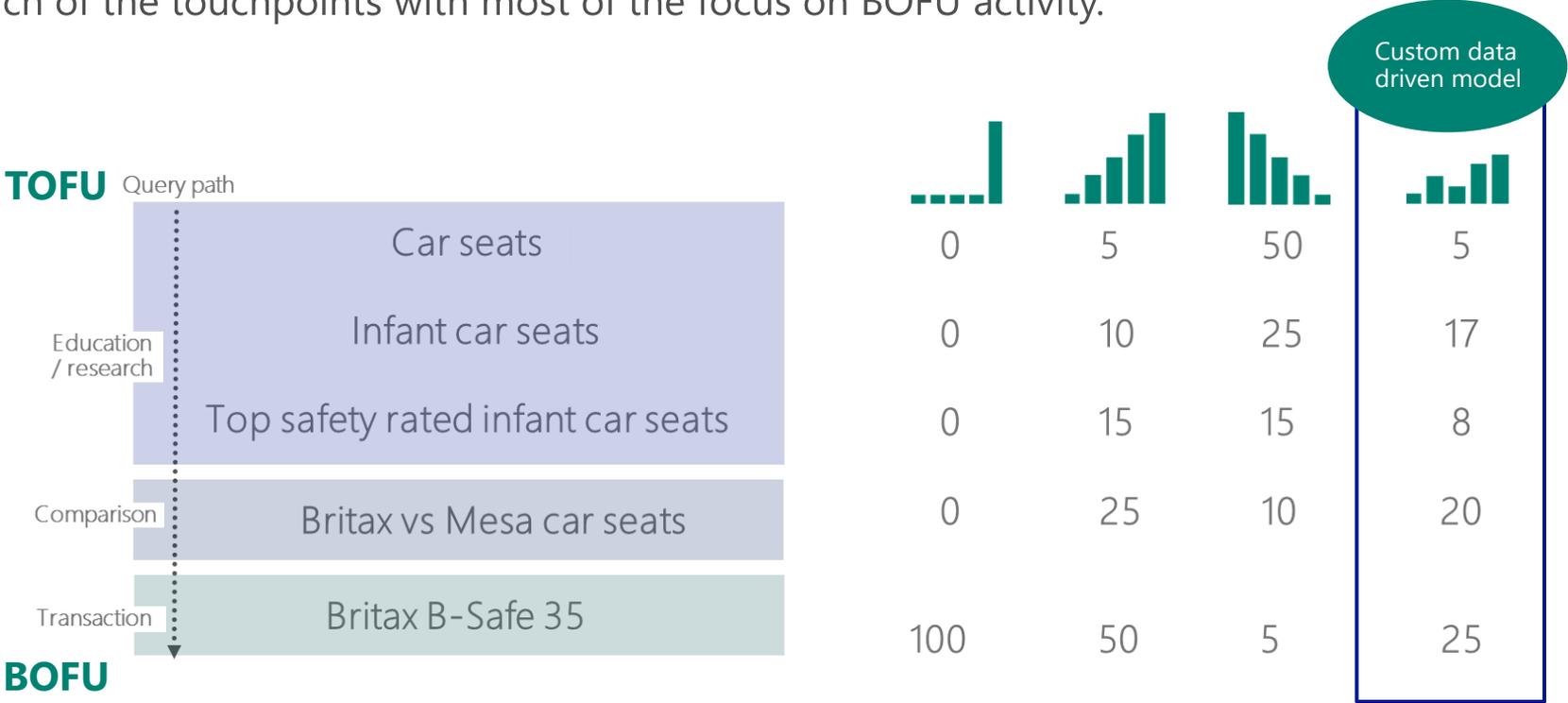
Pros: Accurately reflects the value of each touchpoint

Cons: Requires a lot of time and effort

Digital “fingerprint”



Below is an example of how different attribution models can deliver very different results despite using the same internal data. In the chart below, the keywords are listed in order, starting with top-of-funnel broad keywords and working downwards to bottom-of-funnel branded keywords. The first column shows how a last click attribution model assigns 100% credit to the brand keyword, "Britax B-Safe 35." In the next column, the time decay model attempts to distribute value more evenly across each of the touchpoints, and assigns 50% credit to the brand keyword, "Britax B-Safe 35." The highlighted custom data driven model shows weighted values across each of the touchpoints. These values are arbitrarily unique to each company and will drive this particular campaign to spread budget more evenly across each of the touchpoints with most of the focus on BOFU activity.



Step 1

Implement UET tags

UET tags are the first, necessary step to creating your custom data model. They enrich the advertiser experience with important features such as remarketing, auto-bidding and conversion/microconversion tracking.



Want to learn more about implementing UET tags and creating goals with UET? Watch the UET webcast at <https://aka.ms/bingadsgetstarted>

Step 2

Create multiple goals across your funnel

Conversions/Purchases are usually the primary goal of an online campaign. But there are many smaller goals, also called micro-conversions, that take place throughout the decision journey and provide granular insights into campaign activity. In order to create a more robust custom data model, you should set up multiple different goals to track how consumers engage with your product and your site. Examples of popular goals/micro-conversions are included in the chart below. When you create your goals, be sure they span across all stages of the purchase funnel.



Leverage micro-conversions for troubleshooting

Not only do micro-conversions help you to optimize your campaign, they can also help you to identify problem issues across your funnel. If you are seeing micro-conversion activity that is not converting into a sale, it may be a sign of broken links or errors within your checkout pages.

Step 2 (cont.)

Create multiple goals across your funnel



Step 3

Choose between 2 reports: Keyword Report & Goals Report

In order to link keywords to their goal activity, you can choose between 2 reports within the Bing Ads UI. You will choose between the Keyword report and the Goals report depending on the level of granularity that you want. If you only have a handful of goals and want a higher level view of what goals happened and if you give a keyword an assist, then we suggest you run the Keyword report and add in the Goals & Assist columns. If you have a lot of specific granular goals set up (such as duration/time on site/engagement) that you would like to report on individually, then we suggest you run the Goals report and add in the Assist & Keyword columns. These reports will provide all of the data necessary for custom modeling.

Step 4

Weight the touchpoints

As you determine the best format for data analysis, each company will have to determine how they would like to weight the various touchpoints/goals. There is no optimal formula. Weighting is used to promote certain types of consumer engagement. Companies that would like to promote volume and growth should give higher weight to goals that occur earlier in the top-of-the-funnel. Companies that are focused on efficiency and ROI should give higher weight to goals that occur near the bottom-of-the-funnel. Other factors that may affect weighting are special promotions, time of year, product releases, etc.

Step 5

Analyze & optimize

Once you have weighted all of your micro-conversions, you will need to format the data so that you can analyze and optimize. In the example below, you can see the differences in analysis between a last click model, linear model and custom data driven model. While last click provides zero visibility into top-of-funnel activity, the custom data driven model enables much more powerful analysis as it gives a very granular view into keyword activity across the entire funnel. The example below also uses weighting to provide a final column that reflects the value of each keyword within this particular organization.



Standardize your conversions & micro-conversions for more powerful analysis

Ideally, you will want to standardize your conversions & micro-conversions across all of your marketing channels. Standardization will allow you to populate your analytics platform with similar data so that you can do cross-channel comparisons.

Step 5 (cont.)

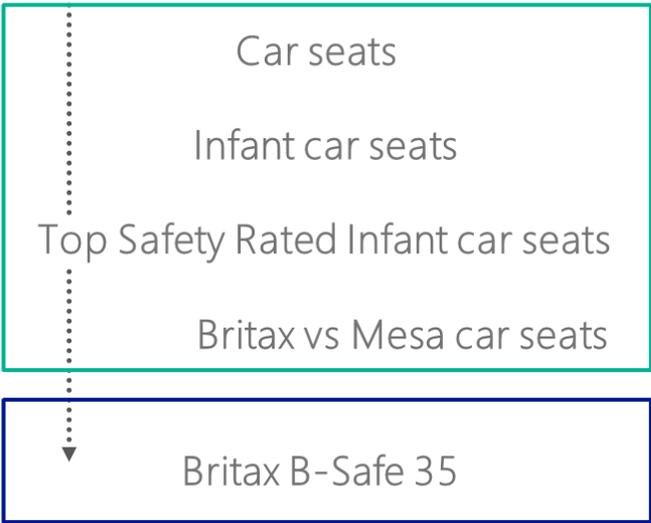
TOFU

Query path

Assists

Conversion

BOFU



0	1
0	1
0	1
0	1
1	1

Custom data driven model

Goal 1 Goal 2 Goal 3 Goal 4

1	0	1	0	5
1	0	1	0	17
0	1	1	0	8
1	1	1	0	20
0	1	0	1	25





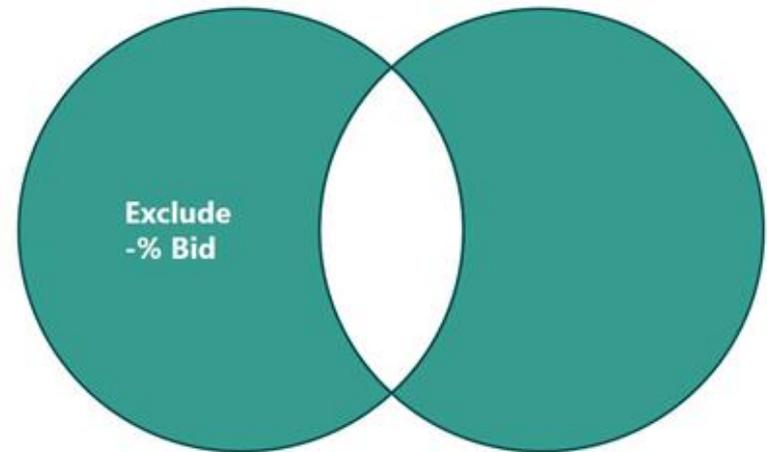
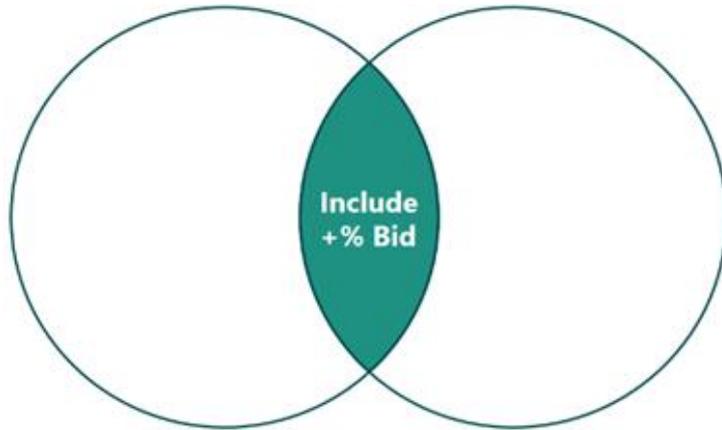
Re-thinking your paid search audience

Re-thinking your paid search audience

Paid search is no longer about a singular audience and wide net approach. Audience targeting and remarketing is a powerful feature within today's search that will greatly enhance the performance of your campaigns. If you have custom keywords, a custom bid strategy or a custom message, then you should associate an audience.

Re-thinking your paid search audience

Bing Evangelist, Christi Olson, has the viewpoint that every campaign could be a remarketing campaign because of the power of inclusion and exclusion. Bid and targeting within the Bing Ads UI allows you to create different audiences based on how they've engaged with your website. By layering different audiences on top of each other, you can find your most valuable consumers and tailor keywords, copy and bids to this user set.

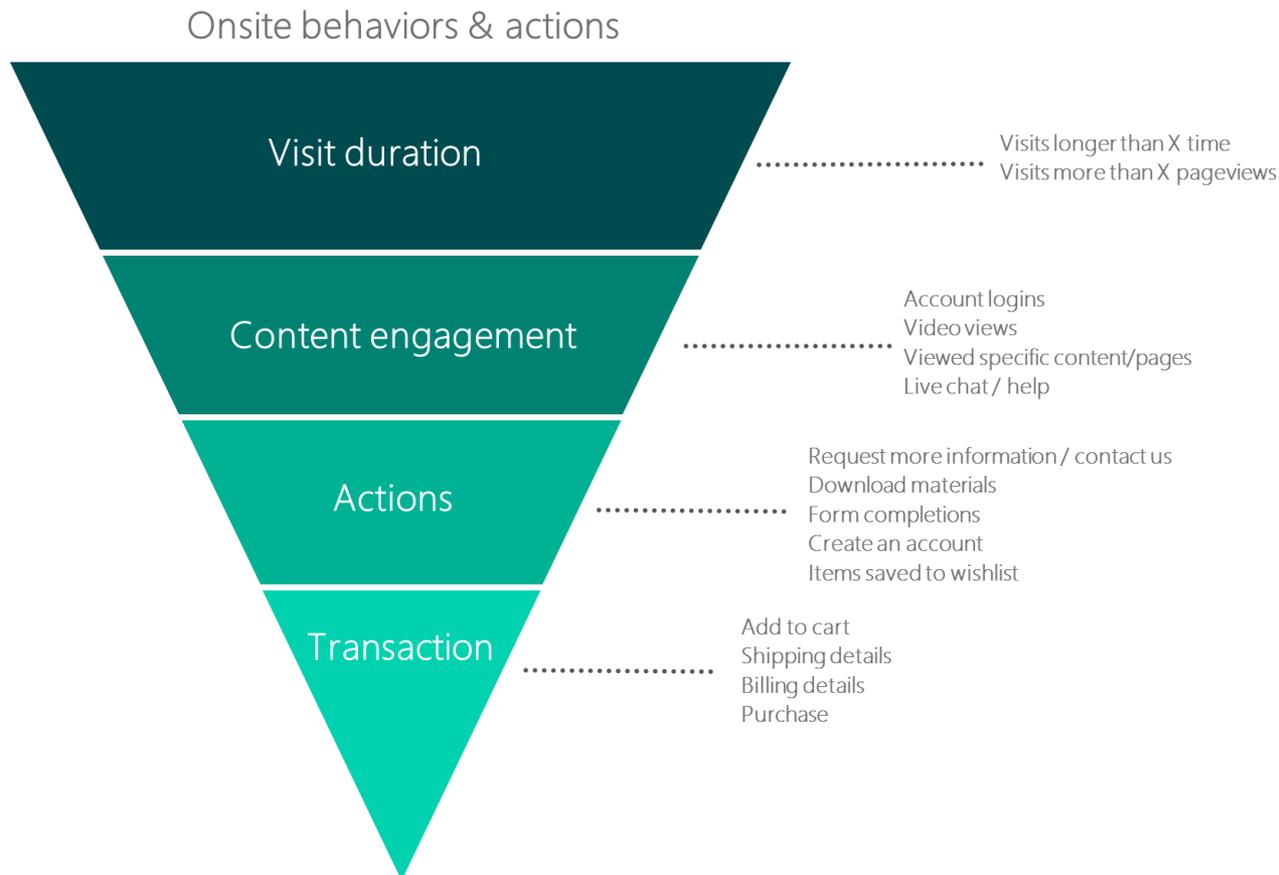


Exclusion example

Sometimes excluding an audience can be just as powerful as including one. For instance, if you have a subscription based service where users frequently login on your site, you probably want to exclude them from using branded paid search to reach your site.

Defining target audiences

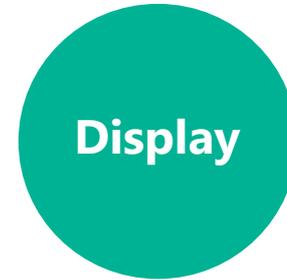
Today's marketers must break free from traditional PPC targeting and structure their campaigns around different audience groups based on behavioral activity. Just like with goals, audiences can be defined through actions and behaviors throughout each stage of the funnel. Examples include:



Cross-channel targeting

Through the usage of URL parameters within referral URLs, paid search marketers can now identify and target cross channel audiences. This is extremely powerful as it allows marketers to target and remarket directly to referred groups from affiliates, social sites, email and display.

Target each specific marketing channel:



Hyper-Personalization



Not only can advertisers reach target audiences referred from social sites, they can further segment these audiences based on demographic information available within a URL parameter such as age range, job title, employer and interests. Digital Agency, LSEO, recently won a Landy Award for their extraordinary client results from hyper-personalized audience targeting within paid search. Read more on the Bing Ads blog.

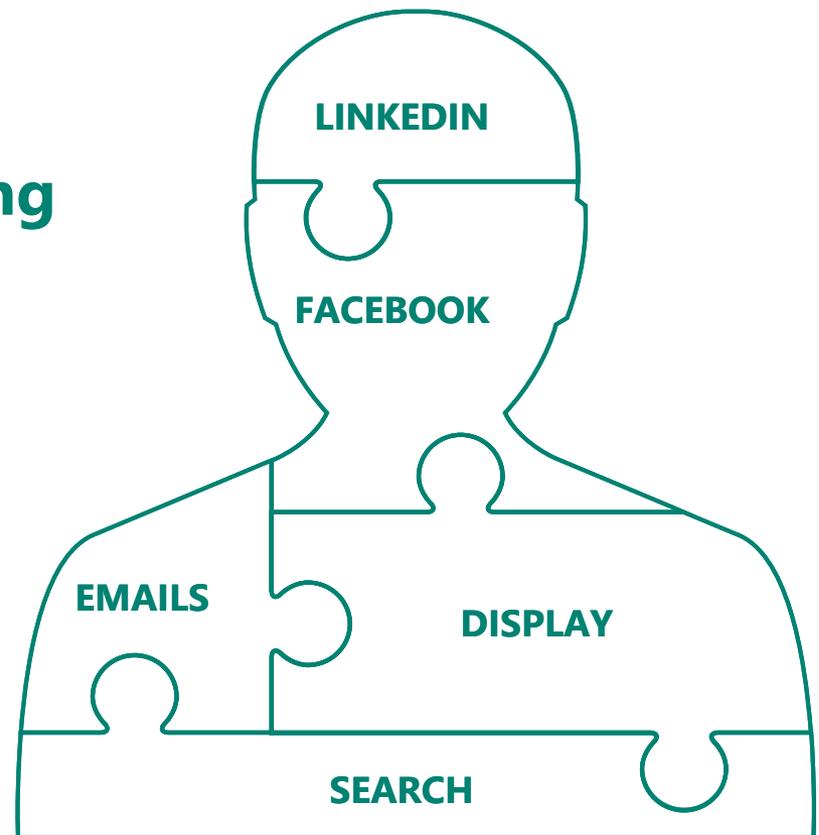
A photograph of a person playing a guitar, with their hands and the neck of the guitar in focus. The background is a large, out-of-focus crowd of people, suggesting a live performance or concert. The lighting is warm and slightly dim, creating a moody atmosphere. The person is wearing a dark jacket and a watch on their left wrist.

Future holistic campaigns

Think holistically about audiences

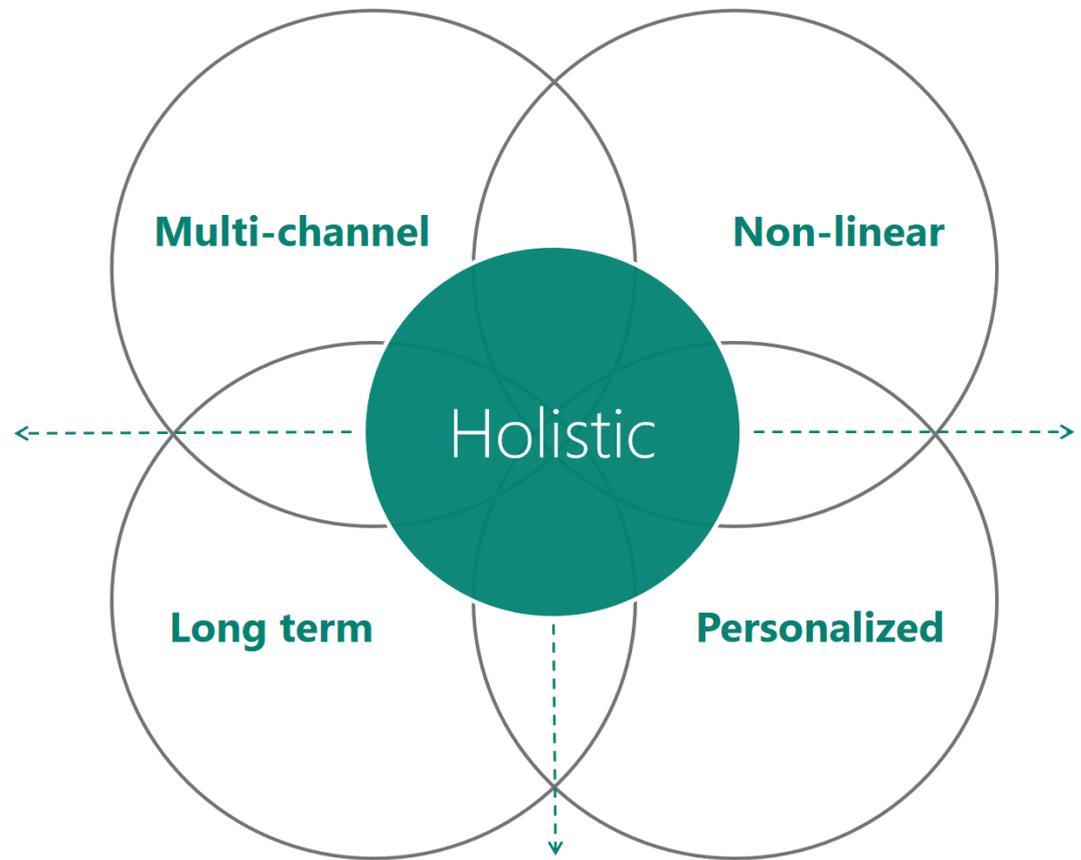
How can you remarket to audiences other channels have engaged with?

Social demographic targeting
+ Search intent
= Winning combination



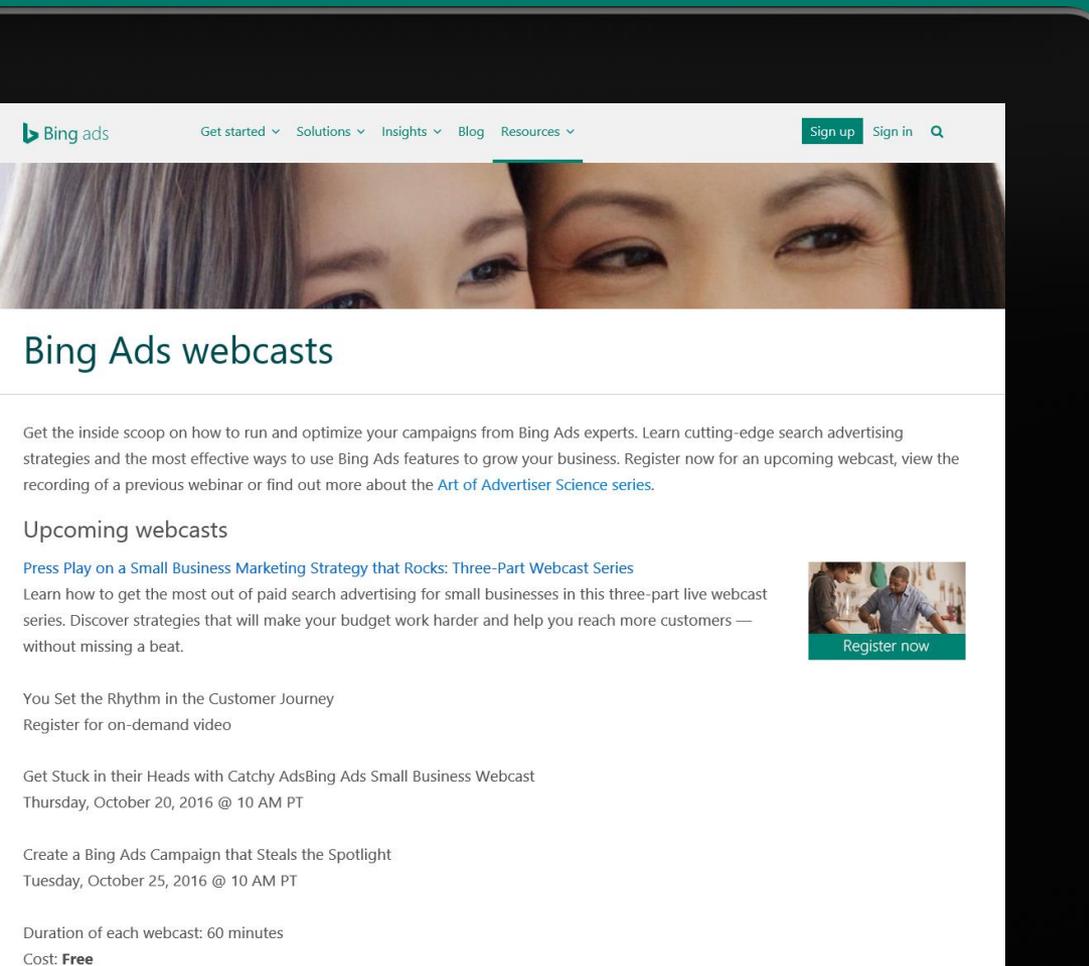
Think holistically about audiences

Each consumer today has a unique digital fingerprint as they embark on highly individualized, cross channel journeys. Marketers should continue to think holistically about their campaigns in an effort to build deeper, more meaningful customer relationships. Attribution and audience modeling continue to evolve in relation to interdependent relationships with social, display, email, etc. There are four distinguishing factors to consider when developing future holistic campaigns: Multi-channel, Non-linear, Long-term and Personalized.



The Science of Audience and Attribution Modeling on-demand webcast

Click [here](#) to access the webcast this eBook was based on.



The screenshot shows the Bing Ads website's 'Bing Ads webcasts' page. At the top, there is a navigation bar with the Bing Ads logo, a menu with 'Get started', 'Solutions', 'Insights', 'Blog', and 'Resources', and buttons for 'Sign up', 'Sign in', and a search icon. Below the navigation is a large image of two women's faces. The main heading is 'Bing Ads webcasts'. The content area includes a paragraph about getting the inside scoop on running and optimizing campaigns, followed by a section for 'Upcoming webcasts'. The first webcast listed is 'Press Play on a Small Business Marketing Strategy that Rocks: Three-Part Webcast Series', with a 'Register now' button and a small image of two men in a meeting. Below this are two more webcast titles with their respective dates and times: 'You Set the Rhythm in the Customer Journey' (Thursday, October 20, 2016 @ 10 AM PT) and 'Get Stuck in their Heads with Catchy Ads' (Tuesday, October 25, 2016 @ 10 AM PT). At the bottom, it states 'Duration of each webcast: 60 minutes' and 'Cost: Free'.

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Bing Ads webcasts

Get the inside scoop on how to run and optimize your campaigns from Bing Ads experts. Learn cutting-edge search advertising strategies and the most effective ways to use Bing Ads features to grow your business. Register now for an upcoming webcast, view the recording of a previous webinar or find out more about the [Art of Advertiser Science series](#).

Upcoming webcasts

[Press Play on a Small Business Marketing Strategy that Rocks: Three-Part Webcast Series](#)
Learn how to get the most out of paid search advertising for small businesses in this three-part live webcast series. Discover strategies that will make your budget work harder and help you reach more customers — without missing a beat.



You Set the Rhythm in the Customer Journey
Register for on-demand video

Get Stuck in their Heads with Catchy Ads
Bing Ads Small Business Webcast
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Create a Bing Ads Campaign that Steals the Spotlight
Tuesday, October 25, 2016 @ 10 AM PT

Duration of each webcast: 60 minutes
Cost: **Free**

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