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Q-Methodology and Modern Marketing Research
Part I: Fundamentals of the Science of Subjectivity

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Blurring the Lines for Sharper Focus: Introducing Q-Methodology

To succeed, today's CMOs need to be part anthropologist, part cultural storyteller and part visual artist. They need to understand the underlying values, mores and psyche that drive consumer decisions. Leveraging cultural context, creating collective stories and developing ideas that resonate all involve research problems that most traditional brand research techniques do not adequately address.

Q-methodology, a relatively unknown and often misunderstood research methodology, blurs the lines between quantitative and qualitative procedures to deliver profound insights into these types of research questions. It enables the rigorous, systematic exploration of human subjectivity.

Widely used primary research methodologies – surveys and focus groups – play crucial roles in informing "what" and "how" people think about brands. But rarely do these tools do a good job of helping marketers develop a truly deep understanding of the underlying subjective viewpoints that shape consumers' interactions with brands.

What is virtually missing in common forms of brand research is a systematic method for exploring subjective viewpoints of consumers that couples both quantitative and qualitative techniques. While it is true many marketing researchers often use quantitative methodologies to inform qualitative exploration – or vice versa – there are usually clear divisions between the two disciplines.

Open-ended questions on surveys and qualitative insights garnered from traditional focus groups can explore these types of questions. But more often than not, these data represent respondents' brief justification for their reactions to a given stimuli. They do little to explore the consumers' life experiences or the collective cultural context that may be shaping their responses – because of the limitations of the research procedures, and because few consumers consciously think about brands in these terms.

These types of "why" questions are the most difficult to explore. *Why?* Because they hit at one of the most perplexing and complicated areas of study: human subjectivity.

When consumers interact with brands, it involves some varying degree of conscious, objective thinking. For example, "This brand of cola is cheaper than the others, so I am going to buy it." Assuming all observers of the situation could read the price tag, all would perceive this objective aspect of the brand experience in the same way.

But, objective thinking is not the only thing at play, and "rational choice" is not the whole story. CMOs would have much easier jobs if they were. Obviously, at the core of every brand interaction is subjective thought that cannot be measured quite so neatly. After all, the respondents themselves often cannot easily articulate this underlying subjective thought process to researchers in the first place.

And one cannot blame them. In an instant, a rush of cultural archetypes, values and mores, self-image and self-esteem, group identity, past experiences, primal instincts and countless other internal and external forces converge to influence consumers' judgments about brands.

Subjective and objective thinking are as intertwined and interdependent as the subject-object interaction itself. Almost instantaneously, consumers simultaneously make judgments about brands based on subjec-

tive and objective thought. Yet few marketing research approaches explore the former in a systematic, rigorous fashion.

Subjective Viewpoints: Approaches and Challenges

Marketing theorists have attempted to dimensionalize objective and subjective aspects of brands in many ways: functional versus emotional brand attributes, tangible versus intangible brand attributes, a dizzying array of hierarchal model. And the research methods most often used to explore subjectivity (or what tends to be generalized as the emotional or intangible dimensions of a brand) reveal the inherent challenges of studying consumers' subjective viewpoints.

In quantitative consumer survey research, the psychometric Likert scale is the tool used most often to explore subjectivity. A typical example would have respondents asked to rate the level of agreement with a statement on a scale of -5 to +5. Data gathered via Likert scales quantify the subjective viewpoints of respondents, which is invaluable in that responses can be objectively measured by the researcher. In addition, a large number of variables can be tested in a single survey. However, the respondent is not forced to evaluate the testing stimuli one against another, making the rating of the stimuli somewhat arbitrary.

Certainly, doubling up on similarly worded stimuli can help gauge the validity of participants' responses. And statistical tools can be employed to explore correlations between the variables being measured to help explain their interrelation, or lack thereof.

But ultimately, the respondents themselves are not "forced" to evaluate the stimuli in the broader context of the adjacent stimuli. In other words, the Likert scale does not simulate the experience of simultaneously weighing an array of stimuli in relationship to one another in order to convey respondents' nuanced, subjective viewpoints.

Focus groups, in-depth interviews and other qualitative methods obviously take a much different approach than Likert scale surveying. And they all suffer from a very different but serious limitation.

Depending on how they are used, focus groups and similar methods can provide rich insights into the subjective viewpoints of consumers. Participants are free to describe in great detail, to the extent of their ability, their subjective viewpoints and the reasoning behind them.

However, in contrast to the Likert scale or other quantitative methods for exploring subjective viewpoints, there is no objectively measured score (*i.e.*, -5, +2, 0) to assign to the responses. Consumers' responses are wholly qualitative and open to a wide degree of interpretation by the investigator, which is a double-edged sword.

On one hand, the researcher often has *a priori* knowledge or hypotheses that can help tease out information from respondents and/or shape the investigator's interpretation of the responses, resulting in deep insights that might otherwise go unnoticed. But for better or for worse, focus group researchers bring their own subjective viewpoints to the table. And this has the potential to result in either unintentional or intentional investigator bias.

Objective Subjectivity: The Q-Sort Procedure

In contrast to more widely used methodologies, Q-methodology enables the study of operant subjectivity. It applies statistical principals of factor analysis to extract hypothetical groups of like-mined people on a given topic. While considered a quantitative methodology, Q incorporates elements more traditionally associated with qualitative techniques.

The data collection procedure in Q, known as the Q-sort, requires participants to arrange statements, pictures, colors, objects or any other type of stimuli along a normal distribution curve according to their level of agreement or likability. Typically the q-sort stimuli consist of statements written on cards and conducted in person or via mail, but new online tools, such as nQue™, make the process more efficient.

Participants are presented with sample statements and a hardcopy or virtual template with a series of columns – each with a fixed number of statements to assign to each column – that resembles a bell-shaped curve. They are then asked to assign each statement to a position on the bell-shaped curve based on their level of agreement or disagreement, like or dislike, or any other continuum. This is perhaps more easily explained visually.

The Q-sort procedure may very well be the biggest reason Q-methodology is often discounted or misunderstood. The data collection technique resembles playing a hand of solitaire. Indeed, the Q-sort has certain game-like characteristics.

However, this is perhaps the real beauty of the Q-sort procedure. It is a self-referential process, and the participant is "forced" to evaluate the stimuli simultaneously in relationship to one another. The Q-sort procedure itself requires participants to make judgments on where to rate the stimuli vis-à-vis one another, thereby contextualizing the stimuli as a collective whole. Essentially the participant is given a set of tools to help him or her express a nuanced, subjective viewpoint on a given topic.

Once the data collection is complete, Q-methodology employs factor analysis to identify groups of like-minded people. This allows the researcher to systematically identify areas of alignment/misalignment between and amongst these hypothetical groups of like-minded people.

Whereas the most commonly used type factor analysis (R-type factor analysis) correlates tests, Q-type factor analysis correlates people. Although an oversimplification, for illustrative purposes it is helpful to think of Q-type factor analysis as R-type factor analysis with the data matrix transposed.

Therefore, in Q-methodology, the sample becomes the statements or other stimuli, and the people performing the Q-sort become the variables. R-type factor analysis studies the relationships between objective variables (*e.g.*, income and level of education), whereas Q-type factor analysis studies the correlations between subjective viewpoints across subjects. In other words, the researcher is exploring the correlations between people as opposed to correlations between tests. The technique allows for the rigorous, disciplined exploration of subjectivity while requiring very small samples of participants.

The data gleaned from Q-sorts are often augmented with other data, which might include in-depth interviews or open-ended questions asking participants to explain why they ranked certain items at a given point on the continuum. The researcher might also gather demographic information or other data to

supplement the completed q-sorts and provide insights to help interpret why certain groups gravitate towards a given viewpoint, or reasons for divergent viewpoints between groups. The result is a rich, structured and systematic deep dive into the subjective viewpoints of consumers that researchers arguably cannot achieve via any other methodology.

In addition, a wide variety of online tools and social media platforms are opening new doors and exciting possibilities for developing Q-samples (*i.e.,* concourse of statements or other stimuli) used in Q-studies. Sites like twitter, Facebook, Flickr, YouTube and an endless sea of blogs and online forums make gathering rich, meaningful, naturalistic Q-samples directly from consumers easier than ever before. Brand researchers can cull through natural conversations already happening in the marketplace to find dominant themes and structures that can be explored via Q-methodology.

Q opens the door to developing a profound understanding of the subjective viewpoints of consumers. It is the science of subjectivity. Part II of *Q-methodology and Modern Marketing Research* will address Q-study designs in more detail, providing hypothetical examples of Q's possible applications in brand research.

For more information on Q-methodology or other innovative approaches to brand research and analytics, please contact Davis Brand Capital at 404-347-7778.