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RESEARCH NOTES

PROVING THE LINK

STRATEGIC ALIGNMENT

MERGER & ACQUISITION

TRANSFORMATION & TURNAROUND

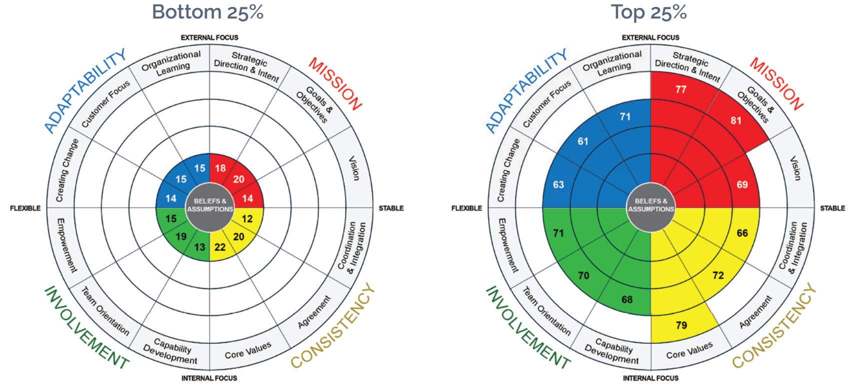
TALENT MANAGEMENT

"An organization's culture is critical to its success or failure."
~ Edgar H. Schein

Many executives, managers, employees, and experts intuitively recognize the importance of an organization's culture for the health of the organization. However, prior to 1984, there was no hard evidence to prove the relationship between organizational culture and financial performance results. For over the last twenty-five years, Dr. Daniel Denison has conducted research to prove the link between organizational culture and financial performance metrics (Denison 1984; Denison 1990). This Research Note highlights the latest compelling evidence linking organizational culture to financial performance metrics, such as return-on-assets (ROA), sales growth and market-to-book ratio (MtB), illustrating that a strong and effective organizational culture can provide a competitive advantage to an organization.

We used the data collected from 127 public companies that completed the Denison Organizational Culture Survey (DOCS). This research shows a significant relationship between culture and financial performance. Figure 1 shows the DOCS composite profiles in the top 25% versus those in the bottom 25% on their overall organizational culture results. Table 1 translates these differences into financial results, indicating that companies with higher positive culture scores also have higher financial results.

FIGURE 1: SCORES ON DENISON ORGANIZATIONAL CULTURE SURVEY



ROA = 1.2%
Sales Growth = 7.5%
MtB = 2.5

ROA = 3.5%
Sales Growth = 24.8%
MtB = 4

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Research Method

To examine the relationship between culture and performance, we looked at a sample of public companies surveyed using the Denison Organizational Culture Survey from 1995 to 2010. Organizations were removed if there were fewer than 100 total respondents. Additionally, organizations were removed if they were a subdivision of a public company. The result was a sample of 127 companies in a wide variety of industries incorporated primarily in the US (86%). (Research indicates that the DOCS results are comparable across countries [Denison Consulting, 2012; Denison, Haaland, & Goelzer, 2003]).

Table 1: The Results

PERFORMANCE MEASURE	BOTTOM 25%	TOP 25%
Return-on-Assets	1.2%	3.5%
Sales Growth	7.5%	24.8%
Market-to-Book Ratio	2.5	4.0

> "Culture matters ...
>
> If the organization begins to fail, this implies that elements of the culture have become dysfunctional and must change. Failure to understand culture and take it seriously can have disastrous consequences for an organization."
>
> ~ Edgar H. Schein - The Corporate Culture Survival Guide, 1999, p. 3

Measuring Performance

Once the sample was obtained, the next step was to measure performance over time. For this study, three financial metrics were chosen to examine: return-on-assets, sales growth and market-to-book ratio.

First, we took a look at return-on-assets. ROA is the percentage of profits derived from a company's total assets; in other words, ROA tells you how much profit a company generated for each dollar in assets. The higher the percentage of ROA, the better the organization is at using their invested capital, or assets, to turn a profit. For example, if two companies independently invest $100,000 in equipment for a project and one company produces $10,000 in profit and another produces $15,000, the second company has a greater ROA.

Second, we took a look at sales growth which is related to profitability. Sales growth is usually expressed as the percentage of increased sales from one year to the next. For example, if we surveyed an organization in 2000, year 1 was calculated by subtracting the sales from 1999 from the current sales year (2000). To get the percentage, we divided the difference by 1999 sales.

Finally, we looked at market-to-book ratio as another measure of an organization's financial performance. The MtB seeks to show the value of a company by comparing the book value of a share to the market value of a share. For example, assume an organization has $100 million in assets on the balance sheet and $75 million in liabilities. The book value of that organization is $25 million. (Assets - Liabilities = Book Value). If there are 10 million shares outstanding, each share would represent $2.50 of book value. If each share sells on the market at $5 (market value), then the MtB would be 2 (because 5/2.5 = 2). Essentially, the market value is the investment community's expectations of the worth of the company.

We predicted that the companies with the higher scores in the DOCS culture traits of Mission, Consistency, Adaptability and Involvement would also have better ROA, sales growth, and MtB ratios than those with lower scores.

To test our hypothesis, we linked the organizations in our database to publicly available financial performance data from Standard & Poor's COMPUSTAT database.

The Results

The results of our analyses show some exciting findings. As you can see in Table 1, in the year of the survey, those organizations with the lowest scoring percentiles for Mission, Consistency, Involvement, and Adaptability earn $1,200 for every $100,000 spent on assets, while those in the top 25% earned $3,500. This profitability is also related to how fast these companies are growing. The sales growth of the top 25% group was 24.8% versus the bottom scoring companies at 7.5%. Turning to the MtB ratio, the investment/market community is recognizing the organizations with the higher culture scores are 400% of book value versus 250% for organizations in the bottom 25%.

The evidence indicates that the companies with higher culture scores have better performance in the year of the survey. But this study also allowed us to take a look at the longitudinal data, and the results indicate that those high scoring organizations also perform better in the future. Figures 2, 3, and 4 illustrate how the bottom and top 25% of organizations rank in their industry (by NAICS code) over a three-year period for each of the three performance measures.

The graphs indicate that today's culture affects tomorrow's performance. Figure 2 shows that companies in the top 25% exhibited a slight gain in industry ROA within a three-year period, whereas the bottom 25% of companies displayed an opposite trend. Figure 3 shows that, as measured by sales growth, both groups displayed a negative trend, but the bottom 25% experienced a sharper decline than the top 25% in subsequent years. Figure 4 shows the top 25% remained at a consistent advantage over the bottom 25% in market value.

Figure 2

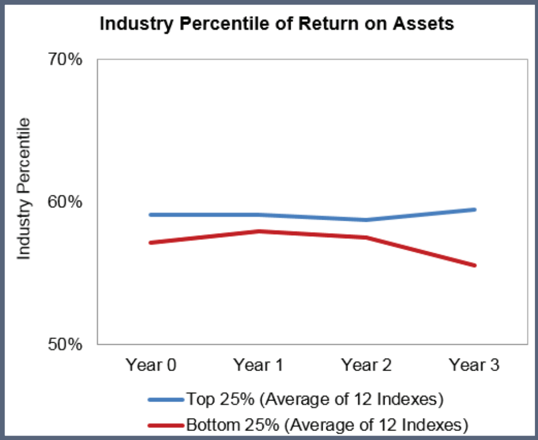


Figure 3

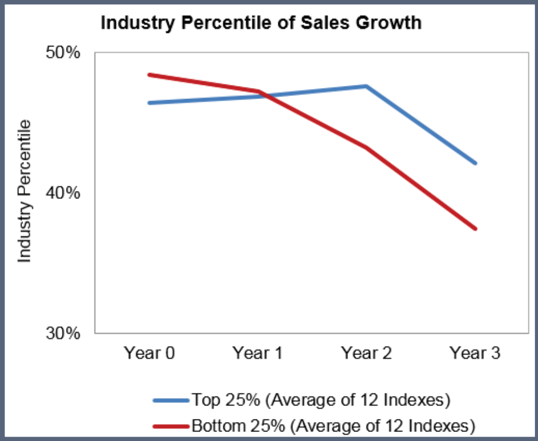
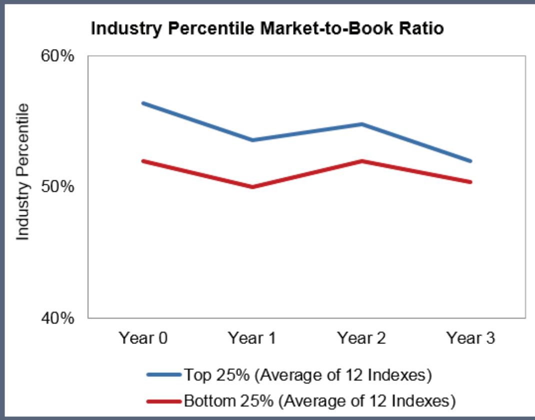


Figure 4



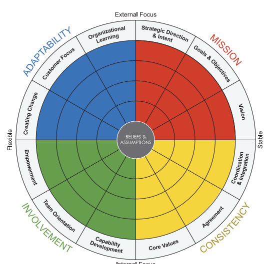
Conclusion

The results indicate that culture has not only a short-term impact on performance, but lasting effects as a competitive edge. Specifically, this research has shown an advantage in ROA, sales growth, and market value for organizations scoring in the top (vs. bottom) 25% on the DOCS. Culture makes a difference in financial performance. As a measurable and controllable aspect of your organization, it is a factor that can improve future business performance. Executives, managers, and employees can focus on their organization's culture today to improve their financial performance tomorrow.

> "This research shows us how we can measure culture in a way that is useful to managers because it links culture with other bottom-line performance measures."
>
> - Daniel Denison
> Chairman & Founding Partner,
> Denison Consulting LLC

The Denison Model

This research uses a culture model developed by Daniel Denison, built to explain the cultural factors leading to financial performance and organizational effectiveness (Denison 1990). The Model



assesses four behavioral traits: Involvement, Consistency, Mission, and Adaptability. These traits are each broken down into three indexes. Ultimately, they can be defined as "a code, a logic, and a system of structured behaviors and meaning that have stood the test of time and serve as a collective guide to future adaptation and survival" (Denison 1990, 175). The traits and definition of culture match Schein's notion of the "shared basic assumption that the group learned as it solved its problems of external adaptation and internal integration" (1992, 12). The notion of survival in the external environment is manifested in the adaptability and mission traits which describe how strategically-oriented and customer-focused an organization is. The learned responses to the "problems of internal integration" are manifested by the traits of Involvement and Consistency.

Related Resources

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