



InSights

Issue 5

Fostering excellence in survey research, process, and technology

ShortTakes

DRC is conducting
a new bench-
marking study
of Employee
Opinion Surveys
(See story page 4.)

LINKAGE RESEARCH

► Moving to Action *by Colleen Rasinowich & Kris Fenlason, Ph.D.*

Interpreting and using linkage results

Prior issues of *InSights* provided an introduction and overview of linkage research and most recently, presented the “readiness factors” and steps necessary to complete a linkage research study. Linkage research creates models that show cause-and-effect relationships among critical organization metrics (e.g., employee and customer opinions, productivity, and financial output). Once the linkages are mapped, managers can identify specific areas on which to focus attention in order to effect change on important outcomes, for example, same-store sales in the retail sector. This article (last in this series) illustrates this final step in the linkage process.

To recap the linkage process briefly, an organization should assess several “readiness factors” before beginning (e.g., clear objectives or goals of the project from the onset, definition of the conceptual model illustrating the metrics, and a unit of measure identified for each metric). Those involved in conducting the linkage research should also have a good understanding of the analytical techniques, principles, and history and best practices of linkage research.

After readiness has been assessed, linkage research starts by forming a cross-functional linking team with representatives from the various functional groups (e.g., accounting, HR, marketing) and having the team develop a conceptual model. Data are then gathered as defined by the conceptual

model and prepared for analysis. Because the data must be at a common level, such as a retail store, this may involve averaging or aggregating lower-level (employee and customer opinions) data up to the common store level.

A number of different statistical procedures can be used to assess the relationships in a linkage model depending upon its complexity, such as correlation, regression, structural equation modeling, or relative importance procedure. Whichever technique is used, the result is a set of measures representing the strength of association or the relationship between the metrics in the model. Displaying results in a graphic format aids management in understanding the model, the interaction between metrics, and current performance levels for each unit. Action plans can then be defined that will impact the desired outcomes.

To illustrate this last step, let’s consider a common finding from these studies, that employee engagement and service orientation are significantly related to customer loyalty. The implication is that improving employee scores in these two measures should have a corresponding impact on customer loyalty. Similarly, customer loyalty has been shown to be significantly related to financial success. In practical terms, this means that by improving employee engagement and service orientation, customer loyalty should increase, which should improve revenue.



Chart 1: Employee Opinion Top-Box Scores for Your Unit

Metric Name	Quarterly Scores, 2003		
	1st Qtr	2nd Qtr	3rd Qtr
E1. Engagement	72%	73%	80%
E2. Service Orientation	60%	62%	65%
E3. Organizational Commitment	62%	65%	70%
E4. Satisfaction with Communication	62%	65%	68%
E5. Satisfaction with Supervision	80%	78%	70%
E6. Overall Employee Satisfaction	70%	72%	80%

Chart 2: Customer Opinion Top-Box Scores for Your Unit

Item Text (Satisfaction with...)	Quarterly Scores, 2003		
	1st Qtr.	2nd Qtr.	3rd Qtr.
C1. Employee responsiveness	60%	65%	68%
C2. Product selection	60%	62%	63%
C3. Service quality	60%	62%	55%
C4. Cleanliness of facility	75%	80%	85%
C5. Knowledge of employees	62%	62%	58%
C6. Appearance of employees	60%	62%	63%
C7. Convenience of location	60%	65%	68%
C8. Convenience of hours	75%	80%	82%
C9. Lighting	60%	62%	61%
C10. Overall customer satisfaction	75%	80%	82%

Typically, a series of charts is used to display and communicate the results. Let's say, for example, that you are a retail store manager receiving these results for your unit. The first chart (*Chart 1*) shows the performance scores from employee opinion data during the current and last two quarters for your unit. With the exception of one metric, employee opinion scores for your unit have continued their general upward trend over the three-quarter period. Your three significant gains from the previous quarter are highlighted in green; and one significant decline in

orange. As you review your employee opinions from the current quarter, keep in mind actions that have been taken in the past. Have those actions resulted in tangible changes? If so, congratulations! Share these results with your team and encourage them to keep up the good work. However, if you still need assistance, you may want to consider benchmarking your actions with other store managers who have had some success in these areas.

The second chart (*Chart 2*) displays the performance scores from your

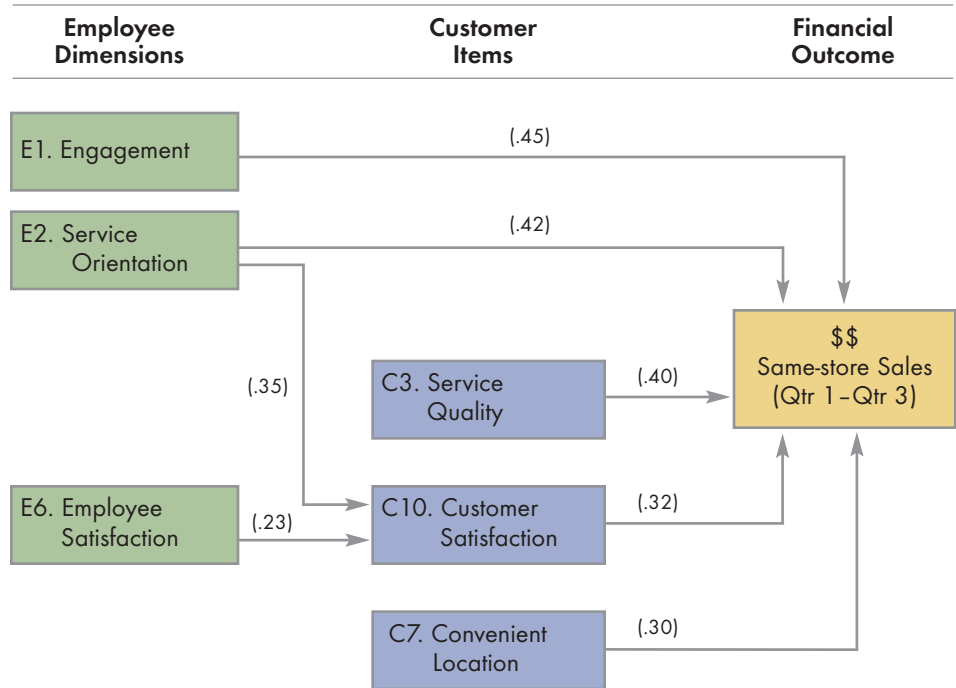
unit's customers during this and the last two quarters. You can see that customer top-box scores for your unit continued a general upward trend over the three-quarter period. One significant gain from the previous quarter is highlighted in green; while two significant declines are highlighted in orange.

The third chart (*Chart 3*) depicts the results of a company-wide linkage analysis in the form of a model. From this model, you can see the key drivers of customer attitudes and same-store sales. Variables with

a significant impact on the outcomes are shown in the model. The influence weight (a measure of the relationship between the metric items) is shown in parentheses; higher values indicate a stronger relationship. Although this means that some items will not be displayed (because they are not key drivers for the company), they may still be an issue for your particular unit if they received low performance scores. For the company, five items/metrics are directly and significantly related to sales. In general, improving scores on these items/metrics should improve sales for your unit. Two employee metrics also influence customer satisfaction.

Finally, the fourth chart (*Chart 4*) combines the linkage and performance results in a quadrant chart to help in identifying areas for improvement. This chart displays employee metrics and customer items that are significantly related to sales. They are arranged according to influence and top-box scores (provided in parentheses). To improve sales, target the

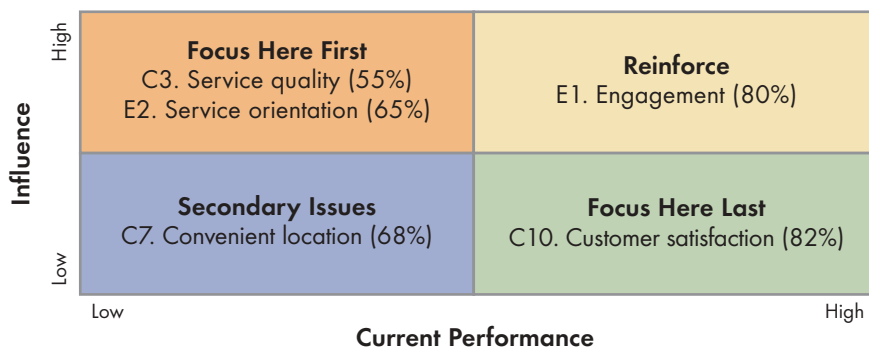
Chart 3: Linkage Analysis Results



Focus Here First quadrant (high influence *and* low performance), followed by the **Secondary Issues** quadrant (low influence *and* low performance). High influence and performance (**Reinforce**) issues should be reinforced.

Although linkage research can be complex and involve cooperation and data sharing on the part of multiple functions across the company, the pay-off can be tremendous for managers and the company as a whole. Results can be delivered in a clear and concise manner helping managers address actual business needs throughout the organization benefiting employees, customers, and ultimately, the bottom-line. 🎯

Chart 4: Quadrant Chart for Your Unit



This is the final article in a series on the topic of linkage research. If you would like to know more about linkage research, please contact Dr. Kris Fenlason at DRC.

► Employee Opinion Surveys on the Web

How does my company compare?


DRC has been on the forefront of Web surveying with leading-edge technology applications and high-quality research. We are continuing this tradition of practice excellence with a new benchmarking study of Employee Opinion Surveys conducted on the Web. We recently completed a small-scale benchmarking study on Web survey practices. Based on interest in this survey, we are undertaking a larger study to more broadly benchmark the use of the Web for Employee Opinion Surveys.

While many companies and vendors are conducting Web surveys, there is little comparative information available to survey practitioners. This

benchmarking study will provide answers to such questions as:

- What are the biggest advantages and most pressing challenges of Web surveys?
- What are the key barriers to adopting Web surveying?
- What survey methods do companies most often use in conjunction with Web?
- What are the primary concerns companies have about Web surveys?
- How are reports and action-planning materials delivered and used on the Web?

A copy of the results will be sent to all companies that participate in the study.

If you are a user of Employee Opinion Surveys and are already receiving this newsletter, we will be contacting you with an invitation to participate in this survey (via e-mail or by phone if no e-mail is available). Alternatively, you can contact the study director, Kris Fenlason at kfenlason@datarecognitioncorp.com or 800-826-2368. 

► **InSights Rings True**

We hope you found this edition of *InSights* informative. The interlaced rings in our masthead illustrate the philosophy that drives the publication. If you look closely, you'll see that no two rings are connected, yet all three are interlocked in such a way

that if any one link is broken, all three will separate.

To us, the rings represent three dimensions of survey consulting—research, process, and technology. In a successful survey application, each of these dimensions works together with the others to create an integrated solution.

Each issue of *InSights* will explore various aspects of research, process, and technology. Our goal is to provide information that will foster excellence in survey research, process, and technology.

