

Why Being Proactive is No Longer Enough

by Phillip Slater

It was about ten minutes before anyone noticed the smoke. The wiring had been heating up since the most recent planned maintenance activity. Apparently, the electrician didn't quite tighten up the joint and hadn't properly cleaned away the built up dust. The result was a hot joint and this heat quickly spread into the cable. The casing began to smoke and by the time the smoke was noticed the cabinet was actually on fire.

The machine operator who saw the smoke immediately raised the alarm, shut down the power, and grabbed a fire extinguisher. She knew better than to open the cabinet and let in more oxygen so she concentrated on stopping the fire from spreading.

The alarm had alerted the local fire brigade and by the time they arrived the factory had been evacuated and their trained emergency response team had contained the fire using CO2 extinguishers. Everyone was safe and the fire was out.

Any reasonable evaluation of this situation would conclude that almost all actions taken here were proactive, but is that really enough?

What is Proactive?

In 1990, Stephen Covey released a book that was to become a modern classic. The book, 'The 7 Habits of Highly Effective People', proposes seven principles that Covey, through his leadership training, had seen enable people to achieve a 'principle centered, character based approach to personal and interpersonal effectiveness'. Some people have interpreted these habits as being the principles for success.

The first of Covey's habits is 'Be Proactive' and the phenomenal success of Covey's book resulted in the word 'proactive' becoming a major buzz word of management in the 1990's and since. We have all heard someone say something like, 'We are taking a proactive approach', meaning that they are prepared (or are preparing) for an expected event.

Being proactive is seen to be the approach of people that are taking charge, who are not just responding to a situation, but are planning and anticipating. In many respects it has become a virtue that cannot be argued against.

Or can it?

The online resource Dictionary.com defines proactive as: 'serving to prepare for, intervene in, or control an expected occurrence or situation'. If you examine this statement, it really says that being proactive means 'doing something' but this is too general from any practical perspective and doesn't really help in determining which actions really are proactive and should be prioritized. Since the mid 1990's, it seems that being proactive represents taking action, any action, even after the event, even if it may not be the best or most appropriate course of action.

Under the 'doing something' definition, being proactive is just no longer enough.

A New Framework for Action

What is needed is a new framework for action that enables us to categorize the actions we take and determine if they are the most appropriate.

In order to develop this framework, let's first look at problem solving. After all, the reason that someone may want to be proactive is that they are trying to prevent or solve a problem. Pretty much all approaches to problem solving (think fishbone diagrams or the '5 Whys') focus on identifying and separating cause from effect. That is the consequence of some event (the effect) and the action that actually produces the event (the cause).

To make better choices in the actions taken, it is important to understand if an action is working on the cause or the effect. For example, in the fire story above, the cause was the buildup of dust and loose joint, the effect was the fire and flames.

The next thing to consider is whether the action works on the past or the future. Working on the past occurs when the action taken actually corrects an event that has already taken place. For example,

	Past	Future
Cause	3. Corrective Action	4. Preventive Action
Effect	2. Adaptive Action	1. Contingent Action

Figure 1 - Activity Matrix

vibration monitoring requires that something is already out of balance or wearing in order for the effect to be measured. The goal is to identify the problem before it causes operational disruption.

Working on the future occurs when the action taken prevents or manages an event that has not happened. Extending the vibration example above, this might mean an equipment redesign that eliminates the issue altogether.

So we have four elements: cause, effect, past and future. Let's put them together in a matrix (Figure 1). The matrix in Figure 1 gives us a new framework for assessing activities that may be undertaken.

For each pairing of the elements we can assign a label that describes the impact of the pairing, these are:

1. Future-Effect: Contingent Action
2. Past-Effect: Adaptive Action
3. Past-Cause: Corrective Action
4. Future-Cause: Preventive Action

To explain these, let's go back to the fire emergency detailed above.

- **Contingent Action:** the planning that put the fire extinguisher in place and trained the operator in its use is a Contingent Action. This action was taken to deal with the effect

(the fire) of a future event (at the time the action was taken it was not known if there would ever even be a fire).

- **Adaptive Action:** once the fire started the action of actually using the extinguisher was an Adaptive Action. This action was taken to manage the effect of a past event (that is, the fire had already started and the extinguisher was used to put it out).
- **Corrective Action:** it is fair to consider the execution of the Planned Maintenance activity by the electrician as being proactive. However, it is really a Corrective Action because it was designed to work on the cause (the dust build up and the loose joint) but also works on the past because the dust has already built up. That the action was poorly executed might never actually be understood because the cabinet was destroyed in the fire, but the fact that it is Corrective rather than Preventive can be understood in advance.
- **Preventive Action:** requires working on the cause of a future event (again, taking the action without knowing if there would ever even be a fire) and this would require, for example, a dust proof cabinet and improved design of electrical joints.

It is easy to see that each of these actions could, if we used the dictionary definition of proactive, be described as proactive. That is, something was done. Yet they are all very different in the timing of their execution and their impact on the incident. Perhaps by using the Activity Matrix we can better predetermine the options and recognize the real choices that we face.

Let's look at another example.

Materials management is a major problem for many companies, and is of major concern to anyone trying to manage the reliability of plant and equipment. The two key issues faced with materials management are stock outs of materials held in inventory (resulting in delays to repairs) and an over expenditure in inventory (resulting in the wasting of cash that could have been better used elsewhere). It is important to realize that both of these issues are effects, not causes. The causes of these two effects are the management systems and decisions that lead to the stock out or over expenditure.

Using the new Activity Matrix we can now examine various options.

The initial reaction of many people attempting to take action relating to materials management is to utilize software to recalculate the required holding levels based on the usage and supply data. This is often incorrectly referred to as optimization. Far from being truly proactive, the software review works on the effect of the problem (incorrect reorder settings) and works on the past (using historical data) and is actually an Adaptive Action fitting very neatly into position 2 on the matrix in Figure 1. This approach makes no attempt to change the issues that resulted in the incorrect reorder setting. Plus, in most cases the data is actually of little or no value because it reflects the past not the future. This is a classic example of an action that could be considered proactive (as in 'we did something') but really isn't.

The next action often taken is to target different inventory types, such as obsolete or slow moving stock, with a view to selling or removing the stock. Again, this is an Adaptive Action as it works on the effect (overstocks) and works on the past (no action is taken to change the recurrence of the effect). Also, the causes of the problem are not being addressed, only the effect. While both of the above approaches might show short term benefit, they do not

prevent future problems and can be equated to using the fire extinguisher in our earlier example.

An alternative option is to train everyone involved in materials management on the issues they face, their influence on the outcomes and the decisions they can make to influence results. This is analogous with training the machine operator in using the fire extinguisher - a Contingent Action (position 1 in Figure 1). For this option, when something happens (say, stock turns going down or systematic material delays), the people know what to do to correct the problems. They may not individually have the authority to make the changes required to prevent the problem reoccurring, but an appropriate review process can take care of that.

A better option is to work on the cause of the problem and to work on the future. This requires putting systems in place that manage materials to deliver the required availability without over spending, even when it is not known if there would ever be a problem. This is genuine prevention and, so, sits squarely in the Preventive Action box (position 4 in Figure 1). Examples of the actions to take include reviewing the materials management procedures and policies and reviewing and aligning responsibilities. These both form part of what is known as Inventory Process Optimization TM. Think of this in terms of the dust proof cabinet and redesigned joints (eliminating the cause) in our fire example.

As you can see, using the Activity Matrix has forced us to think in terms of the four elements: cause, effect, past, and future. Thus we can now evaluate each of the options to determine which really are proactive and which are merely dealing with the effects with no preventive impact. This analysis enables us to make better and clearer decisions on the actions that we implement.

A New Way to Be Pro-Active

Being genuinely proactive is very difficult. This is because Adaptive and Corrective Actions provide an instant gratification, as in 'I achieved this, I fixed the problem'. This comes from working on something that has already happened and being able to deal with it. Whereas being proactive eliminates the 'feel good' factor because you are working to prevent something from occurring, there is no instant gratification.

Perhaps because of this, over the past 20 years, it seems that the definition of proactive has changed from 'prevention' to 'doing something'. This has meant that almost any action can be claimed to be 'proactive', and the term is, therefore, almost meaningless. What is now needed is a new approach that enables objective evaluation of the available options to determine those that are genuinely preventive and those that are merely corrective or adaptive. This is the Activity Matrix in Figure 1.

Using the Activity Matrix has enabled us to review two different types of situations and to evaluate the options under each. From this we can see that not all options are equal. Some work on the cause, some on the effect. Some work on the past, some work on the future. A truly proactive and preventive option works on both the cause and the future.

As the old saying goes, an ounce of prevention is worth more than a pound of cure, and it is always better to prevent future causes of problems than to work on the effects once the problem has arisen. Next time you are faced with a decision regarding what action to take, try fitting your choice to the Activity Matrix and see which category the option fits into. This

will enable you to explore the causes, effects, and options to determine better and longer lasting solutions.

Foot note: Stephen Covey actually had a very different definition of proactive to the one that is recorded in the dictionary. Covey's definition of proactive related to an individual's freedom to choose how they respond to what happens to them, rather than relating to preparation for an expected occurrence or situation.

References:

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