Principles of Building Pharmaceutical and Non-Pharmaceutical Acquisition Models

What are acquisition models?

Acquisition models are predictive models, which are used to acquire new customers or consumers to the brand. While typically models in database marketing involve binomial variable as a predicand and a host of predictors, the definition of predicand becomes a tricky issue in acquisition models, due to non-availability of right predicand and also the sampling problems that we end up facing due to the same problem mentioned above and further accentuated by the large scoring population that is being considered in the study.

By the very nature of the model being new and for the reasons mentioned above regarding data problems, acquisition models require certain special considerations to be built into the modeling process.

How are they different from loyalty, cross-selling, and up-selling models, and co-branding models?

Model type	Purpose	Definition of Predicand
Loyalty model	To find those who are most likely to respond from the the internal list of current customers; scoring list is internal	Clearly defined as some one bought the product or not due to the mailing, with in a certain time period

Cross-selling model	To find those who could be sold another complementary product or services because they already bought a specific type of product or services; the scoring list could be internal	Clearly defined as some one who bought the base product and who also bought the complementary product with in a specific time period
Up-Selling model	To find those who could be offered higher value (to the individual) and higher profitability (to the company) product; the scoring list is internal	Clearly defined as some one who owned the base product and switched to the higher value product with in a specific time period
Acquisition model	To find those who are the most likely people who will buy the product for the first time or who already buy the product and we want to bring them into our internal list; scoring list is external	The predicand has to be well defined as stated in the purpose. Because return on investment is higher in loyalty, the first thing companies has to do in acquisition is to get the current customers in to the internal database. For this, the predicand has to be some one who has already bought the product vs. some one who has not bought the product but they are not in the internal database. Many marketing analyst approach it as a look alike model and hence they are likely to mix the sampling variation between the desirable (acquirable) population

		vs. random population

Some very extreme cases of acquisition models

For example, if the analyst is building an acquisition model, where the predicand is defined as someone who has been understood to be good responders (for something, perhaps not even connected with the acquisition) for some offer, and trying to build a predictive model, which will be scored against, say a 50 Million prospect database, there are two important difficulties that we will have are unstable and even if it is not unstable, a poorly predictive model. First of all, the predicand is considered to be one it belongs to the "acquirable group" vs. "prospect database". We select a sample, say 100,000, from the "acquirable group" and another 100,000 from the prospect database to build the model. We are talking about modeling a poorly defined acquirable group with a small fraction of the population from the prospect group (population signal to noise ratio could be very different order of magnitude between these groups for a given sample of size N and a given set of predictors, and the distribution of these ratios could be widely distributed for the population group vs. the "acquirable group"

An Ideal approach to acquistion

Always define your acquisition problem to be one where you predicand is the following: The current product purchaser or not in a given time period.

For example, in the case of pharmaceutical product marketing, the predicand is whether the individual purchased the product or not in a given time period. Of course, finding this information is a whole different game, but that is the only way to the job. On the other hand, even if the product is not in the market for a longer time and the market penetration is not that much, we can still use the same method; the only difference is that this time, we will be acquiring really new product users, new consumers (in the previous case, we are acquiring current customers).

In the case of a membership based internet company, if the interest is in getting new members, the right way to do the acquisition is to use the predicand whether some one is a current member or not, the current member's characteristics should be orthogonal to the competitor's factors and the non-members factors should be parallel to the members factors; it is a combination of cluster analysis and logistic modeling.   Note that this is not a problem in Pharmaceutical acquisition because the products are unique and hence we do not need to talk about orthogonality of factors with respect to the competition; they are not unique in internet membership and hence we need the modification. However, if the product is not unique in the case of Pharmaceutical product marketing, we will significantly gain by using both cluster analysis and the logistic models.

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