DATACTIONABLE!

ACTIONABLE SEGMENTATION: FUSION OF CUSTOMER AND SURVEY DATA

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INTRODUCTION: COMPANIES STRUGGLE TO IDENTIFY INDIVIDUALS FALLING INTO SPECIFIC SEGMENTS VIA TARGETABLE VARIABLES

Overview of a traditional segmentation study

A typical organization can gain considerable strategic and tactical insights by conducting a market segmentation study among customers and non-customers. For example, a market segmentation study can inform a company's approach to the four traditional marketing "Ps" (viz: product, price, place and promotion) in order to optimize the products/services that are offered and assist in developing the most effective marketing communications and advertising.

The basic proposition in a typical segmentation study is that a particular market is not composed of a homogeneous group of individuals (or businesses), but instead consists of different sub-segments that differ in terms of their attitudes, needs and/or behaviors. The goal of a segmentation study is generally to identify groups of individuals who are as similar as possible within a segment but who differ as much as possible from other segments.

In order for a segmentation solution to be actionable and lead to different marketing strategies, six criteria should be satisfied: 1) *substantiality* (segments are large enough to warrant separate efforts), 2) *differentiation* (segments appear to be distinct and different from one another), 3) *stability* (segments do not change over a short period of time), 4) *responsiveness* (segments will respond to unique marketing efforts directed specifically at them), 5) *actionability* (extent to which the marketing efforts to reach segments align with an organization's capabilities, and 6) *accessible/targetable* (extent to which individuals in segments can be targeted via mechanisms such as client databases or ad placement).

Traditional segmentation studies fall short

In our experience, most segmentation solutions generally do a good job of meeting the requirements listed above with the exception of *accessible/targetable*. Segments can be identified through a survey instrument that clearly differentiates in terms of their needs, attitudes and/or behaviors. However, when trying to specifically target individuals within each of the segments (e.g., via database variables, demographics/firmographics, targeted marketing campaigns, ad placement, etc.) it becomes evident that the targeting variables do not align well with the segments. In other words, given the weak relationships between targetable variables (e.g., demographics) and variables that can be used for segmenting (e.g., psychographics), there is generally not a clear connection or relationship between the segments that are derived based on survey data and external variables that could be used to target them.

In cases where it is not possible to target segments via easily identifiable characteristics, companies must generally resort to classifying individuals into segments based on a segmentation classifying tool which utilizes respondent's answers to a battery of questions. This algorithm assigns individuals into the segment in which they have the greatest probability of membership.   The approach works fine when there is a need to classify individuals into segments either on a real-time basis during a survey or after the data have been collected. However, it does not work well in many other cases such as sales efforts (sales people do not want to ask a series of survey questions to a prospective customer in order to classify them), direct marketing to specific segments, targeted advertising campaigns, etc. Further, many organizations have extensive customer databases that can be used more effectively for sales efforts. Being able to integrate segments derived from a survey with the entire customer database makes the resulting segmentation effort much more actionable and useful.

Because of this disconnect, many segmentation studies that are otherwise quite good and actionable are judged to be less than optimal and useful. In other cases, in an effort to better link targeting variables with the variables that form that basis of segmentation (such as needs, attitudes, behaviors), an analyst will merge the targeting variables with the survey responses during the analysis in the hope that this will lead to segments that are more targetable. However in our experience, this approach hardly ever results in a compelling segmentation solution. Instead we find that oftentimes including so many potential, dissimilar variables delivers segments that do not substantively differ across either the attitudes, needs, behaviors, or among the targeting variables. In other words, this approach washes out meaningful differences among the segments.

ACTIONABLE SEGMENT SOLVES THE PROBLEM OF IDENTIFYING INDIVIDUALS FALLING INTO SPECIFIC SEGMENTS VIA TARGETABLE VARIABLES

Introducing Actionable Segmentation

A more useful approach to developing segments that are differentiated as well as targetable is to utilize a technique that we call *Actionable Segmentation* that can bridge this gap and resolve this common challenge by allowing for the creation of perfectly identifiable, and highly differentiated, groups. It connects differences in behaviors and attitudes to known targetable attributes (e.g., customer database, demographics/ firmographics, media usage, channel usage), resulting in a segmentation solution that is much more actionable and useful in comparison to traditional approaches.

How it works

In a typical segmentation analysis, the units of analysis are the individuals that complete a survey in which they answer a series of questions (e.g., they rate their agreement across a series of attitudinal statements). For example, a cluster analysis of individuals who completed the survey will yield various segments composed of these individuals. Actionable Segmentation, on the other hand, creates a collection of "microsegments" that are formed based on different combinations of targetable variables which are then grouped into segments.

For example, imagine that we have conducted a survey among 1,000 respondents in which we had participants provide their level of agreement to a series of 20 attitudinal and need-based statements. Further imagine that the client has a database of variables that can be appended to the survey and that the database contains three variables that have been judged to be most interesting (below we explain how we determine which variables are "most interesting"): age (18-29, 30-49, 50 or older), gender (male, female) and reported income (low, high). From these three variables, we can construct 3 x 2 x 2 = 12 different cells or "microsegments."

Within each of the microsegments we have various individuals who share the same demographics and who have rated agreement with 20 attitudinal and need statements. For instance, one of the microsegments might consist of 55 respondents who are male, age 19-29 years with high income. We can take these 55 respondents and calculate an average score for each of the 20 attitudinal and need statements. If we do this for all microsegments we would have a datafile that consists of 12 microsegments across the 20 attitudinal/needs statements instead of a datafile of 1,000 respondents x 20 statements. We would then conduct the segmentation analysis using these microsegments. However, from a practical point of view, 12 microsegments would actually be too few to conduct a robust, reliable segmentation analysis. Instead, rather than just forming 12 microsegments across three variables, we normally develop 100-200 microsegments from many more variables and then these microsegments are used in the segmentation analysis.

Actionable Segmentation thus involves conducting a segmentation of microsegments rather than individual respondents. In this way we are able to group together microsegments that share similar needs and attitudes. Once these microsegments are grouped together, we now have segments that differ on the key segmentation variables, but that are also perfectly identifiable via the targeting variables that were used to form the microsegments.

How to determine which variables to use to form microsegments

In Actionable Segmentation, constructing the microsegments is critical to the success of the segmentation outcome. We want to form microsegments that are maximally different from one another on the needs, attitudes, and behaviors so that the resulting segments are as different as possible.

In order to identify the variables to use, we conduct a series of multivariate tests including Multivariate Analysis of Variance (MANOVA), Analysis of Variance (ANOVA) and Discriminant Analysis. The approach we have found that works best is to first identify the targetable variables one at a time that are most differentiating. Once these variables are found, they are combined into different sets of potential microsegments and additional multivariate tests are run to determine which microsegments seems to offer the best potential. Thus, the formation of the microsegments is based to a certain extent on investigative "trial and error" where we evaluate a variety of different formation schemes until we identify two or three

that look most promising. Segmentation analysis is then conducted using these various microsegments. After each segmentation analysis is run, the outcome is evaluated using the criteria previously discussed in order to arrive at a final segmentation solution. In some cases, none of the segmentation solutions is judged to be suitable at which point the process is repeated by identifying a different set of targeting variables to form the microsegments.

CASE STUDIES PROVIDE AN OVERVIEW OF THE USEFULNESS OF ACTIONABLE SEGMENTS

Case studies
Two case studies are presented below that demonstrate the use of Actionable Segmentation to identify segments that differ both in terms of attitudes/needs, but that are also highly targetable.

Case study 1
The study was conducted among respondents that are a part of a very specific industry in the US (e.g., a group such as attorneys or physicians) in the US. Our client was interested in segmenting this audience to identify groups that differed in their needs, attitudes and behaviors so that they could develop products, promotions and target messaging that would be most likely to resonate with the segments that offered the greatest potential.

Over the years, the client had compiled a very large database (300,000+ records) of current and previous customers and non-customers which included names, contact information (including telephone number and address for all records and email address for ~10% of the records), as well as many different demographics and firmographic characteristics (e.g., products purchased, size of organization, likely years in business, etc.).

Several years ago, our client had conducted a segmentation study among this audience. While the resulting segments were judged to be interesting, the organization never fully embraced and utilized the segments since they did not align in any meaningful way with any targeting variables. This greatly limited the usefulness since particular segments could not be targeted with specific product offers or messages.

In late 2015, our client again decided to segment the market, however given their previous experience they wanted to ensure that they were able to match the resulting segments to their database to ensure the results were actionable.

An Internet-based survey was conducted among the target audience in the US. The client provided the sample for the research which was drawn from their database of 300,000+ records. Respondents were recruited via email invitation when their email address was available, otherwise they were contacted via telephone and asked to participate in the online survey.

Once they began the survey, respondents were asked a series of questions to understand their familiarity with various brands, the brands they used as well as their level of satisfaction. Next, they were asked to respond to a large battery of attitudinal and need-based statements that covered a multitude of dimensions relevant to their specific industry. Finally, they were asked various demographic and firmographic questions (that were not contained on the database) as well as several behavioral questions that assessed their usage of various services, information sources consulted, channels used, etc.

A total of 900 completed surveys were obtained. An Actionable Segmentation analysis was conducted utilizing the following steps. First, each of the database variables that could potentially be used for targeting was examined to identify those that showed substantive differences on the items that would form that basis of segmentation including attitude and need measures. Once identified, further analyses were conducted to determine the best method for combining the variables into microsegments. Ultimately, a total of 135 microsegments was identified. The segmentation variables were then aggregated within each microsegment (by averaging the measures) in order to construct a new datafile with the 135 microsegments. These microsegments were then used in the segmentation analysis.

A variety of segmentation approaches, algorithms and solutions were investigated (including Latent Class, Convergent Cluster Ensemble Analysis, and K-means), to identify the solution that was judged by the client as producing the most meaningful and actionable segments. In the end, a solution consisting of seven segments was selected. Once a final solution was adopted the segments were fully profiled and described during the reporting phase which allowed the client to decide which segments were most valued (based on a several factors) and hence should be prioritized.

Finally, since we had utilized Actionable Segmentation, we were able to develop an algorithm (essentially a series of "if/then" statements) that allowed us to perfectly assign a segment membership to all of the 300,000+ records on the client's database.

The client has since used the results of the research to identify unaddressed needs among the prioritized segments that can be met with new product offerings. In addition, they have utilized their database to target segment-tailored marketing communications and promotional offers to the most valued segments.

Case study 2

A major software manufacturer frequently sends out communications to their subscribers to drive engagement with the product and enhance retention. Existing communications are triggered by a lifecycle stage (e.g., annual renewal) or simple behavioral triggers.

The goals of the research were to gain greater insights into what attitudes and perceptions drive individuals to renew or not renew their subscriptions so that targeted messaging could be optimized to increase renewal rates, product engagement (use more features) and related sales (upsell add-ons). The ultimate goal of the research was to tie the findings to existing customer purchase behavior and usage data contained in the client's database which contained 5M+ records.

A total of 20,300 completed online surveys were completed among current and lapsed customers in the US, UK, France, Germany, Spain, Mexico and Brazil. All sample was provided via the client's database which allowed us to tie the results back to their database of customer purchases and usage history.

In the survey, a series of 67 attitudinal and perceptual statements were evaluated by respondents. In addition, questions were asked to assess each respondent's likelihood to renew, likelihood to increase the services they utilized, overall satisfaction, and likelihood to recommend the service. These metrics were used in order to construct an overall "affinity score."

Once the data were collected, a factor analysis was conducted to reduce the attitudinal and perceptual items to 22 factors. These factors were used to create composite measures that were used in subsequent analysis. A Latent Class Regression Analysis was conducted to derive individual-level coefficients which related the 22 composite factors to the overall affinity metric.

An Actionable Segmentation analysis was then conducted by first constructing a total of 84 microsegments which consisted of groups formed using variables from the client's database based on insights from the latent class clusters and how the factors drove affinity. Within each of the microsegments, the latent class regression coefficients were averaged. Finally, cluster analysis was conducted using the microsegments and a total of six segments were identified that differed in terms of the factors that drove their affinity towards the product.

Since Actionable Segmentation was used, we were able to assign all of the records on the client's database into a segment. The client has since used the findings from the study in order to develop targeted messaging and promotions that differ by segment to motivate customers to renew and further engage with the product.

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