Use of Q Methodology by Public Relations Practitioners for Hospital Strategic Planning

Karen Popovich
Cardinal Health Alliance

Mark Popovich
Ball State University

ABSTRACT: This case study demonstrates how public relations practitioners can apply Q methodology to strategic planning activities in health care settings. Utilizing planning activities which took place in an Indiana hospital in 1993 (and given the fictional name of Riverbend Hospital for this study), pratitioners arrived at three stakeholder sets of perceptions concerning health care reform for the hospital. These perceptions then became the focus of the strategic plan (corporate objectives) created by the hospital's administrative staff in 1994. The authors suggest that Q methodology is a research technique that can be employed successfully by public relations practitioners in finite strategic planning environments.

While much has been written about the value of issues management as a role for public relations practitioners over the past two decades, recent public relations literature has encouraged practitioners to expand their management skills to include strategic planning. A 1992 study conducted by the International Association of Business Communicators (IABC) reported that 73% of their respondents agreed there was a need to "increase their role in providing strategic planning and counsel for management . . ." (Corrigan, 1992) Managers and academics have jumped on the bandwagon. PR agency president David Drobis says:

> We in public relations firms and our counterparts in corporations can significantly increase our contribution to the corporate effort by making

Authors' addresses: *Karen Popovich*, Chief Operating Officer, Cardinal Health Alliance, Muncie, IN 47303; *Mark Popovich*, Department of Journalism, Ball State University, Muncie, IN 47303

strategy part of our repertory of services and by showing corporations how to be more competitive (1991, p.32).

Kincaid and Winokur (1992) have found that PR practitioners have had mixed success in their ability to influence strategic planning. They suggest that two strong elements come to play in the success which PR practitioners might have: corporate culture and individual ability. One of the CEOs they interviewed concluded that since public relations is a narrow specialty, practitioners would be excluded from strategic planning unless they acquired generalist skills.

Plenty of anecdotal reports exist about how practitioners can succeed in strategic planning activities (e.g. Forbes, 1992; Hainesworth & Wilson, 1992; Bahls, 1992; Johnson, 1992; and Tucker & Broom, 1993). Quantitative methods for conducting strategy planning in the boardroom, however, do not dominate public relations literature. The prevailing theme of strategic planning in the public relations literature generally focuses on planning activities for corporate image or marketing with external publics or stakeholders. This would suggest that public relations practitioners may have overlooked the potential to ply their strategic planning skills within the organization they service. Practitioners report utilization of traditional research techniques, e.g. focus groups (Grunig, 1990 and 1992), opinion surveys and open-ended interview questions (Lindenmann, 1990), but seemingly overlooked as a tool for strategic planning is Q methodology. This study attempts to alleviate that void by presenting a case study in which Q methodology is the behavioral tool of choice in an organization seeking to devise a corporate plan in the face of looming competition. Then researchers will show how the data from the Q analysis was molded into a set of corporate goals for the organization.

Previous Literature

Q methodology has not gone unnoticed by public relations practitioners. For example, Dozier and Gottesman (1982) used Q to determine what part practitioner belief systems played in their role-taking behavior. Broom and Dozier (1990) discuss Q methodology in their research methods textbook for public relations students. However, the potential of Q methodology in public relations is best conceptualized in a new book by Mickey (1995), who argues that public relations is "a drama enacted in speech on three different levels within and outside a company or organization." He suggests that Q methodology will help practitioners find the themes, patterns, or images which will lead to

understanding PR publics or audiences.

Q methodology and strategic planning have been found to be compatible techniques in other disciplines. Nutt (1989), for example, explains how anchored rating scales, paired comparisons, rank-weights, direct assignments, and Q sorts are methods that can be used to estimate likelihood of future conditions. Nutt says that Q sorts identify coalitions among stakeholders, and, "The criteria supported by each coalition suggest potential disagreements that can be explored before consensus is sought." (1989, p. 417) Felkins, Chakiri, and Chakiris (1993) report that Q methodology can be used to assess organizational communication and image, management attitudes toward organizational development and change, support teamwork, and develop strategic planning. Cragan and Shields (1981) have reported their own and other research work using Q methodology in fantasy theme analysis. Their efforts have included research in small group communication, political communication, organizational communications, and marketing.

The procedures used in this case study are based on those reported by Gargan and Brown (1993), who have documented the use of Q methodology as a tool in planning public policy for a local non-profit agency. They say that an important contribution of Q methodology to the decision making process which arises out of their study is that Q provides a quantitative basis for both understanding and insight in the process.

Background of the Study

Bombarded by spiraling health care costs, which accounts for an 11% share of the U.S. gross national product, the American public has come to believe this country is undergoing a crisis in health care financing, access and quality. Public outcry for health care reform has been heard in Washington, and congressional battles were heating up in early 1993, when the administrative officers of Riverbend Hospital, a 150-bed facility located in Indiana, felt a need to address the reform issue and the potential impact it would have on the organization. As part of the hospital's yearly strategic planning activities, the chief hospital public relations manager organized a planning retreat in the Spring of 1993 with the hospital's key stakeholders (medical staff, administrative staff, and board members) to formulate a strategic plan in response to what was thought to be, at the time, impending health care reform.

Health care reform has the potential to result in entirely new price structures, new structures to managed care, new business partners, new

clinical expectations, and new competition. The chief public relations officer for the hospital felt that using issues management models for this exercise would have limited outcomes since most issues management models focus solely on issue identification. This officer turned to the Heath (1988) integrated strategic planning model because it would compensate for the operational knowledge levels of Riverbend's three stakeholder groups, and create linkages between strategic planning, programming, and budgeting.

Because of the complexity of the issues involved in health care reform, and the potential for ideological and emotional intensity which could arise over those issues, retreat planners turned to Q methodology to help them identify consensus areas among their stakeholder groups as well as any alternative perspectives which might arise.

Method

The planning process at Riverbend began with a meeting of the Planning Committee. This committee was made up of three board members, three physicians, and the senior management group of the hospital. It was chaired by a board member. The committee set the agenda for the retreat, and developed the following response question for retreat participants:

> What does Riverbend Hospital need to do if the hospital is to survive and prosper under the constraints proposed in the American Hospital Association, American Medical Association, and the Clinton/Gore health care reform proposals?

Prior to the retreat, potential participants (medical staff, administrative staff, and board members) were sent invitations and copies of the health care reform proposals advanced by the AHA, AMA, and the Clinton Administration. Retreat planners hoped that prior knowledge of the issue would help attendees to focus on the potential implications of health care reform so that meaningful discussions could take place at the retreat.

Sixty-eight participants (7 board, 25 physicians, 36 managers) attended the evening retreat to enjoy dinner and discussion. Seating was arranged so that members of each stakeholder group were able to co-mingle at each table. The response question was placed on each table along with tablets for recording responses. Each table had a facilitator assigned to record statements and to seek clarification if necessary. Each participant was given a strategic planning matrix to

assist them in formulating their responses. The strategic planning matrix was adapted from a previous study by Gabris (1989), and participants were encouraged to vary their responses according to the matrix. The matrix encouraged participants to frame their responses in terms of routine versus complex activities, and short-term (less than 24 months to implement) versus long-term time constraints.

Retreat participants generated 149 statements which were subsequently edited into a final concourse of 77 statements. (Stephenson, 1953) Because of the number of statements generated and the number of participants, retreat planners found it impossible to edit, reproduce, and collate 68 sorts in the time allotted for the retreat.

A special meeting of administrative staff was held in the week following the retreat, and the sorts were distributed and completed. Q sort response sheets and the sorts were mailed to the medical staff and the board participants for completion. Each of the subjects were asked to rank the 77 statements on an 11-point most agree (+5)/least agree (-5) scale. The Q sorts were completed by 56 participants, or 82% of those who had attended the retreat.

Once the Q sorts were completed, responses were computer tabulated using the QMETHOD factor analysis program (Atkinson, 1992). QMETHOD provided the two kinds of statistical summaries which can be used to differentiate factors chosen for study. QMETHOD calculated the z-score value for each statement on each factor, and the program also provided the average Q sort value for each statement which resulted from the original responses provided by the respondents. In order to determine the number of factors which should be retained in the solution, investigators examined an unrotated factor mix provided by QMETHOD. Using zero order correlations, according to a method discussed in Brown (1980), factors were selected which contained at least two factor loadings significant at the .01 level. Factor loadings in this study were considered significant if they exceeded a correlation of .294.

Once factors were determined, QMETHOD produced statement arrays for each factor, which gave investigators an indication of the statements on each factor which were most agreed with and those most disagreed with by the respondents. QMETHOD calculated z-scores for the 77 statements which comprised each factor, and statements were arrayed from the highest positive z-score to the highest negative z-score (A complete listing of factor statements and z-scores is available from the authors). Z-scores for statements on each factor which exceeded a positive or negative score of 1.0 were considered to be significant for

that factor.

Because strong correlations were found between the three factors generated for this study, the investigators employed another technique explained in Brown (1980), which would highlight significant differences in statements between each factor array. Using the average of Q sort values provided by the respondents for each statement initially, statements which varied by an absolute score of three or more were used to distinguish between factors. Finally, the investigators inspected the demographics for the subjects who correlated best with each factor to determine if demographic characteristics could provide more information about each factor array.

Findings

Of the 56 respondents in this study, 46% were male and 53% were female. Average age was 41 years-old. Managers comprised 71% of this group; physicians, 20%, and board members, 9%. Females comprised 78% of the managers, and 20% of the board members, but all of the physicians who participated were male.

Based on the sorts of 56 stakeholders, three factors evolved from the analysis to represent the views of the three stakeholder groups. All three factors were highly correlated (See Table 1), and they accounted for 27% of the variance in the outcome.

Table 1
Correlations Between Factors

	Factor 1	Factor 2	Factor 3
Factor 1	1.00	.52	.56
Factor 2		1.00	.61
Factor 3			1.00

Hospitals have tri-polar authority because control is shared by the Board of Directors, the medical staff and the management staff, so it should come as no surprise that all three factors were highly correlated. All three stakeholder groups are especially vested in the reform issue since it could have a personal financial impact on them. As a result,

all three groups, expressed high agreement or high disagreement with a few of the statements.   At the positive end, the following two statements (and their group rankings) were rated highest:

+4 +4 +4   Riverbend should deliver adequate, expedient out-patient care which will be crucial.

+4 +5 +5   Riverbend should allocate more money, space and staff to out-patient programs since they are the future.

Positive ratings here reflect the current state of the world in health care, as hospitals are moving from an in-patient to an out-patient delivery mode.   The three stakeholder groups at Riverbend Hospital were in agreement with the changing face of health care at this point in time.

Statements which received high negative ratings by all three groups included:

-4 -5 -4   Riverbend should eliminate programs based only on their profitability.

-5 -4 -5   Riverbend should develop an open heart program.

-4 -4 -4   Riverbend should offer only private rooms.

-5 -4 -5   Riverbend should add a kidney dialysis program.

-5 -5 -5   Riverbend should diversify into non-health care businesses.

What is interesting about this group of statements is that the management staff had discussed all of these options as ways to expand Riverbend's services. Yet, these programmatic proposals were all rated negatively by the participants in this study. It was apparent to retreat planners that respondents had used the retreat as a referendum to voice their displeasure concerning the possible introduction of various programs they had heard about via the hospital grapevine.

As mentioned earlier, three factor types (or sets of perceptions) were chosen to represent the major preferences of the stakeholders at Riverbend Hospital.   In order to differentiate between the three patterns, only those statements on one factor which differed significantly from the other two factors will be discussed here.

Factor 1

Statements which comprise this factor could typified by the term "Integrators" (see Table 2). This viewpoint seeks to integrate Riverbend with other health care providers, including its own medical staff as well as other hospitals. Factor 1 statements reflect the belief that Riverbend cannot operate in a vacuum; they can no longer be autonomous. The Integrators believe it is time for the hospital to address the future: explore outside alliances, introduce capitation into managed care, join forces with local employees, work more closely with hospital physicians, and shift the focus of care from in-patient to out-patient. The statements rejected by Factor 1 serve to reinforce the beliefs of this group which understands that nurses may no longer be the center of health care as in an in-patient setting, and that bucking national collaboration trends may not prove very fruitful. It would be safe to say that the Integrators believe that the solution to health care reform resides within themselves and the hospital. They know that change is coming, but they believe that they can find answers to reform issues by pulling together and changing their own modus operandi.

Respondents who comprised this factor consisted of 13 males and 15 females -- a total of 28. Stakeholders who comprised this group consisted of 21 managers, 5 physicians, and 2 board members.

Table 2
Factor 1 Distinguishing Statements

+5 Riverbend and its physicians should begin discussions on how to do pricing, billing, and reimbursement together.

+5 Riverbend should pursue PPO developments in a joint venture approach with area employees.

+4 Riverbend should explore alliances with large urban hospitals.

+4 Riverbend should address needs in physician practices to prevent their sale -- such as billing and management.

+4 Riverbend should develop the capability to offer risk based capitation managed care plans.

-3 Riverbend should enhance the role of nurses with the public.

-3 Riverbend should retain as much autonomy as possible.

Factor 2

Fiscal concerns are the focus of the statements which highlight the perception pattern for Factor 2 (see Table 3). For want of a better label, this group can be tagged as the "Independents." This factor believes that the reform issue can be solved by expanding services for the hospital, improving facilities, creating new programs in the schools and opening various medical clinics and agencies. Sentiment here includes a concern for wellness in the community, but the Independents do not believe that integrating programs or negotiating with other provider networks will help Riverbend solve problems which arise from health care reform. The Independents believe that the issues in health care reform can be answered by finding more revenue, but they do not see the need to integrate their services as does Factor 1. Factor 2 reflects a desire to take what Riverbend has already accomplished, and to do it bigger and better. Riverbend can survive if this strategy is used.

Factor 2 statements were provided by six males and five females, who represented nine managers, one physician, and one board member -- 11 altogether.

Table 3
Factor 2 Distinguishing Statements

+5 Riverbend should plan for the loss of Medicaid and Medicare revenue.

+5 Riverbend should establish health programs in schools.

+4 Riverbend should reduce waiting times and improve the quality of waiting rooms.

+4 Riverbend should establish its own home health care agency.

+4 Riverbend should develop new revenue sources.

+4 Riverbend should expand clinic programs to include pre-natal and long-term OB care.

-3 Riverbend should form a joint venture with the physicians to cherry pick each network and managed care plan.

-3 Suburban hospitals, including Riverbend, should negotiate with networks only as a group.

-2 Riverbend should assist with the integration of the health care delivery system.

Factor 3

Those who agree with the statements found on this factor (See Table 4) can be labeled "Lobbyists." They are ready to work with legislators; they are ready to work educating the public; and they are ready to be pro-active in the political battles that will heat up once reform legislation gets underway. More than any other factor, this group is defined by what is sees as negative activities. They reject capitation development, which is one of the cornerstones of health care reform. They reject expanding services to include a home health care agency, education and therapy programs, and they even reject moving into the computer age by linking physician offices to the hospital. More than any group, this group is more closely aligned with health care reform as an issue to manage. Rather than focusing on programs, new sources of revenue, or integration strategies, Lobbyists believe that the real issue is reformation of the health care system, and not the reformation of Riverbend.

Statements for Factor 3 were contributed by 6 males and 10 females. In the group were 10 managers, four physicians, and two board members.

Table 4
Factor 3 Distinguishing Statements

+5 Riverbend should enhance the role of nurses with the public.

+5 Riverbend should inform the public about health care reform with physicians taking the lead.

+4 Riverbend should develop a standing committee with variety of representation to implement reform legislation.

+4 Riverbend should work with legislators.

-4 Riverbend should establish its own home health care agency.

-4 Riverbend should provide therapy/ancillary care and education in physician offices outside of Noblesville.

-3 Riverbend should link its physician offices by computer.

-3 Riverbend should develop the capability to offer risk based capitation managed care plans.

Upon examining the demographics of the individuals who were members of the three factor types extracted for this study, no conclusions could be drawn about the relationship of the demographics to the factor patterns. The composition of the factors was evenly split for the most part, between males and females, and between the three stakeholder groups. Managers dominated all three factor types, but that was understandable since they contributed over 70% of the Q sorts in this study.

Discussion

At the outset, this study was designed to illustrate how public relations practitioners could help their clients/managers utilize Q methodology as a tool for strategic planning. The case study chosen involved a small Indiana hospital faced with local competition brought on by government efforts in 1993 to impart a health care reform to the nation at large. Faced with the intimidating prospect of designing a strategic plan for a competitive environment, senior management officers at Riverbend Hospital wanted to determine if any consensus was possible among its three internal stakeholder groups concerning the future of Riverbend.

Riverbend efforts to identify stakeholder perceptions resulted in a strong consensus among stakeholders that integration should be a priority for the hospital. Stakeholder perceptions broke down into three views once that priority was determined. One view was that Riverbend should seek to align itself with larger health care facilities because Riverbend could not survive alone. Another view suggested that Riverbend should remain autonomous and seek other ways to raise and increase revenues. The third view suggested that Riverbend should

work with legislators to affect health care reform.

Once the three factor perceptions were analyzed, and the average rank of every statement in the sort was considered, Riverbend administrators were able to create a list of corporate objectives which were presented to and accepted by the hospital board. This analysis was heavily weighted to the positive and negative statements of the Board of Directors and physician responses. Statements were accepted and/or rejected based on the consensus or divergence of those two groups with final weight given to Board opinions. The statements of the managers that were in opposition to the Board and physicians were used to form a basis for identifying areas for education of the managers in relation to the preferences of the other two groups. Where there was a need to determine the validity of a direction indicated by a statement, the hospital CEO was the final decision maker. This was especially true for the statements that indicated opposition to planned programs. In fact, many existing plans were modified based on the responses of the sort. The final list of corporate objectives were, in fact, the statements that received a positive response from all of the factors.

Those corporate objectives can be summarized as follows:

1. Riverbend should insure the existence of a strong primary care component of the medical staff with wide geographical coverage.

2. Riverbend should pursue preferred provider organization development with area employers.

3. Riverbend should deliver adequate, expedient out-patient care.

4. Riverbend should explore alliances with large urban hospitals

5. Riverbend should inform the public about the impact of health care reform.

6. Riverbend should begin discussions with physicians on joint reimbursement.

7. Riverbend should develop a vertically integrated network sufficient to provide a total continuum of care.

8. Riverbend should develop relationships with legislators.

9. Riverbend should develop a program to promote preventive testing to the public.

10. Riverbend should implement policies and procedures that support the hospital's quality vision statement.

Riverbend senior management officials were satisfied with the results obtained from Q methodology, and surprised, too. They discovered that some of their stakeholders had used the planning exercise as a referendum to exhibit their displeasure with programs tentatively discussed by senior management. Because QMETHOD makes it easy for the investigator to quantify subjectivity, there was little doubt about stakeholder displeasure. Statements which were rejected by stakeholders could be compared numerically with those that were accepted by stakeholders, which was a more effective indication of displeasure than just gathering opinions might have been, as would happen in focus groups, for example.

It was apparent from the results that no single perception about the future of Riverbend was predominant in the stakeholder groups. Although this might seem like a problem on the surface, the QMETHOD program provides a ranking, based on the average of sorter ratings, for each of the statements in the sort which meant that senior officials had another source of data from which to determine their final objectives.

Once senior management had succeeded in identifying potential support and potential resistance to views about the hospital's future, this process helped them to feel more comfortable about providing a leadership role after their corporate objectives had been determined. The numerical values which arose from the analysis of the Q statements eliminated the mystery of where individuals and groups of stakeholders were positioned concerning the issues. In short, it eliminated a lot of guess work which senior management might have been involved with if they only had depended on anecdotal data to determine their objectives.

One other strategy to analyze statements was available to the chief public relations officer at Riverbend. It might have been more meaningful for senior management to see a break out of each stakeholder group individually, rather than dump all participants into one big pool for analysis. By doing so, the value of the information collected from such sorts would provide not only individual stakeholder patterns of perceptions, but it would identify which stakeholder group had contributed each factor array of perceptions. Since there were three stakeholder groups in this study, three factor arrays would have been available to senior management. The fact that three factors were

evident in this study was only peculiar to this particular study. By dumping stakeholders into one big pool, one, two, or any number of factors might have been determined for the study. Stakeholder group information might be more valuable to senior management officers depending on the needs of the management group.

Finally, it should be evident from this case that Q methodology can be an important tool to public relations practitioners. By learning to use the methodology, practitioners can provide effective and relatively precise strategic planning leadership for their clients. This particular tool can provide large quantities of data which will require the perspectives of both practitioners and corporate officers working together to arrive at appropriate solutions. In many instances, strategic planning involves small and selective groups of people. It may not be necessary to generalize findings for a strategic plan any further than the planning group itself. Strategic plans are only meaningful to the people and the organization which create and implement them. Q methodology can be an important asset to practitioners in those kinds of finite and subjective environments.

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