from one issue that is already affecting the world of engineering managers, namely, the growing number of women in what has been a predominantly male field.

Mershon Shrigley of Shrigley & Associates points out in a newsletter that women are bringing new and valuable leadership styles into the world of engineering that deserve imitation, or at least serious consideration. among their male counterparts. While gender does not guarantee a particular leadership style, women in general tend to place more importance on communication, a trait that some proponents of management education emphasize is missing in engineers who are "kicked upstairs" into management with only a background in technical issues.

Author Sally Heigesen highlights some of the differences in male and female leadership style in her book The Female Advantage: Women's Ways of Leadership:

- Women managers tend to see themselves at the "center" of things; men see themselves at the "top."
- Men collect information; women share it.
- Women see relationships as a priority and therefore make an effort to be available to subordinates.
- Men perceive their homes as "branch offices" and spend less time with family and outside activities than do their female counterparts. Women make time with their families a priority and are more likely to understand subordinates who do likewise.
- Women tend to work at a steady pace, scheduling breaks throughout the day. Men are more likely to work at a frantic, unrelenting pace with no breaks.

In Toward a New Psychology of

Women, author Jean Baker Miller says, "The female view that one strengthens oneself by strengthening others is finding greater acceptance. Female values of inclusion and connection are emerging as valuable leadership qualities."

Studies show that this type of management style is going to play an increasingly important role in the A/E/C workplace.

According to a recent survey, salary/ compensation ranked only sixth in importance among a list of job considerations, well behind such intangibles as satisfaction and fulfillment.

People entering today's job market are comfortable with changing jobs if they experience even a well-paying job as inhumane or stifling. Managers of both sexes must heed the danger of the exaltation of efficiency at the expense of human values.

PEOPLE SKILLS

Auditing Human Resources

ow does a firm know if its human resource practices have an impact on business results? To put it another way, where on the balance sheet can you find the return on your investment in people?

Most professional service firms and organizations complete an extensive audit of their financial statements on an annual basis, but the programs involving "people," such as recruiting, training or pay for performance, are seldom given the same scrutiny. Increasingly, in a competitive market-place, organizations will need to make fact-based people investments that can be quantified to demonstrate a return on assets.

The typical professional service firm spends over two-thirds of its money on people. Although auditing these expenses may seem relatively easy, some of the data collected tend not to be useful for two reasons. First, the data often reward and reinforce only broad activities, such as the number of training programs and new hires, without assessing the impact of these activities on business. Second, the information is often in the form of historical data and does not emphasize predictive information that management can use for strategic business decisions.

The organization's management needs to understand how human resources contribute to business success before it can decide on the people investments that add business value. Accordingly, the design and development of human resource measurements should revolve around answers to the following set of questions:

1) What does it take for the firm to succeed? What are some important

business trends that impact the firm? What will make or break the firm in the current and future business environment? What are the scarce people resources the firm needs?

- 2) Can the organization's human resources add value to the business? In what ways can people create sustainable competitive advantages? Will it be organizational capabilities such as innovative practices, customer service or providing the lowest cost that sets you apart from competitors? Will the organization consist of committed permanent employees who intend to be with the organization for a long time or a staff that is adjusted from project to project?
- 3) How can appropriate human resource measures be designed to fit an organization's framework?

Once the firm identifies its niche in the marketplace, appropriate measures can be developed. The three most common clusters of human resource measures tend to be internal operational, internal strategic and external strategic measures. Within those three clusters, you can break down and measure human resource functions in the six domains of staffing, training/development, performance appraisal, rewards, culture and communication. Some possible measurements for each of the domains could be the following:

Staffing:

- Acceptance per offer ratio;
- Time and cost of filling a job;
- Percentage of internally versus externally filled jobs;
- Average tenure of employees in relation to performance standards or measurements.

Training/development:

- Percentage of employees involved in training;
- Percentage of training dollars to payroll dollars:
- Comparison of training evaluations taken at the end of a course and followup evaluations two to six months later;
- Percentage of new materials in programs each year as part of a continuous improvement effort.

Performance appraisal:

- Percentage of employees receiving performance appraisals;
- Effectiveness of appraisal process in dealing with poor performers;

- Percentage of total salary at risk;
- Labor costs as a percentage of revenue dollars;
- Salary levels compared with those of closest competitor.

Rewards:

- Success in identifying fast-track employees:
- Average increase granted by classification:
- Number of spot bonuses and individuals recognized in the past fiscal year for outstanding performance;
- Number of nonfinancial reward systems used by management.

Culture:

- Perception of consistency and equity in treatment of employees;
- Average age of workforce;
- Compliance with federal and state fair employment practices;
- Compliance with affirmative action.

Communication:

- Frequency and effectiveness of communication between departments;
- Percentage of employees making suggestions for improvement and percentage of suggestions implemented;
- Consistency and clarity of messages.

These are just a few of the domain areas that may affect an organization's results. The ability to access the people components of a business

and their impact on the bottom line should be correlated to investment. For example, a large majority of businesses today pride themselves on providing excellent customer service. An organization may spend extensive time and expense on customer service training only to discover it provides a very small return on investment because the majority of clients purchase services strictly on the basis of price. On the other hand, it is important to evaluate the amount of business that might have been lost if customer service had not been emphasized. The costs of not training employees in areas such as customer service or hiring procedures are apparent only when legal bills start rolling in.

"One size fits all" is not necessarily true when it come to assessing your organization's human resources. However, "what you measure is what you get" and taking the time and effort to audit your people resources could affect your organization's competitive advantage. A professional service firm typically allocates up to two-thirds of its budget to "human" costs. In a globally competitive marketplace, having an audit of those costs may provide some new insight on your firm's current and future competitive edge.

Jim Krug Woodward-Clyde Professional Development Institute Denver

COMMUNICATION

The Art of Dynamic Q&A

well-run question and answer session can be just as valuable as the presentation preceding it if you, the speaker, know how to take charge of the interchange and structure it as a dynamic means of exchanging information. A Q&A strategy can make you more effective at every meeting, interview, presentation or public hearing you address by

helping you gain control over the interaction and keep it on track. Every Q&A session needs to be treated as more than a simple exchange of information; rather, it needs to be viewed as a vital part of a communication process that builds a relationship between you and the questioner. An effective Q&A, in addition to sharing information, can help you create

rapport with clients, consultants, team members, selection committees and the public.

When you are tackling a Q&A, keep these hints foremost in your mind:

• Keep answers brief. Answer only what you are asked. Resist the temptation to overexplain so your answer is "very clear." Be succinct and to the point.

Copyright of Journal of Management in Engineering is the property of American Society of Civil Engineers and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.