

The Ownership Culture Survey™ Technical Note

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1. Survey Design

The Ownership Culture Survey™ (or OCS) is designed to measure the strength of ownership culture among employees at employee owned companies. A strong ownership culture is said to exist when employees feels strongly that the company gives them ownership rights and that the employees take on ownership responsibilities, within a context of strong ownership identity, trust in leadership, and positive work atmosphere.

1.1 *Positively and Negatively Worded Items*

The survey contains a core set of 65 objective items. Most of these are scored on a Likert scale indicating the degree to which a respondent agrees with the statement: from 1 (“strongly disagree”) to 7 (“strongly agree”). The neutral point for these items is 4. Exceptions are the Ownership Identity items. Most OCS items are positively worded, so that agreement represents the more desirable response. One-fifth of the items use negative wording. (For example, “*This company rarely responds to employee suggestions.*”)

We use negative questions because researchers have found in some instances that respondents exhibit a response bias toward agreement. If agreement consistently produced a higher score, such a response bias would distort scores. To avoid this problem, we have included a certain number of negatively worded questions, for which agreement implies a lower score. In our actual experience with the survey, we have found no evidence of any such response bias.

1.2 *Individual and Observer Items*

The OCS uses two distinct types of items, the first of which is “**cultural observer**” items. These items ask respondents to serve as observers of the organizational culture in which they work. They use phrases such as, “Employees at OurCo...” or “At this company...” to solicit observations. If one asks about potentially sensitive issues, such as how well people fulfill their responsibilities, survey respondents are often more candid and objective about the groups of which they are members than they are about themselves personally. Further, it is important for conceptual reasons to ask questions about the culture—the norms, values and behavior of whole groups—when using a cultural model for survey design and analysis as in the OCS.

As a complement to the “cultural observer” questions, another section of the OCS questionnaire asks about **individual** respondents’ experience. These items use phrases such as “I feel...” or else they state a position (i.e., “The company makes an effort to...”). This kind of item adds a dimension of individually-oriented information to the “informant” perspective and also gives individuals the opportunity to express their own views about their own circumstances, an opportunity that they frequently wish to have when participating in an organizational inquiry such as this.

1.3 Aggregate Measures

Each item in the Ownership Culture Survey™ measures an ownership right, ownership responsibility, ownership identity, or a complementary measure such as trust in leadership or work atmosphere. The items in each category are grouped to provide aggregate measures of each of these concepts.

The heart of the OCS results is a *measure of rights* and a *measure of responsibilities* for each of six culture “clusters.” Based on the difference between rights and responsibilities scores, the results also include a *measure of how well balanced* a company’s culture is in each of the six clusters. The six clusters are:

- Decision Making
- Information and Learning
- Organizational Fairness
- Accountability
- Work and Pay
- Entrepreneurship

In addition, certain other measures are derived, such as measures of cynicism based on responses to ownership identity items. These items are included in the “Supplemental Analysis” portion of the survey report.

1.4 Standard Deviations and Averages

Survey items are most useful when their average score is not at either extreme of the response scale. For example, items for which the database average score tends to be close to the highest possible make it difficult to detect a company with a substantially stronger-than-average culture. Similarly, greater differences among survey items makes it easier to measure differences from one company to the next.

As a result, the OCS has been designed to maximize the number of questions with average scores greater than one point away from the extreme end of the scale, and with standard deviations (a measure of how “spread out” results tend to be) greater than 0.80. The ranges of statistics for core OCS items are below.

Individual N	Company N	Average (7-pt scale)	Average (10-pt scale)	Standard Deviation (7-pt scale)	Standard Deviation (10-pt scale)
1736 to 2958	12 to 19	2.3 to 6.5	4.9 to 9.2	0.87 to 1.93	1.33 to 2.64

Although a few items have an average less than a point away from the maximum, we have chosen to keep these items at client request. Client companies have felt that these items are an important part of giving an engaging, positive, and usable picture to their work force. Employees can see that there is a great deal of agreement on certain items, and that the work force is united in its view on certain issues.

Note: This table has not been updated to include all recent OCS clients, companies participating in the Shared Capitalism Research Project, or companies participating in research by the Nijmegen School of Management.

2. Brief History

The Ownership Culture Survey™ was first used in 1991 at the request of Polaroid Corporation. At the time, Polaroid was investing a substantial amount of corporate resources to create an ownership culture, and wanted a way to measure the success of their efforts. Company management requested that Ownership Associates create a survey instrument that would allow them to track their progress in building a strong cultural connection between ownership rights and ownership responsibilities. The first version of the OCS was the result.

The next phase in developing the survey took place in 1994, when a researcher affiliated with OA, Lynn Engelskirchen, used portions of the OCS in her study of Stone Construction Equipment and Advanced Technological Solutions.

In 1996, the OCS advanced rapidly, with a staff person at OA dedicated to its promotion and development. Five companies across the United States, including Fastener Industries and Web Industries, used the survey that year.

The survey attained its current form in 1997—except for minor changes and the steady testing and introduction of new optional survey items, it has remained unchanged for the most recent 25 survey companies.

The survey served as the basis for substantial research, including the Ownership Culture Reports (started in 1998), the Shared Capitalism Research Project of the National Bureau of Economic Research, and the doctoral work of Eric Kaarsemaker at the Nijmegen School of Management (Netherlands). Amy Smith-Boden also used OCS data for her master's thesis work at the Netherlands Institute for MBA Studies (NIMBAS).

3. Reliability

Reliability is a statistical measure of whether the data produced by a survey instrument is reproducible. In different circumstances, will the survey items elicit the same responses? Would the same person give the same responses when asked again? There are several forms of reliability, including test-retest reliability and internal consistency reliability.

3.1 Internal Consistency Reliability

A commonly used measure in assessing survey instruments is internal consistency reliability. It is applied to groups of items that are thought to measure different aspects of the same concept, and indicates how well different items measure the same issue (Litwin 1995). To measure internal consistency, it is necessary to calculate a statistic called Cronbach's coefficient alpha, which reflects the homogeneity of the different items that measure the same variable or quality.

The Ownership Culture Survey™ displays internal consistency reliability in a number of dimensions. The six Rights and Responsibilities clusters contain items classified as measuring employee rights and other classified as measuring employee responsibilities. Some items in each category ask about individuals' own situations and other ask respondents to act as observers for the company as a whole.

A value of 0.7 or higher is considered good. When the items are split into these measurement categories, internal consistency is seen to be strong. See table below.

Rights and Responsibilities	Cronbach's alpha coefficient
Rights	0.9308
Rights: individual items	0.8928
Rights: observer items	0.8824
Responsibilities	0.9352
Responsibilities: individual items	0.9027
Responsibilities: observer items	0.8965

The Ownership Culture Survey™ is designed to measure several aspects of an ownership culture. Most aspects are measured using a cluster of items. These clusters of items in general show a good degree of internal consistency. The table below reports the alpha coefficient for eight of the clusters.

Ownership Aspects	Cronbach's alpha coefficient
<i>1. Rights and Responsibilities</i>	
1. Decision Making	0.8532
2. Information and Learning	0.8755
3. Organizational Fairness	0.7549
4. Accountability	0.5866
5. Work and Pay	0.6732
6. Entrepreneurship	0.8614
<i>2. Complementary Items</i>	
1. Trust in Leadership	0.7948
2. Work Atmosphere	0.7509

The lower value for the alpha coefficient of the Accountability cluster is probably indicative of a lack of coherence in companies' cultures of accountability rather than a shortfall of the survey instrument. It may simply be the case that the items that ask about company-wide management accountability, one's own manager's accountability, and employee accountability are measuring substantially different qualities and not one homogeneous quality.

3.2 Test-Retest Reliability

Test-retest reliability is the most commonly used indicator of survey instrument reliability (Litwin 1995). Measuring this form of reliability requires having the same set of respondents complete a survey at two different points in time to measure the stability of the results.

The Ownership Culture Survey™ has been re-used at four companies since its inception in 1994. The time period between administrations was long enough in each case (at least a year) that some change in responses could be reasonably expected. In addition, companies adopted policies intended to raise some scores. However, the survey shows good test-retest reliability.

	% of items w/no significant year-on-year change
Company 1	46%
Company 2	52%
Company 3	61%
Company 4	75%

At Company 1, 17 items underwent a major improvement, 1 underwent an improvement, 3 items declined, and 1 item suffered a major decline. Nineteen items remained unchanged. Five of the items in the “major improvement” category dealt with Decision Making issues, and four with Trust and Work Atmosphere. Over the time period between the two administrations of the survey, the company was engaging in a re-engineering project to improve the poor state of labor relations in the company.

At Company 2, 18 items underwent a major improvement, 18 underwent an improvement, 3 items declined, and no items suffered a major decline. Forty-two items remained unchanged. Ownership Identity, Trust in Leadership, Information and Learning, and Decision Making improved the most. Over the intervening time period, Company 2 worked on ESOP involvement, large-group involvement, and celebrations of employee ownership.

At Company 3, 11 items underwent a major improvement, 12 underwent an improvement, 3 items declined, and 1 item suffered a major decline. Forty-three items remained unchanged. The greatest improvements were in Decision Making, Ownership Identity, and Information and Learning. Company 3 made a major effort in the intervening time to improve clarity about decision making and support middle managers.

At Company 4, 1 item underwent a major improvement, 2 underwent an improvement, 9 items declined, and 7 items suffered a major decline. Fifty-eight items remained unchanged. Ownership Identity and Decision Making items were among those that suffered a major decline. The one item that improved substantially concerned information about job performance, and the two items that improved concerned supervisor behavior. Company 4 suffered an economic crisis in the intervening time, but worked on improving job evaluations and support for middle managers.

Overall, these results show solid test-retest reliability, insofar as items that were not expected to change largely remained unchanged. In the timescale between tests, a certain amount of organizational change would be expected.

4. Validity

4.1 Review By Experts

Establishing the validity of a survey instrument is complicated. Validity is how well an instrument measures what it sets out to measure (Litwin 1995). One way to establish validity is to have the survey instrument evaluated by knowledgeable reviewers.

Corey Rosen, the executive director of the National Center for Employee Ownership, has called the OCS “the best survey you can get on employee-ownership.” Leading employee-ownership scholars such as Douglas Kruse and Joseph Blasi have used OCS data in numerous published research articles. OCS data has also been an integral part of the Shared Capitalism Research Project, headed by Richard Freeman of the National Bureau for Economic Research.

Ownership Associates has published several *Ownership Culture Reports* based exclusively on OCS data, and these reports have received widespread recognition. An example of the comments follows:

There is a tendency toward simplification when we talk about organizational culture. The *Ownership Culture Reports*, however, situate the concept in a precise way, provide very valuable information, and are based on studied and proven [survey] methodology.

—José Hernandez

Executive Director of the Association of Employee-Owned Corporations
of the Basque Country (ASLE)

4.2 Concurrent Criterion Validity

In the survey, Ownership Identity refers to the overall sense of ownership that respondents feel toward the organization. There is only one item in the core set of survey items that addresses this variable. At three companies, however, additional items developed by Dr. Jon Pierce of the University of Minnesota were used in the administration. These five additional items measure psychological ownership and have been validated and used in published research by Dr. Pierce.

The five items together have a Cronbach’s alpha coefficient of 0.9154. With the responses to the core survey item that measures ownership identity, the Cronbach’s alpha is 0.9150. This indicates that the ownership identity item has a high degree of reliability and validity.

5. Further Analysis

OA is continually improving and testing the survey. By the fourth quarter of 2004, we expect to have completed further validation work, including confirmatory factor analysis and correlational analysis with items from other validated surveys (including the General Social Survey and the Worker Representation and Participation Study).

In addition to Douglas Kruse and Joseph Blasi at Rutgers, Ownership Associates has ongoing relationships with academic researchers, and further work in validating the OCS is expected to come from their work. Eric Kaarsemaker and Eric Poutsma of the Nijmegen School of Management (Netherlands) are gathering data from Dutch companies. In addition, Peter Thompson of the University of Illinois at Chicago is planning to use OCS data in his writing.

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