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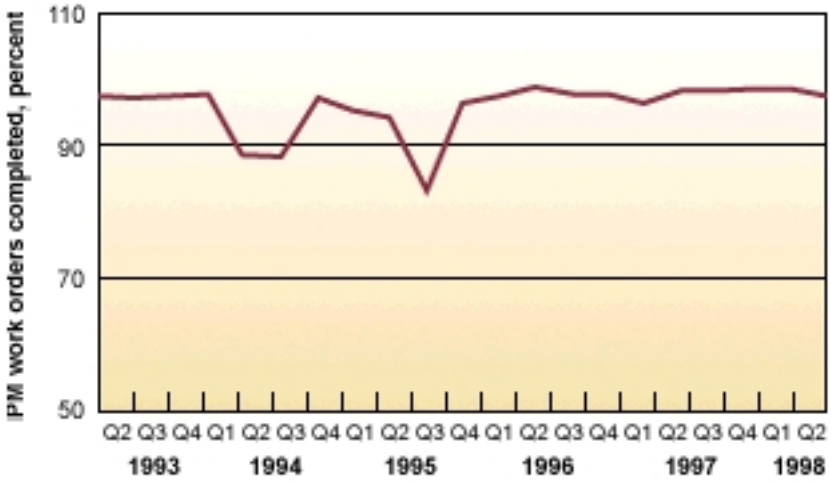
Incentive clauses in maintenance service agreements benefit both owner and contractor when they focus on important goals. Here are some issues to consider.

When you buy a service, what do you believe is the contractor's primary goal? A. Pride; B. To employ people; C. To make you happy; or D. To maximize the difference between his receipts and his cost? While A, B, and C are noble goals, the reason the contractor is in business is D: to make money.



PM work orders completed in scheduled time was part of the original maintenance agreement at a paper mill in the mid-South. Kellogg Brown & Root has been providing total maintenance services at this mill since the early 1990s.

In a similar vein, service providers should ask that question about you. As the owner, what is your primary objective? A. To employ the contractor's people; B. To build the contractor's resume; C. To be a good citizen; or D. To maximize the value you receive for each dollar spent? Obviously, your primary objective is D: to maximize value received.

Pros And Cons Of An Incentive Plan

Advantages

- Creates greater ownership and commitment by the contractor

- Motivates the generation of new ideas
- Encourages closer cooperation between owner and contractor
- Influences key personnel assignments to the project
- Creates potential for greater management attention to the project
- Stimulates a more disciplined approach to using information and control systems

Disadvantages

- Additional administrative costs
- Extra negotiations
- Changes in priorities require renegotiations
- Increased number of disputes
- Difficulty in establishing fair and equitable targets for performance measures

Is it easy to see that these two goals might not be in alignment? In fact they could end up being 180 degrees out of alignment. Then, what can you do to motivate the behavior of the contractor to be consistent with your goals and objectives?

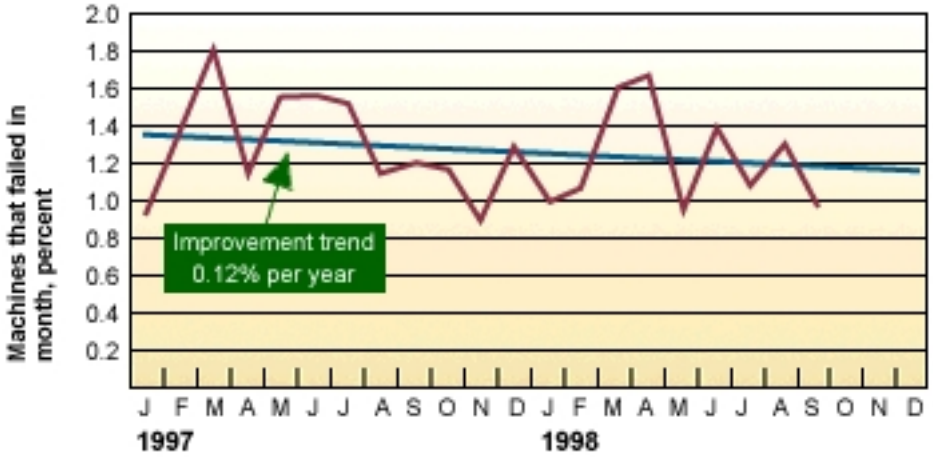
The answer to this question can be found in the behavioral sciences. Expectancy theory argues that the motivational force to perform or expend effort is a multiplicative function of the expectances concerning future outcomes and the value of those outcomes.

This concept of expectancy then has two specific components:
1. Expectancy or probability of success associated with each behavior, and 2. Association of certain outcomes with every behavior.
If we apply these concepts, we find that motivation will be greatest when:

- Participants believe that performance at a particular level is possible.
- Participants believe that performance will lead to certain positive outcomes.
- The outcomes are found to be attractive.

The behavior of a contractor is linked to certain attractive outcomes (increased receipts) which are tied to obtainable performance measurements. These performance measures gauge the contribution of the contractor to those drivers, which maximize the value received by the owner.
Kellogg Brown & Root has been working with incentives in our contact maintenance

business for over 15 years. We have had successful incentive plans, and some plans which were not so successful. Advantages and disadvantages of incentive plans we have observed are outlined in the accompanying section "Pros and Cons of an Incentive Plan."



Reliability: Monthly Machine Failure Rates. Machine failure rate is part of the maintenance agreement at a major chemical plant located east of Houston. Kellogg Brown & Root provides total maintenance services at this location, where there has been an incentive plan in place for 5 years.

Reliability Index: Machines Requiring Rework During "Warranty" Period. Count of machines requiring rework is part of the maintenance agreement at another major chemical plant in Texas. Kellogg Brown & Root provides total maintenance at this plant. There has been an incentive plan in place at this location for 4 years. Making Incentive Clauses Work

The success of incentive clauses in maintenance contracts is a product of a variety of factors. The following observations are offered as suggestions for consideration during the development of a maintenance service agreement:

- An integrated approach to design and implementation has been found to be the most successful. Contractors should be involved in plan design. Owners must remain an active member of the team and not abdicate this accountability during implementation.
- Owner's commitment to success is paramount for plan success. You must

want your contractor to earn the bonus.

- Performance measures must be obtainable, within the contractor's control, comprehended, and valid.
- Bilateral determination of results creates a collaborative environment between the owner and contractor.
- Goals and status must be communicated to all employees.
- A high level of trust between owner and contractor must be established and sustained.
- Positive incentives encourage positive actions, behaviors, and relationships. Negative incentives encourage behaviors and actions that are defensive.
- Effective incentive plans are designed carefully to respond to specific requirements and particularities of application.
- A contractor's degree of risk aversion increases with his inability to absorb the potential loss.
- Two-way communication is essential at all levels of both the owner's and contractor's organizations.
- Incentive plans take time.
- You can't incent capabilities into a relationship which neither owner nor contractor is capable of providing.
- Incentive plan design should be flexible. Don't be afraid to change the design if it is not yielding results. Review the plan at least annually.

The incentive clauses in the service agreement must be designed around the plant's overall maintenance and asset management goals. Generally, clauses will have a minimum performance figure above which a bonus award will be paid. There will also be a maximum goal figure above which the incentive bonus will cease to increase with performance. Some of the clauses we have worked with include the following:

- Safety work orders completed within scheduled time.
- PM work orders completed within scheduled time.
- Emergency workload.
- Overtime worked by maintenance core group.
- Absenteeism.
- Asset maintenance downtime.
- Skills inventory-work time devoted to developing multiskilled crafts.
- Reliability-monthly machine failure rate.
- Productivity-man-hours per completed base work order.
- Training-percent of training man-hours to goal.
- Contractor's man-hour performance-over or under budget.
- Contractor's overall maintenance performance-over or under budget.
- Safety-recordable incident rate.

The accompanying performance charts illustrate incentive clause measurements from three different contract maintenance agreements.
Incentives can be useful for motivating performance when the owner-contractor relationship is long term, focused on business goals, and with shared control.
Strive for these features in your maintenance projects. The accompanying section "Making Incentive Clauses Work" offers observations for consideration as you develop your incentive plan. **MT**

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