

## **Managing the Marketing/Analytical Partnership**

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All too often, the relationship between analytical people and marketing people is a difficult one. The marketing people do not understand the terminology, or buzz-words, of the analysts. Often, marketing does not understand what is possible through the use of analytical techniques, and they do not know how to ask. On the other hand, the analysts do not clearly understand the desired objectives of the project or the relevance to the bottom line. At the same time, analysts believe that marketers do not understand the power of what they offer.

In 1977, I was hired as a Systems Engineer at IBM. At that time, they decided to take marketing people and train them in systems issues, while taking systems people and training them in marketing. My management felt that was important because the systems people they had were not always adept in communicating with the end-user or client. At the same time, marketing personnel could not “talk” systems issues. Just prior to a month-long Assembler coding class, I decided that marketing was my true calling. I was fortunate enough to join Sara Lee Direct in its infancy and learn the world of database marketing from the ground up.

Since IBM, I have used my training to work with service bureaus and to understand data issues involved in starting new catalog businesses or running existing ones. Especially when starting a new business, teamwork with analysts is critical to the creation of a well-constructed test – minimizing test time, maximizing test effectiveness and evaluating test results.

The lessons I learned at IBM have served me well. The truth is that marketing and systems/analytical people need each other, but do not spend enough time communicating with each other.

One of the strengths of database marketing is that the numbers can “talk” to you about your business, if you know how to massage them. Data is important to the success of your catalog business. Understanding data enhances your marketing ability and adds efficiency to your processes.

Most marketing people in our industry are at least somewhat adept at evaluating standard data. However, there are processes and abilities that require sophisticated technical training. For that, we need specialists. In today’s world of evolving technology, the role of analytical resources will continue to grow in importance, and more often mean the difference between failure and success.

Data analysis is an iterative process. The data points to opportunities. For example, it may direct you to a change in positioning, or help generate a spin-off catalog. Once results are analyzed, further study of the data will help refine next steps.

### **Maximize the Relationship**

Let's look at what you need to know to make the relationship between marketing and analytical personnel both productive and profitable:

- Encourage communication:
  - Hold regular meetings to review marketing results and analytical findings. Include analytical personnel. Let them be part of the process and contribute with their special abilities and experience. Time spent reviewing past and future promotions is critical to understanding as they dig through the data. Without this, the most important questions may never be asked.
  - Allow dialog between groups.
  - Use management by walking around. Get to know each other. Much is discovered within casual conversation.
- Set clear objectives for the business, the “event,” or analysis.
- Develop mutual understanding and respect for the processes each group uses. Acknowledge that you need each other and can benefit from a partnership. Be willing to acknowledge another's experience has validity and work together.
- Make every effort to speak the same language. Highly trained analytical personnel can be intimidating to marketing/management. For one thing, they often speak a different language. There should be at least one person who has some knowledge of both languages who is willing to be a translator. Everyone should attempt to speak the same language. (See “Basic Terminology Explained.”)
- Know that using analytical tools is a process rather than a quick fix. Being a data detective is not a one-time thing. Rather, in an environment conducive to good research, it is ongoing.

### **Seeking the “Right” Analytical Help**

Most companies could benefit financially from improved, or at least expanded, analytical capability. The number of people who can do this work is relatively large. But, if you want someone with industry experience, the pool of talent is very small. This low availability means that it is even more critical for each organization to have someone on staff who understands both marketing and analytical issues, and can “translate” for everyone else.

The perfect analytical person would be:

- Knowledgeable of processes and techniques, but also of the data, from both internal and external sources.

- Able to focus on a project and complete it on time without going off on a tangent. There are individuals who are absolutely brilliant, but become distracted by low-priority patterns within the data and are unable to set them aside to concentrate on data that can translate to the bottom line.
- Interested in digging into the data, in order to understand why things happen. This adds richness to the marketing process. And, when there is a meaningful pattern within the data, that person is more likely to address it in an appropriate – even optimal – way.
- Respectful of other people and their contributions.
- Experienced in different analytical processes, and able to communicate the strengths and weaknesses of each, offering recommendations as to the best methodology for a given situation.

The perfect marketing person would:

- Respect other people and their contributions.
- Not be intimidated by buzz-words or terminology.
- Seek education on terminology and key issues, in order to increase effectiveness in evaluating research results and implementing change into marketing strategy.
- Clearly communicate objectives and needs.
- Understand the customer based on past behavior and research results.
- Put the business in context within its market.
- Develop the strategic plan.
- Be available to answer questions, review progress as appropriate, and brainstorm scenarios.
- Promote teamwork.
- Keep everyone focused on the desired end, and set deadlines with input from analytical personnel.

### **Internal versus External Resources**

If you are in the market to hire analytical expertise, how do you decide between hiring full-time employees and using external consulting resources? There are advantages and disadvantages to each. The important thing is to honestly look at your organization – its strengths and weaknesses, as well as its “personality” in light of the following issues:

## **Internal Analytical Resources**

### Advantages:

- A full-time hire can be cost effective if the person is used steadily. It can be a tremendous asset to have someone with a true data orientation think about your business all of the time.

For example, one clever analyst was intrigued by an unusually high number of back-orders. He uncovered a programming glitch that, under certain circumstances, identified back-order situations when, in reality, the merchandise was in stock. This had cost his company a significant amount of money in cancelled orders from customers unwilling to wait for the merchandise to be shipped. Fortunately, there was an inexpensive fix for this “false back-order” problem, which had immediate revenue impact.

- There will be day-to-day opportunities to fully integrate with marketing. Not only will there be communication during scheduled meetings, but at the water cooler or in impromptu lunches or office drop-in conversations.

### Disadvantages:

- If you have a small organization, you may have no one in-house to train, develop, or evaluate that analytical person effectively.
- There is a small pool of experienced talent from which to recruit.

## **External Analytical Resources/Consultants**

### Advantages:

- There is a wider availability of talented/experienced personnel.
- Outside resources usually bring the broader perspective gained from working with multiple clients. They are further along the learning curve of various techniques.
- A long-term relationship can supersede personnel turnovers in-house. An outside firm can actually become the repository for the analytical (and marketing) history of an organization.
- In a retainer, or ongoing, relationship, there are individuals thinking about your business on a continuing basis. If they see opportunities appropriate to your business, they will tell you.
- Expertise is available for occasional projects without having to hire full-time.
- Are more likely to be up-to-date on new techniques and processes.

### Disadvantages:

- The absolute cost can be high. However, if the research results are implemented effectively, the investment can be paid back. With retainer relationships, the real cost can be similar to

in-house employees. One large financial institution estimates that it costs \$250,000 per year (in a major metropolitan area) to pay salary, benefits, training, recruitment, data processing support, licensing fees, overhead, and equipment for experienced analytical talent.

- By definition, outside resources are not as accessible as someone in the same building. However, some large clients do pay consultants to work full-time on site.

## **Conclusion**

Business issues do not always have statistical solutions, just as statistical techniques do not always result in good business decisions. And, there are always political issues that require slow, evolutionary changes as credibility is built. However, a solid partnership between marketing and analytical groups will provide the give and take necessary to guide a strong catalog operation.

## **Addendum:**

### **Basic Terminology Explained For Marketers**

#### **Statistical Techniques**

RFM Analysis: Selecting panels of buyers or prospects for promotions based on permutations of historical criteria such as recency, frequency, monetary value, and product type. Generally, the RFM criteria, as well as their associated categorical breaks, are intuitively determined, based on historical performance. By definition, each panel, or “cell,” is homogeneous in composition (e.g., everyone within a particular cell will have 0 to 6 months Recency, two Lifetime Orders, and \$50 to 100 Average Order Size). Some companies have cells that number into the thousands, causing sample-size problems.

Multiple Regression: A statistical technique that: 1) interrogates multiple potential predictors (i.e., “independent variables”), 2) finds the subset that best predicts future behavior (i.e., the “dependent variable”), and 3) weights them (i.e., “assigns multiplicative coefficients”) in such a way that a file of customers or prospects can be sorted in terms of most to least desirable predicted behavior.

Regression assigns a unique score (i.e., predicted behavior) to every individual. But, very different individuals can receive the same scores (e.g., a person with 36 month Recency and three Lifetime Orders might have the same score as someone else with 3 month Recency and one Lifetime Order).

Tree Analysis (e.g., CHAID): A statistical method of dividing customers into homogeneous groups by purchase history and/or demographics. The resulting groups can be rank-ordered by some performance measure such as response or sales. They are always applied to situations where there is

a dependent variable and a number of independent variables. They can provide insight into customer behavior and result in the identification of marketing opportunities.

Statistics defines the best variables to include for grouping. Tree analysis creates cells just as does RFM, but is less dependent on human intuition. Generally, human intuition determines the variable “breaks” during the data preparation stage (e.g., Average Order Size = \$0 to 25, \$25.01 to 50, \$50.01 to 75, etc.). However, Tree Analysis uses statistics rather than human intuition in determining how the variable categories should be grouped.

Tree Analysis often is used as an intermediate step in regression, to find “interactions” in the data (e.g., individuals who are both older as well as affluent might be particularly interested in buying a Cadillac).

Multiple Discriminant Analysis: A classical statistical technique to classify observations and assign them to distinct, mutually exclusive groups. These groups are reviewed and descriptive names applied to each (e.g., "soccer moms").

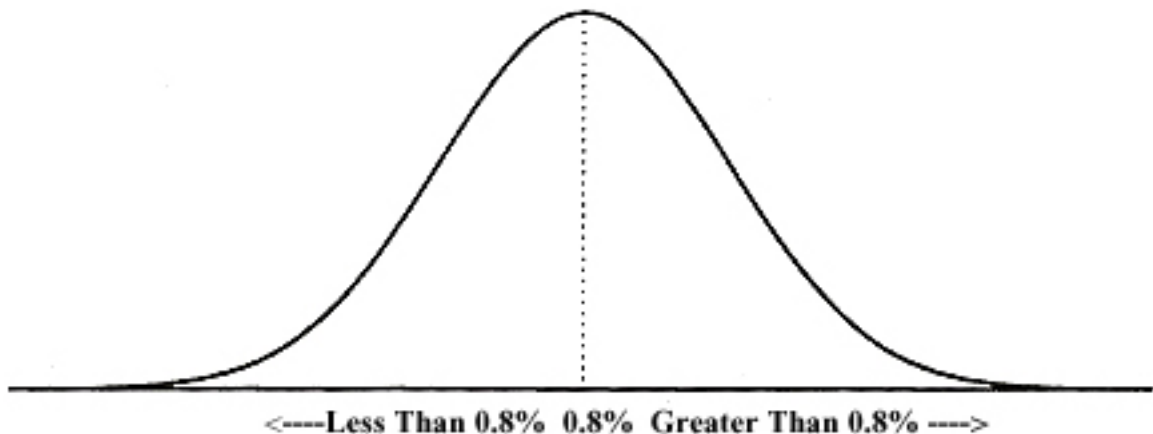
Neural Networks: Originally developed to mimic the human brain process, these methodologies “learn” from data via various mechanisms. They make no assumptions about the distributions of predictor variables or targets. They can model highly non-linear relationships and capture interactions that are difficult to see. Often used for pattern recognition. Because they are highly sensitive, any problems with the data are exacerbated. However, if the problem is defined correctly, with a strong research design, these types of methodologies can be quite effective.

### **Statistical Packages**

SAS & SPSS: Popular statistical packages of application software that are used to do regression, create clusters, perform tree as well as discriminant analysis, manipulate data, interrogate data sets, and more.

Statistical Significance: The determination of whether or not two results are different enough to be considered “real.” For mailers, most often used to determine if the response differences between two test panels, or test and control panels, can be used to determine a “winner.” Also used to evaluate research results. This is determined by statistical techniques that incorporate: (See illustration)

- **Bell Curve:** A visual depiction of a normal distribution of observations. It is, by definition, always symmetrical.



- **Confidence:** (a.k.a. Confidence Level): Degree of certainty in the accuracy of a test result; often expressed as a Range (a.k.a. Confidence Interval) around the test result. Example: Test result of 1.0% @ 26,790 quantity. Have 90% Confidence that “true” universe response is within the 0.9 to 1.1% (Range). The theory behind this example is that if an experiment is repeated 100 times, we should expect the result to fall within the Range 90 times.
- **Precision:** One-half of the Range. If you want the results to be +/- 10%, 10% refers to the precision. Note: A Confidence Level of – say – 90% does not necessarily have Precision of +/- 10%.
- **Tails:** Extreme areas of the distribution, both to the left and right of the Mean (a.k.a. Average). Tails typically lie plus/minus two standard deviations beyond the Mean of the distribution.
- **Outliers:** Atypical observations. Approximately 95% of the observations should fall within two standard deviations of the mean. Extreme observations can fall into either the left or the right tail of the distribution.

## Name Selection Techniques

**Nth Name Selection:** Generally used for test panel record selection. Every “nth” record is chosen. If you are selecting – say – 10,000 records out of 1 million, every 100<sup>th</sup> record is chosen. (In this case, “n” = 100.). This technique can cause problems if: 1) there is an intrinsic pattern within the data set (e.g., you want a 50% sample, and the data set is ordered male, female, male, female), or 2)

for list order fulfillment (e.g., ten orders of a 10,000 Nth could result in the same 10,000 names being selected ten times).

Nthing With A Seed: Often used in list order fulfillment to ensure against the problems inherent in “normal” Nth’ing. For example, if ten companies ordered list tests of 10,000 from a universe of 100,000, this process would prevent all of the companies from receiving the same records. For each company, one record from the first 10 (i.e., the universe divided by the desired panel size) would randomly be selected, and then every 10<sup>th</sup> record subsequent to it.

True Random Sampling: Each record is selected randomly and has an equal chance of selection. For instance, to select 10,000 out of a 100,000 base, the first name chosen may be #682, then, # 99,204, then, #88, and so on. This is relatively expensive from a data processing standpoint.

Stratified Sampling: A process to improve the “representativeness” of test panels compared with “normal” or “common” sampling. This is done by dividing the universe into subgroups based on a factor(s) that correlates with what you are trying to measure, and then sampling within these subgroups. For example: to measure next 12-month sales: 1) rank the universe based on previous 12-month sales, 2) divide into equal 25 panels, and 3) Nth-select within each panel. Often used when dealing with extreme price points.

## **Test Panel Design**

Holdout Panels: Known customers who receive no database driven promotions. They can be influenced only by other, non-database driven, media.

Longitudinal Test: A long-term test using an A/B split(s) to measure cumulative behavior over time. Multiple panels can be used. Often, 6 to 12 months in duration. For example, Panel A receives multiple database promotions; and Panel B no database promotions. Useful because database promotions often change behavior slowly, which cannot be measured with a single test. Especially useful in open loop situations such as retail where the target audience is receiving stimuli outside of database promotions.

## **Other Terms**

Mean: The average result. In the Bell Curve illustration, 1.0%.

Median: If all of the observations in an analysis were listed from high to low, the median is the one in the middle, regardless of value. For instance, if you took a sample of 99 observations, the median would be the actual value of the 50<sup>th</sup> observation.

Mode: The observation value that happens most frequently.

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