

## Economics: The Key to Unlocking M & R Improvements

Written by John Mitchell  
Thursday, 01 April 1999 19:09

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Pictured in a recent cartoon, two dinosaurs are contentedly munching leaves while a few snowflakes are falling in the foreground. One says to the other: "Seems to be getting a bit cold and dark around here."

I dislike sounding like Chicken Little, but why is it that only a few leaders recognize that survival and prosperity through the storms of change battering the maintenance and reliability profession requires action outside conventional boundaries?

Most maintenance organizations are experiencing heavy pressures to reduce costs. Investments for improved methods and technology are becoming more difficult to justify. Many see the maintenance and reliability profession itself declining in numbers, stature, and recognition. Attendance at professional conferences seems to be declining. Expansion of condition-monitoring and condition-based maintenance, measured by instrumentation sales, has been slowing for at least 6 to 8 years. The perceived value of publicly held maintenance management system suppliers, measured by market capitalization, has declined significantly over the past 18 months.

But why talk in generalities? Do you as a maintenance and reliability professional feel that your stature and recognition has increased, remained about the same, or declined over the past several years? Do you believe that if free to pursue optimizing initiatives you could contribute greater value to your company, as well as reduce costs? Despite headlines proclaiming a booming economy and widespread prosperity, most of the people I talk to in the maintenance and reliability community feel unsettled and insecure.

During one recent discussion, I learned that a company long known for its maintenance and reliability improvement efforts was postponing some, canceling others. Why? Because executives who prioritize funds have concluded (perhaps more correctly, have been convinced) that there is higher return in building new capacity rather than optimizing what they have.

Although many will agree with these observations, few appear to recognize that what's happening to them is happening to everyone.

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Suppliers are stating that the failure to meet expectations in 1998 will be corrected this year by making more contacts or sales calls and initiating more quotations. Perhaps this worked in the past. The question is whether it will continue to work as conditions change. Many maintenance and reliability professionals seem to believe that the solution is fine tuning what is already in place. In my opinion both are woefully misguided.

We are far beyond the stage where fine tuning will have much impact. How can we gain approval for investment in long-term improvements when many executives view maintenance as one of the first areas to cut when profits are squeezed? How many have been told that the reduction was only temporary? Have you ever seen a curtailed or canceled maintenance and reliability improvement program reinstated? Without awareness of the potential gains from improved maintenance and reliability, long-term value will be sacrificed for short-term cost reduction.

Returning to the earlier question, how does the return gained by improving the effectiveness of current production assets compare with the return from capacity expansion and other competitive investment opportunities? I suggest that the ability to answer this question with solid financial return for specific initiatives will have far more impact on the success, stature, and recognition of maintenance and reliability professionals than pursuing incremental improvements in methods and technology.

Maintenance and reliability professionals must learn a lot more about how investments are evaluated. For new capacity, what sort of product pricing assumptions are made? What about market conditions, foreign competition, project delay, and higher-than-planned operating costs?

Competing for resources without fully understanding and questioning all the assumptions used to demonstrate the superiority of alternates is playing a game without knowing the rules. Without any direct knowledge of the investment opportunities that compete with your proposals for maintenance and reliability improvement, I'd bet that all are slanted toward the most favorable economic assumptions.

Unless maintenance and reliability professionals become energized and learn how to play the financial game, conditions will continue to deteriorate under pressures to reduce cost. A bleak picture perhaps--but it has happened before. **MT**

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