



## How to Know What Media are Working

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*iKnowtion's senior partner shows how marketing mix modeling can significantly alter the way marketing effectiveness is evaluated.*

Integrated multi-media marketing strategies and multi-channel sales are forcing many companies to derive new ways to assess marketing effectiveness and return on investment. Marketing mix modeling, a prominent tool of the CPG industry that uses statistical relationships to link business results with marketing and non-marketing factors, is one approach gaining broader acceptance.

While this technique can provide much needed insights into marketing ROI, there are implications. Most notably, business results attributed to marketing are typically smaller using this approach since other non-marketing factors, such as underlying economic forces, are now explicitly awarded some of the credit. Also, the business results attributed to trackable media using marketing mix models will generally not be the same as those obtained through traditional attribution methods.

To see this, refer to the chart below, which depicts the number of new accounts opened during the last quarter by Barter Financial, a disguised financial services company that uses an integrated, multi-media marketing strategy. Spending on each media is also shown. Without using marketing mix modeling, Barter Financial has, like most firms, attributed some of its account openings to measurable media such as direct mail and email, and left a large volume of account openings as unexplained (see Column B).

Of course, it is highly probable that Barter Financial's marketing group would ascribe some, if not all, of the unexplained results to its general media spending, brand equity or some other measure of prior advertising. And to some extent it may be correct. It would also likely use survey-based brand and advertising tracking studies to assess consumer reactions to its general advertising.

**Table 1**  
**Traditional and Modeled Attribution of New Accounts**

	(A) Investment	(B) Traditional Attribution	(C) Modeled Attribution	(D) Modeled \$ Cost / Account
<b>General Media</b>				
Network TV	\$5,600,000	---	5,321	\$1,052
Magazines	\$1,600,000	---	968	\$1,652
Newspaper	\$1,100,000	---	1,451	\$758
Radio	\$400,000	---	---	NA <sup>(1)</sup>
<b>Direct Media</b>				
Outline Ads	\$1,200,000	3,209	4,353	\$276
Direct Mail	\$2,200,000	13,200	10,239	\$215
Email	\$300,000	2,448	2,902	\$103
<b>Interaction Effects</b>				
TV / DM		---	2,419	\$460 <sup>(2)</sup>
<b>Baseline Factors</b>				
Economic Forces		---	14,513	---
Other Non-Marketing		---	6,209	---
<b>Non-attributed</b>		29,518	---	---
<b>Total</b>	<b>\$12,400,000</b>	<b>48,375</b>	<b>48,375</b>	<b>\$256</b>

(1) Not available since model could not find a relationship with radio spending.

(2) Cost is based on weighted average of TV and Direct Mail spending.

On the other hand, Column C depicts how a marketing mix model might explain the same business results. In this example, the model indicates that 20,722 accounts, or 43 percent of the total, were opened due to economic factors and other external drivers, not advertising. These "baseline" results might represent the transactions of customers who, on their own initiative and without advertising's impetus, went to the firm's website or a branch office, or called its familiar 800 number, and opened an account.

As before, some of Barter Financial's new accounts are, according to the model, attributed to online ads, direct mail and email campaigns. However, the model reports these impacts at different levels than through its traditional measurement procedures. In the case of direct mail, the figure is smaller; suggesting that some of the direct mail responses, despite being linked to a specific mailing, were actually driven by other factors, perhaps other media, or should be considered part of the underlying baseline trend.

On the other hand, the model indicates that online ads and email are having a bigger impact than their directly attributable results would claim, perhaps by inducing some customers to contact Barter Financial through other channels. For instance, not all of the customers who opened the 4,353 accounts ascribed to online ads may have clicked through an ad and opened an account online, but the model asserts that this many accounts should be credited statistically to these ads.

The model also apportions some of the new accounts to general media, such as television and print advertising. Here the model is saying that changes in new account openings are sufficiently correlated with changes in television and print spending to infer that there is a causal relationship between them. While television and print advertising may be primarily aimed at building or maintaining brand awareness, the model claims they are also having an important short-term affect on account openings.

On the other hand, the model did not find a relationship between radio advertising and accounts opened. This could mean that radio is truly not affecting account openings in the short term or it might mean that, due to the stronger influences of other factors or insufficient data, the model simply could not identify an independent relationship for this media activity.

In addition to the individual effects of the various media, we see that the model has identified an interaction effect between television and direct mail, and says it accounts for about five percent of the total. This kind of effect is often hard to find, but it is very important because it adds to the overall value of the marketing spend for these media.

Thus, you can see that marketing mix modeling can significantly alter the way marketing effectiveness is evaluated. This will have immediate and potentially startling ramifications for marketing investment decision making. For instance, in our example, traditional metrics for the cost to acquire an account will be vastly different using marketing mix modeling. This could be a good thing for managers who want to assess the impacts of total marketing spending or it could be very confusing. Long held norms about cost effectiveness of each media type may be the casualties in this change, but, if marketers can adjust to the new metrics, then they may have a new, and more comprehensive, way to manage their spending and the performance of their marketing programs.

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