

Chapter 10

How Marketers Conduct Mixed Methods Research: Incorporating the Exploratory Sequential Design with the Hierarchy of Effects Model

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ABSTRACT

The complimentary nature of qualitative and quantitative research methods are examined with respect to a study assessing the market's view of a training and development institute in the Middle East. The qualitative portion consisted of focus groups conducted with seven distinct market segments served by the institute. The results proved insightful with respect to uncovering and understanding differences of opinion among the seven groups; however, taken alone, the qualitative research would have been very misleading with respect to the institute's standing in the Middle East.

INTRODUCTION: MARKETERS' FREQUENT USE OF THE EXPLORATORY SEQUENTIAL DESIGN IN MIXED METHODS RESEARCH

Mixed Methods research has been widely accepted, used and reported in fields such as sociology, education, and health, among others, and has been practiced by marketers for many decades (Creswell & Plano Clark, 2007; Tashakkori & Teddlie 1998). Even so, most marketers don't use the term "mixed methods" and, in actuality, few mixed methods marketing cases have been published. Consequently, the rich methodology and alternative research designs available in the area of mixed methods have not been as formally adopted by marketers as one might expect—even though qualitative and quantitative approaches have been used by them since the 1950's. Marketers have long realized the advantages of combining quantitative research with qualitative research most often in the form of large sample surveys and focus groups and most often in a QUAL – QUAN sequence.

While one-on-one in-depth interviews are used by marketers when there is a need to study individuals' decision-making processes in depth and for sensitive and personal issues, focus groups have been

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the qualitative method of choice among marketers for many years. One potential contribution to mixed methods research made by marketers is their careful consideration of segmentation in determining the composition of focus groups. An example is available in Table 1. While not generally using this nomenclature, marketers most often tend to use and begin the sequence with the Exploratory Design in their mixed methods studies. Most often this is done to identify important variables and issues which they will then study quantitatively through survey methodology. Thus, the Exploratory Sequential Design would be the mixed method design of choice in most marketing research studies. The focus group discussions enable marketers to develop a better instrument for use in the quantitative phase in that the variables, propositions and issues have been raised which need to be quantified.

Do marketers tend to emphasize the qualitative or quantitative component when conducting exploratory sequential mixed methods research? This is a difficult question to answer as the case discussed in this paper will reveal. The complimentary nature of qualitative and quantitative research methods is examined in this study which was conducted to assess the market’s view of a training and development institute in the Middle East. The qualitative portion consisted of focus groups conducted with seven distinct market segments served by the institute. The results proved insightful with respect to uncovering and understanding differences of opinion among the seven groups; however, taken alone, the qualitative research would have been very misleading with respect to the institute’s standing in the Middle East. Subsequent quantitative research, consisting of surveys of users and non-users of the institute’s programs, provided an insight critical to management that could never have been uncovered via qualitative means. Similarly, the qualitative findings proved to be much more robust and insightful in many matters than the quantitative findings.

Thus, it is impossible to conclude whether the qualitative or quantitative results of the study were more important. While the advantages of mixed-methods research are well known, this study offers a cautionary note regarding the qualitative component. It also offers a model for questionnaire development for use in the quantitative phase which proves useful in verifying or not verifying results from prior qualitative research.

Background of Study

The training and development (T&D) institute being studied has been located in one, small Middle Eastern country for approximately 30 years. Many consider it to be a world-class provider of T&D, offering

Table 1. Important segments to consider for focus group participation

Current User of Institute	Former User of Institute	Never User of Institute
Heavy user	Currently using competitor	Currently using competitor
Moderate user	No longer looking	Never user currently looking
Light user		Never user not looking
User migrating upward		
User migrating downward		
User with no migration either way		

Note: Companies migrating upward are those using increasing spending at the institute. Those migrating downward are decreasing spending at the institute. Those companies with no migration are maintaining the status quo.

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professional qualifications for the financial and insurance sectors with programs in insurance, Islamic banking, leadership, banking and finance. The institute is a multilingual, multicultural organization with an accomplished faculty, most of whom hold internationally recognized professional and academic qualifications, along with extensive market experience. The institute is considered by many to be the best in the world for training in Islamic finance and one of the best educational institutes in banking and insurance. The institute also provides an extensive range of internationally and locally recognized professional qualifications.

The purpose of the study was to assess its position in the marketplace: the strength of its brand and programs among its major segment users and potential users. Oftentimes this is referred to as a SWOT analysis: a study of an organization's strengths, weaknesses, opportunities and threats. As such, qualitative research is conducted prior to quantitative research in order to highlight variables, issues and situations which can be quantified in the subsequent survey research.

THE QUALITATIVE RESEARCH STUDY

Focus group sessions were conducted with each of the institute's main market segments: commercial banks, non-commercial bank financial institutions (NCBFI's), insurance companies, government ministries and prominent country opinion leaders. The first four segments mentioned can provide an assessment of the institute's strengths and weaknesses while prominent country opinion leaders can also do that but in addition discuss its opportunities and threats. This is what Creswell refers to as "purposeful sampling (Creswell & Plano Clark, 2007). These companies and individuals were selected because they had the awareness, knowledge and experience with the institute and could therefore provide necessary information.

Qualitative research generally involves small samples and each focus group consisted of 8-10 individuals. Each group was homogeneous in terms of business segment. Nonetheless, with a total of seven focus groups being conducted, the sample size was approximately seventy—a fairly robust number. The participants in each industry focus group numbered only 7-10 and projections to each industry are not warranted. However, taken together, the seventy focus group participants offer a fairly good representation of the institute's base. The focus groups uncovered dramatic differences of opinion among the sectors but did not uncover a key underlying issue regarding the institute's image which could only be revealed through a quantitative study. First, let us examine the sectors' views of the institute in terms of image, curriculum, course offerings and customer focus.

Sector Opinions of the Institute

Commercial bankers feel the institute has a name which is well established in the country. They view it as a strong bank training institute with high quality offerings and staff, and one which provides an excellent education in banking fundamentals. Opinion leaders viewed the institute in societal terms stating it has a wider reputation than just offering vocational courses. According to opinion leaders in the country, the fact the institute has expanded into executive education and professional certificate programs shows it is meeting the needs of "our" society. They view the institute as filling a gap in a country without too many strong universities. Likewise the heads of the government ministries view the institute as a model of excellence that should expand its financial sector expertise to other sectors such as retail and construction. They encourage their entire staffs to attend the institute's courses and view the certificates

they earn as comparable to university degrees. They view the institute as the best educational facility in the entire country.

Insurance companies use 90% of their training budgets at this institute but feel that while the institute excels in basic training, it lacks courses and skills in advanced and specialized training. NCBFI's include securities and investment houses, financial institutions, brokers and investment managers. They feel that the institute has done a great job at entry-level programs but not at levels 2, 3, or 4. They view the institute as being good, solid, safe and reliable but one that does not offer courses that are relevant for their business or for middle and upper management. One from this sector summed up the feelings of the entire group by saying "You aren't meeting our needs but you enjoy enormous credibility."

Sector Opinions of the Institute's Curriculum and Course Offerings

The conclusion from the previous section is that the institute is solid in the basic-core foundation courses and serves the ministries very well, commercial banks fairly well, the insurance industry to some degree, and NCBFI's not very well. However, all have a positive view of the institute and feel it has a strong reputation and reflects well on their country. When it comes to the institute's curriculum and course offerings however, most feel it falls short. Commercial bankers feel it doesn't offer anything of value for employees who have more than five years of service. The insurance sector said they are happy with the institute but have no more courses to attend since there is no advanced curriculum in their field. They view the institute as a shop selling the same "stuff" for more than ten years. The NCBFS feels the institute offers no series of courses paralleling career paths in their industry— not even a single options course. It became obvious that the sectors feel the institute needs to update their courses, curriculum and catalogue by pruning old courses and introducing new ones in growth areas.

Most sectors, especially the NCBFS, feel that if the institute is going to innovate, they must do it now since they are at the peak of the maturity stage. They see the institute as being vulnerable to the many high-powered 2-4 day business workshops being offered by financial experts in Dubai.

Sectors View the Institute's Current Position and Ideal Position

The issue here refers to how the institute should position itself. Is it (*a, the*) leading institute in the (*country, Gulf, entire Middle East*)? Is it a training, development or training & development institute? Which fields, if any, is it a leader in: banking, finance, insurance or management?

Some felt it is the leading training institute in the entire Middle East—but only in banking and finance. The insurance sector felt it was the leading insurance training institute in the Gulf.

As we will see, the results of the quantitative survey render many of these opinions relatively useless.

Most agree that while development should be what the institute does, it is best characterized today as primarily a training or T&D institute. No one positioned the institute as a development institute saying that since it does not target middle and senior management, there is no development focus. All felt the institute should focus on development. One said, "What is the benefit of training? Career development is more important because it includes the reward of training." The feeling is that if the institute wants to move into employee development, it has to work more closely with human resource departments in designing sequenced programs for employees and positions.

Sector Opinions of the Institute's Customer Relationship Efforts

All sectors viewed the institute as lacking customer-centricity. They complained that they never receive visits, see few marketing efforts, lack knowledge of program offerings, and feel the institute doesn't understand their educational and training and development needs. They feel the institute needs to sequence course offerings to match career growth within each sector. To do that, the institute needs to become a partner with companies in each sector—not merely an acquaintance.

THE QUANTITATIVE SURVEY RESULTS: A REAL SURPRISE

Focus group participants were intimately involved with the institute and its training of their employees; in addition, focus group sessions were held at the institute's meeting room. It is well understood that opinions generated in focus group sessions may not represent the entire marketplace since participants basically "self-select" their attendance at a session and consequently may be different from those who don't attend. In addition, the number of participants is small and they may not reflect the larger whole. Finally, opinions can sometimes be channeled by dominant participants in ways that don't reflect the market. Consequently there is a need to quantify results using a larger, probabilistically-selected sample.

As a result, two larger surveys were conducted in this research study—one with users of the institute (128 companies) and one with non-users (146 companies). Ninety percent of the respondents in the users group were employed at companies located in the institute's small home country. Half were directors/managers/ department heads, a fifth were general managers or assistant general managers, fifteen percent worked in Human Resources departments and ten percent worked in T&D as managers or assistant managers. These were highly qualified respondents.

When designing a questionnaire such as the one used in these surveys, it is important to cover the domain of issues pertinent to the organization. Consequently it is recommended that the Hierarchy of Effects Model be used to insure that all key issues are addressed. Basically this model consists of six components around which questions can be arrayed. It also mirrors the stages in the buying or consumption process (Lavidge & Steiner, 1961). The first two are cognitive components—awareness and knowledge. Since there are different degrees of awareness, measures of "aided recall" and "recognition" should both be taken. Aided recall refers to the prominence of the company or brand once the category is given. For example, "Once you think of jogging shoes, which brands come to mind?" Recognition refers to the prominence of the brand name or symbol. For example, which of the following brands of jogging shoes have you seen before: Nike, Adidas, etc.?"

It was taken for granted that participants in the focus groups would be well aware of the institute in that they were pre-screened for awareness, knowledge and usage of the institute and the groups were conducted at the institute. In the quantitative survey of the institute's users, it was also assumed awareness of the institute would be extremely high; after all, all respondents were middle and upper-level managers in companies whose employees were being trained at the institute. Consequently it was a shock when these users were asked the following aided awareness question: "Are you aware of any professional training bodies in the Gulf?" Only 26 of the 128 (20%) users responded with the institute's name and this is after they were informed that the institute was the sponsor of the survey! Among non-users, less than four percent mentioned the name of the institute. This result was not even remotely anticipated. The

implications for marketing strategy were far reaching—instead of fine-tuning the image of the institute it was the name of the institute that would have to be marketed! Before attitudes toward the institute can be formed, modified or changed there must be awareness and knowledge of the institute—and clearly, on the basis of such low scores, the institute was not prominent even among company users! Further, since it was found that less than 20% of the companies in the Gulf have ever heard of the institute, the current feasible market for the institute should not be all companies in the Gulf but rather selected, targeted segments—for example, insurance or banking.

This finding, while surprising, is perhaps more typical than atypical and highlights the reason why most marketing research studies of this nature need to be characterized by the mixed-methods approach. The qualitative portion focuses on an organization's attributes, strengths and weaknesses and, as such, respondents are selected who are intimately familiar with the organization—very often heavy users or previous heavy users. The quantitative portion, however, is needed, at the very least, to determine if the organization has a “footprint” in the marketplace; i.e., to determine if it is salient. This is best done by measuring awareness and knowledge of the organization—the first two stages in the hierarchy of effect. As this study shows, awareness and knowledge cannot be taken for granted even among heavy users! Only 20% of the institute's users mentioned the name of the institute when asked if they knew of any professional training bodies in the Gulf.

Another aided awareness question was asked which focused on the specialty of the institute: “When you think of banking and finance, what professional training bodies come to mind?” Thirty percent did not name any, which was very surprising since the institute was the known sponsor of the survey. The other 89 companies named a total of 122 different banking and finance training bodies in the Gulf with 58% of respondents mentioning the institute. No other company received a significant number of mentions with second place going to a company recording 7% of responses. The results of the aided awareness question was very instructive for the institute in that the market's awareness was not nearly as strong as anticipated from the focus group results. Only 41% of the institute's users mentioned the name of the institute when asked what banking and finance institutes they can think of. Further, the institute had no major competitor; rather, its challenge is to compete against a hundred small training organizations each of which has strong ties with a few companies.

Since participants in focus group sessions are selected based on their familiarity with the company, product or brand, awareness is going to be one-hundred percent. As this study shows, in the marketplace a company's awareness may be extremely low even among users. The challenge then is not to build strategies and tactics around attitudes and image; rather the challenge is to simply build awareness. This finding will never result from qualitative research and points out the need for quantitative research as well—best done in a mixed methods Qual-Quant exploratory sequential study.

Once awareness has been measured in the quantitative study, the next stage in the Hierarchy of Effects is to measure the market's knowledge of the company, product or brand. Where is the company located? What brands and products does it offer? What are the price points? What is its differential advantage? In what country are its products produced? In this survey, respondents were given the acronym of the institute and 93% correctly knew what the institute's acronym stood for. Granted this is only one measure of knowledge regarding the institute and many other questions could be asked to get a more accurate reading of the market's knowledge of the institute. The important thing to keep in mind is that the market's attitude toward a company can be based on correct or incorrect information. Before one can change attitudes based on incorrect information it would be necessary to get the correct information out there. Thus, measuring and correcting the knowledge component precedes any tactics regarding attitudinal change.

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The survey instrument thus far has measured the cognitive components (awareness and knowledge). The next step in the instrument is to collect information regarding “affects”; i.e., liking and preference. To this end, respondents were asked “When you think of (name of institute), what is the first thing that comes to your mind? This was deliberately left open-ended and the two prominent responses were “professional training” (32%) and “quality, reputation, credibility” (16%). With nearly half of all respondents associating the institute with broader capabilities than simply finance and banking, the results of the survey indicates the institute could broaden its offerings, with the expansion being viewed as credible. Additional attitudinal questions assessed user satisfaction with the way the institute trained their employees, overall satisfaction with the institute and its courses, deficiencies, quality of staff, quality of course materials, quality of facilities, etc.

Preferences toward types of new programs and courses were assessed as well as preferences toward a positioning statement regarding the sphere of influence for the institute. Forty-four percent of users regarded the institute as being **the** leading institute in the country, Gulf or Middle East. It was decided, therefore, that the institute had the credibility to market outside its country. Further, respondents were asked what the institute was at its core: training, development or T&D. Nearly half saw the institute as T&D and a fourth as merely training.

Results from the focus groups proved more instructive with respect to how to position the institute than results from the quantitative surveys. From the focus groups it was found that “development” really had two components: first, developing students for careers where manpower is scarce in the country; and second, developing individual skills to move participants from entry level to senior management positions (Mumford, 2006). It was agreed that the institute was not really doing either but had the capability for the second type of development. Further, if the market views the institute as only being into “training”, it would be impossible to upgrade its image. Thus, based on both the qualitative and quantitative findings it was decided to position the institute as a professional training and development institute. The subtleties in the nature of training and development came through in the qualitative research but not in the quantitative research. The feeling that in-depth responses to issues such as these can be achieved in surveys is more hope than reality. Open-ended questions are used to encourage respondents to “open-up” in ways not restricted by alternatives given in closed-end questions; however, the reality is that for full and rich responses, qualitative research is best. The focus group participants in this study discussed the meanings of training and development from many angles and with a depth of thinking that wouldn’t be achieved in a survey conducted over the phone.

Numerous improvements were suggested in the areas of courses, programs, communication and customer relationship management. These were viewed as tactics which would strengthen the relationship between the institute and their company clients leading to greater enrollments. These questions comprise the last phase in the Hierarchy of Effects model—the conative or action-tendency phase (intentions and behavior) in this case intentions to enroll company employees and actually enrolling them in the institute’s programs. Enrollment would be based on a number of factors including price, time offered, course content, level of content, etc. and preferences toward these factors would be determined through quantitative survey questions geared to the conative constructs.

The Need for Both Qualitative and Quantitative Research

Institutions need to position themselves appropriately for the markets they serve. Oftentimes qualitative research is conducted with users to determine the position of the institution and the feasibility of adopt-

ing a new position. The focus is on the attributes the institution needs to adopt in order to move toward the “ideal” position. In this study, focus group participants brought up what subsequently was found to be the key attribute and key issue facing the institute—how can it become a training and development institute instead of just a training institute. If the quantitative study had not been preceded by the qualitative study, this finding would never have emerged and never been explored. The essence of what this organization was striving for would have never been uncovered.

The assumption is made, based on the fact that all focus group participants have been selected because of their familiarity with the institution, that others in the marketplace are as familiar with the institution. Consequently institutions oftentimes mistakenly allocate resources to change their image or position when, in fact, a better use of their funds would be in investing in an awareness campaign in order to increase the salience of the institution in the marketplace.

Fine-Tuning the Qualitative Research Component in Mixed Methods Research through Segmentation

Careful consideration should be given to the selection of participants in each focus group. It is common practice to make each group homogeneous on participant characteristics related to the issue at hand (Patton, 2005). In this study, five main user groups were identified (banking, insurance, government ministries, etc.) and each focus group consisted of managers from only one of each of the main user groups. It will be argued that there are other important characteristics which should be considered as the basis for selecting members of each group. Table 1, indentified these. (Note: “usage” refers to usage of training and development program).

Given that there are eleven possible participant segments based on usage characteristics alone, it is not likely that those companies in the former-user-no-longer-looking category and never-user not-looking category would be of interest. That leaves nine segments of possible interest based on the “Usage” characteristic alone. The differences among these groups and findings based on their behavior may determine the future of the organization. For example, one might feel that the focus on the heavy user segment is of top priority. However, it could be argued that such a focus would be a mistake. After all, the heavy user segment—insurance companies, banks and non-bank financial institutions—said they only use the institute for introductory/fundamental and basic courses. The institute will never grow (if the number of such businesses are at its peak) if it only solicits comments from heavy users in its focus groups. It may garner better competitive insight if it conducts groups with companies that use them then switch to competitors for higher-level courses, or if it conducts groups who are migrating upward and determines why they are doing so.

Similarly, companies migrating downward should be interviewed to determine why their business is declining: is it due to dissatisfaction or simply due to lack of employees needing training. Former users currently using competitors should be interviewed to determine why they left (defection analysis) and what is needed to regain them (winback analysis). Finally, never- users of the institute’s programs should be interviewed to determine whether they simply are not aware of the institute or whether they are aware but don’t see a match between their needs and the institute’s offerings. One could argue that the greatest contribution of marketers in helping organizations grow is their focus on segmentation. It is felt that this contribution also holds in their selection of segments for participation in focus groups.

Mixed Methods Research and the Hierarchy of Effects Model

In business and marketing, many models exist showing the stages that final consumers and businesses progress through before actually purchasing a product or service. The AIDA (awareness, interest, desire and action) model has been used in business-to-business marketing and consumer marketing for many years as a model of consumer response (Strong, 1925) and the Hierarchy of Effects Model has been used in marketing and advertising since the 1960's.

As previously mentioned the Hierarchy of Effect Model consists of six stages:

1. Awareness
2. Knowledge
3. Liking
4. Preference
5. Intention
6. Usage

Depending upon the marketing issue at hand, tables similar to Table 1, which is based on usage, could be developed based on the 5 other variables with varying levels of complexity. For example, since "awareness" is basically a dichotomy, participants would be those either aware or not aware of the institute. Focus groups are seldom if ever conducted with those who are "unaware" of a company, organization, product, brand or issue, because if they are unaware, they would have nothing to say about the 5 other components which follow in the hierarchy of effects model. Groups selected on the basis of the "liking" variable would be those highly favorable, neutral and not favorable toward the institute. Using "intention" as a selection variable, groups could be selected based on those who are highly likely to retain an institute for T & D in the near future, those who are likely, somewhat likely, not too likely, and not likely at all. Marketers often find the "usage" characteristic to be most relevant, however, because of its stronger relationship to purchase volume, revenue or profits.

Considering the hierarchy of effects model in conjunction with the qualitative and quantitative components of mixed-methods research, it is suggested that quantitative research can most often be conducted alone when the issue is measuring "awareness" and "knowledge" in the marketplace. It is also necessary in establishing your standing in the marketplace on the other 4 variables in the hierarchy of effects. However, when one wants to understand what "motivates" individuals or companies to like, prefer, intend to use, or explain differences in usage, then the qualitative approach is needed. For example, an understanding of the distinction between training and development was only uncovered through qualitative research.

On some occasions, quantitative measurement alone will suffice. Are there occasions when qualitative measurement alone will suffice? It is suggested that in the following situations, self-contained focus groups without quantitative research follow-up could be sufficient:

- To see users first hand again,
- To generate ideas,
- To develop and screen concepts,
- To detect deficiencies,
- To test clarity and comprehension of materials,
- To collect expert opinions in order to generate ideas and forecasts.

In business, particularly marketing, the sequence in mixed-methods research is generally qualitative followed by quantitative. Very often, however, quantitative surveys are conducted without any qualitative work preceding them. When results from the survey prove confusing, however, there may be qualitative follow-up which results in the quantitative-qualitative sequence. Such was the case when a publishing company did survey research on its 700 page book for emergency technicians. They said they didn't like the "order" of the book. What did this mean? Did it mean they didn't like the chapter sequence; mix of pictures, charts, tables and text or something else. Through qualitative research they found what the "order" problem was—a finding that wasn't uncovered in the quantitative portion.

SUMMARY AND CONCLUSION

A mixed-methods research study was discussed in which the key attribute and key issue facing a regionally renowned institute in the Middle East was uncovered through qualitative research. However, taken alone without a subsequent quantitative follow-up, the research results would have been extremely misleading with disastrous consequences for the institute. It would have positioned itself on dimensions and attributes which would have been rejected by its constituency, and spent resources in ill-advised marketing efforts. This study offers a cautionary note regarding the singular use of qualitative research. Using a model called the Hierarchy of Effects, it is shown that there are certain key dimensions that are better purviews for both qualitative and quantitative research methods. Further, it offers the suggestion that to maximize the strategy implications of qualitative research, the composition of the groups themselves should be based on finely-tuned usage segments as well as other possible segments based on Hierarchy of Effects variables. Further, participants in focus groups are selected based on their familiarity with the company, product, brand or issue at hand. This research found that even among heavy users, awareness may be extremely low.

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