



Singular Logic Ads by Choice White Paper

In today's "best guess" scenario for targeted advertising, advertising networks are striving to produce that perfect algorithm to "guess" the perfect ad for the consumer. While technology allows for snooping and educated guessing this technology is being wasted as most consumers simply see the ads being presented to them as nothing more than spam and at worst an invasion of their privacy. The inventive and new Ad's by Choice model is the first to permit the consumer to select precisely the ads and ad categories of interest to that unique individual. It does so in a manner far more accurately than any 'predictive' or 'deductive' technology based upon harvesting a consumer's viewing, browsing, or purchasing behaviors. It also does so in a manner that acknowledges and respects the privacy of an individual because it is based entirely upon consent and choice. Ad's by Choice is uniquely personal and private.

While most consumers are willing to trade ad viewing for free content, many consumers simply shut off their brain when the ads are played. Thus the hundreds of hours and thousands of dollars that were spent to produce that ad are simply wasted on that consumer, that technology so elegantly "guessed" was a perfect match for the ad. Advertisers have been limited to click through tracking, geo-location printing and demographic information to "calculate" if the ads are hitting their targeted audience. Again there is no guarantee that the targeted audience is indeed being served the correct ad. A true calculation of the ROI on ad dollars becomes almost impossible to calculate, thus continuing the dive in CPM rates that a content aggregator is able to charge an advertiser.

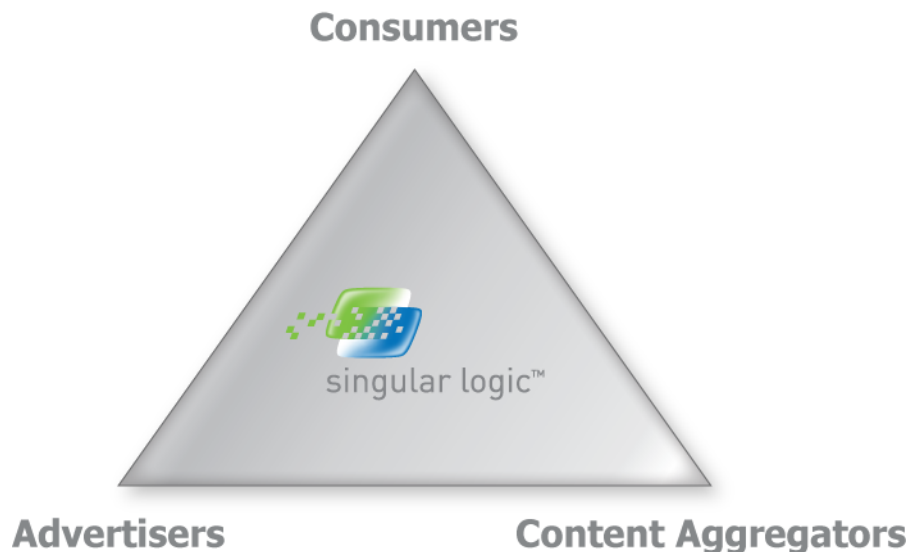
Singular Logic decided to take a completely different approach to the problem, "Why not ask the consumer what ads they would like to see". This revolutionary new approach would allow the consumers to decide what advertising they would like to see in return for their free content. Content aggregators and ad networks would no longer need to "guess" what ads to present to the consumer based on geo-demographic information but rather on the preferences the consumer setup. True ROI for an ad campaign becomes very easy to calculate because you now know who actually chose and viewed the ad. If the consumer chose to fill out demographic information the advertiser will also be able to determine the success of the campaign within AND outside of their desired targeted demographic.

Ads by Choice is Singular Logic's server-based technology that's intended to be licensed and deployed by content aggregators whose primary means of compensation for non-paid access to content is advertising. The technology is capable of being deployed in any environment that allows for a two-way communication between the viewing consumer and the content aggregator who is serving up the ads along with the selected content.

In each deployment of the technology there are three fundamental information components that define the three points of a triangle. First is the **Advertising**



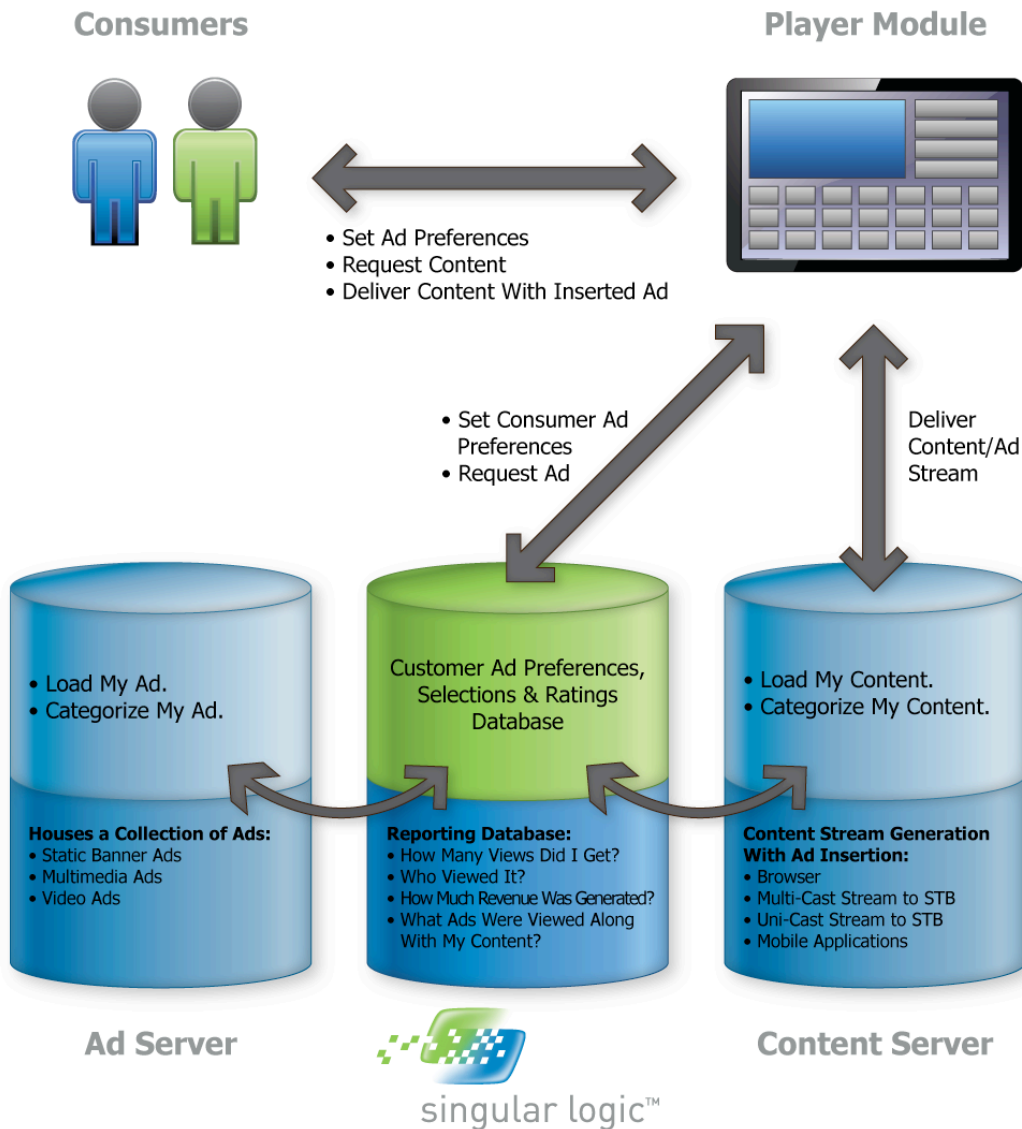
Control, where an advertiser has the ability to establish inclusionary and exclusionary targeting for a particular advertising campaign. This allows an ad to be viewed only by its intended audience. For an advertiser this is the ultimate tool to ensure that their ad dollars are not wasted on viewers that do not match their intended audience. Second is the **Consumer Side Module** where the consumer may establish their set of advertising preferences. The consumer can identify those items that they prefer to view and those that they do not. The consumer can choose to provide as much or as little preference information as they desire with the clear understanding that the more information they provide the more targeted ads they will receive. Personal demographic information is not required but will result in better ad suggestions when they don't have detailed ad preferences defined. The third point in the triangle is the **Content** itself. It is the information or entertainment choice that the consumer primarily desires to view and in exchange for viewing ads they are not charged for viewing or accessing the content. The Singular Logic Ads by Choice technology sits in the middle of the triangle connecting all the points together and insuring accurate matching and exchange of the information between all three points with no leg of the triangle missing.



The Singular Logic Ads by Choice technology operates as a central base of code that is installed on a content aggregator's network. It is accessed via a web application for the ad manager, reporting engine and a set of RESTful web service APIs used for the consumer account creation, ad preference creation and update, ad serving and the ad view tracking

Regardless of the media delivery device, e.g. IPTV box or web browser, the interaction with the Ads by Choice API framework follows the same basic flow.

1. Consumer chooses content to view.
2. Media delivery device makes call to Ads by Choice server to serve up list of ads for consumer based on passed AdPrefID. If the consumer does not yet have an AdPrefID and the content aggregator has chosen for AdPref creation in-line then the consumer will be prompted for preferred ad categories.
3. List of ads are displayed to consumer for their choice of which specific ad to view.
4. Consumer chooses ad.
5. Content aggregator uses specific standard for media delivery device to spin up stream to deliver content to consumer with ad(s) inserted at appropriate locations.
6. Content aggregator makes call to Ads by Choice upon completion of ad view by consumer to indicate successful view of ad.





For the standard web site and internet enabled mobile device the Ads by Choice framework provides an API call that will generate the necessary playlist formatted for the display technology, e.g. Flash or QuickTime playlist with the ads already imbedded in the playlist with the content in either JSON or XML format. As new player technologies are developed the Ads by Choice framework will be updated to support these players.

Tru2way™ enabled devices such as Cable VOD and IPTV systems will facilitate the communication to and from the Ads by Choice framework and the end consumer. This next generation interaction standard will facilitate the most feature rich two way communication between the consumer and the Ads by Choice framework, resulting in the best possible user experience. The consumer will be able to choose ads in real-time directly from their tru2way™ enabled device, as well as update their ad preferences and communicate in real-time back to the Ads by Choice framework on ad views facilitating instant ROI calculation on an ad campaign.

The Ads by Choice framework does not actually serve the ad or content for these devices it simply provides the necessary detail on what ad to play. Thus the framework does not alter the standards defined by the Cable Labs for the interoperability for stream creation between the Head End Servers and the consumer cable box. Again the Ads by Choice framework doesn't replace any of these standards for interoperability but simple acts as a lookup for what should be played.

For Broadcast Digital Cable and Satellite systems where no two way communication mechanism is available, the backend distribution system will communicate with the Ads by Choice framework to query for the necessary ads based on the consumer's preferences they have set in their account through the provider's online website. In many cases with Cable and Satellite broadcast bandwidth limitations and the advancement of the cable and satellite boxes having significant on-board memory, forward caching of individual or daily ad should be employed based on the results of the calls to get ads from the Ads by Choice framework. This will allow for off peak delivery of the ads and instant delivery of consumer specific ads based on their preferences without a true two way enabled communication stream.

www.singularlogic.com

Patents Pending

23505 Smithtown Rd #290

Excelsior, MN 55331