Lean on Quality

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We've been hearing a great deal lately about the advantages of the "lean" organization. MIT has published a book extolling the virtues of "lean production".[1] General Motors announces that it is "downsizing", which is a euphemism for laying off seventy five thousand people. The management of defends these layoffs by saying it is creating a "lean" company. Being "lean" is not an objective; being competitive is the objective. You don't become competitive by being lean; competitiveness is a *consequence* of being a quality company. It does no good to be efficient at building the wrong product. Lean doesn't help if your methods of dealing with customers makes them angry. Lean comes from quality management. It's the only route.

If you see a successful runner, you will notice that he or she has no excess fat. Top flight runners are lean. So, if you want to be a top flight runner, do you go on a crash diet? If you believe that, then you will believe that your company can become a tough competitor by laying off people.

If your competitor can assemble an automobile with 28 hours of labor while you require 40, can you become competitive by laying off 30% of the people? Competitiveness comes from productivity. It comes from making the right products and from delivering the right services. The important key to these three areas is quality... total quality... quality in every thing you do. Total Quality provides the lean route to competitiveness.

Quality companies will be lean. They will use "just in time methods." They will "empower employees." They will have "employee involvement." TQM managers don't treat these characteristics as *ends*. The TQM quest is for better ways to serve customers. As a *consequence* of this quest, they create enterprises which involve all their employees, which empower them to make decisions, which keep inventories low and which are "lean".

We have to breathe to live, but the objective of living is not just breathing. We have to eat to live, but a healthy objective of living is not just eating. We have to have a profit to remain in business, but unless and until managers have a motivation beyond profit for staying in business, they will not be able to create a quality company and they will not be able to compete with those who do.

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[1] Womack, J.P., Jones, D.T., Roos, D <u>The Machine That Changed The World</u> Rawson Associates, New York, NY (1990)

What is involved is not just a *change* in the way we manage. Rather a *transformation* is required. Gorbachov thought he could *change* the Communist party. What was required was a *transformation*. The difference is significant. A change is external. It has to do with the way you do things. A transformation is deeper. It goes to the heart of how you think about things you do, particularly, how you see the world and your place in it. Until managers are *transformed,* the adoption of TQM will always be in doubt.

One of the barriers to the transformation is in the way executives are compensated. If you ask an executive "Do you want to be more profitable or more viable?" he or she will not give you a straight answer. Executive pay depends on profitability measured in the short run. We are all victims of the way the books are kept.

In an oversimplified way, we may define the annual profitability of a company like this:

$$\text{Profit} = \left(\begin{array}{c}\text{Revenues}\\ \text{from all}\\ \text{Goods and}\\ \text{Services}\end{array}\right) - \left(\begin{array}{c}\text{Cost of}\\ \text{Purchased}\\ \text{Goods and}\\ \text{Services}\end{array}\right) - \left(\begin{array}{c}\text{Amortization}\\ \text{of Equipment}\\ \text{and Cost of}\\ \text{Capital}\end{array}\right) - (\text{Taxes}) - \left(\begin{array}{c}\text{Salaries}\\ \text{and}\\ \text{Wages}\end{array}\right)$$

When the profits turn negative, especially after they once were positive, draconian measures, will be invoked. Managers are paid according to the profits they show, *now*, and, since the above equation attaches a minus sign to every wage and salary, they see a quick benefit to the company (and themselves) in eliminating people. It is only human nature to try to put the best face on whatever is done. It would be very difficult for a manager to say, "The reason that we are 'downsizing' today is because we did a poor job of managing our resources in the past."

A profit calculation is not the only way to evaluate the annual performance of the management of a company.[2] A different measure of the accomplishments of a company is the *value added*, defined in an oversimplified way, similar to the definition of profit:

$$\text{Value Added} = \left(\begin{array}{c}\text{Revenues}\\ \text{from all}\\ \text{Goods and}\\ \text{Services}\end{array}\right) - \left(\begin{array}{c}\text{Cost of}\\ \text{Purchased}\\ \text{Goods and}\\ \text{Services}\end{array}\right) - \left(\begin{array}{c}\text{Amortization}\\ \text{of Equipment}\\ \text{and Cost of}\\ \text{Capital}\end{array}\right)$$

[2] We shall leave to another time the examination of how to evaluate the contribution of the management to the long term future of the company, a matter of even greater importance to the employees and shareholders than the performance for the year.

Value added does not include terms for either salaries and wages or for taxes, but instead measures the economic contribution of the enterprise to society. The use of the value added measure is much more compatible with TQM than profit. The profit measure pits the shareholders against the people who work in the company. It makes it harder for the management to look out for all the stakeholders.

The value added is available to be used for three purposes: a) To reinvest in the company, b) to pay salaries and wages and c) to pay shareholders, that is, (again, in an oversimplified way):

$$\begin{pmatrix}\text{Disposition}\\ \text{of the}\\ \text{Value Added}\end{pmatrix} = \begin{pmatrix}\text{Reinvestment}\\ \text{in the}\\ \text{company}\end{pmatrix} + \begin{pmatrix}\text{Dividends}\\ \text{to}\\ \text{shareholders}\end{pmatrix} + \begin{pmatrix}\text{Salaries}\\ \text{and}\\ \text{Wages}\end{pmatrix}$$

Reinvestment in the company represents the management's concern for the future. The other two terms represent the concessions to people's needs today. A management report which differentiates between the value added (a measure of the effectiveness of the management in utilization of resources) and the way the value added is divided up among the claimants (a measure of equity) would give a better picture of the state of the enterprise.

Dividing the value added by the total number of people in the enterprise, gives the value added per person which, in my opinion, is a better way to judge the management of a company, for it indicates the efficiency with which the resources of the company have been used. It would concentrate their attention on management's main responsibility, which is constantly to improve the systems for which they are responsible.

The use of value added as a measure of how well the company is run can also be the basis for discussion between management and labor regarding wages and salaries. The question of how to divide up the value added can be separated from the question of increasing the value added, which provides the basis for paying all of the stakeholders.

New methods for accounting are called for which will help each level of management to understand how it is contributing to the value added of the company. Many managers will say that they can easily compute the value added and see no added value in a change in reporting. True. They can do so because they have all the figures. But those who are not in the board room cannot easily dredge out the numbers and, ultimately, we have to judge the management, too.

There is, of course, no method of accounting which cannot be misused. After all, the Ten Commandments have been violated for fun and profit since their pronouncement. Father Ballon and his Japanese co-authors have described how, even with a book-keeping system which makes use of the value-added concepts, many Japanese firms have managed to commit the same kinds of white collar crimes as their American counterparts and to fool their investors and their government.[3] Nonetheless, I believe the Value Added measure would be helpful to all who strive to create the quality company.

Both value added and profitability suffer from the fact that they are "results measures" and, as such, are lagging indicators of performance. Quality measures are "process indicators." They are leading indicators and provide much better information on how the company is doing. Each company that wins the Deming Prize in Japan has to provide a set of quality measures, tracked over time, to show how the management has been improving the company. It would be an improvement in the Baldrige Prize if a similar requirement were in place. This would be especially useful in the advice the winners give the public on how they can became winners, too. Examples of these indicators are to be found in the excellent little book by John Hudiburg[4], the former CEO of Florida Power and Light, who led FPL to become the first company outside of Japan to win the Deming Prize. A new management has been installed at FPL and it would be interesting to see the same figures as appear on pages 103 to 112 extended into the future as part of the FPL annual report.

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[3] Robert J. Ballon, Iwao Tomita and Hajime Usami Financial Reporting in Japan , Kodansha International Press, (Sophia University), Tokyo, 1976

[4] John J. Hudiburg, Winning with Quality, the FPL Story , published by Quality Resources, a Division of the Kraus Organization, Ltd., White Plains, NY (1991)