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Sprinkler heads

Successfully managing multiple initiatives is like watering your lawn

by Shon Isenhour

Do you find many of the initiatives within your facility fail to deliver the results you or others had expected? Does it feel like you never have enough support or resources? Do you feel like you must constantly fight for people's time?

Many facilities today live in a world where there are multiple corporate and local initiatives being started on a simultaneous basis. They operate in a world of initiative overload and "flavor of the month" thinking where the newest buzzword is the focus of today. Most of these facilities do not have adequate new resources, nor are they currently able to free up existing resources to support all the new initiatives created each month.

This then leads to more time spent making the projects and initiatives look exciting and effective but achieving less than the adequate bottom line results. This is compounded by the lack of a unified plan. The result is redundant effort: work that is done for one initiative remains in a silo while the same or similar work is redone in another. The problem is that all this effort without results equals waste and therefore must be eliminated.

That waste elimination is the focus of the following pages. The process presented will be done in three steps that culminate with the creation of a site master plan.

Many sites have master plans or project plans for their initiatives and projects but not for the site as a whole. By not having a master plan for all their master plans, these sites do not get the results they expect due to restricted resources or substandard penetration into the culture of the facility.

Just for alignment, the initiatives or implementations you are facing could be any or all of the following as well as others:

- Behavioral Based Safety
- Total Quality Manufacturing (TQM)
- Inventory Reduction
- Operator Care/Autonomous Maintenance (AM)
- Total Productive Maintenance (TPM)
- Reliability Centered Maintenance (RCM)
- Lean
- Six Sigma
- New enterprise Asset Management (eAM)/
Computerized Maintenance Management

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- System (CMMS)
- New Integrated Accounting and Enterprise Resource Planning (ERP) Software System

These last two items require development of the process for use and training for the users, therefore consuming a lot of resources.

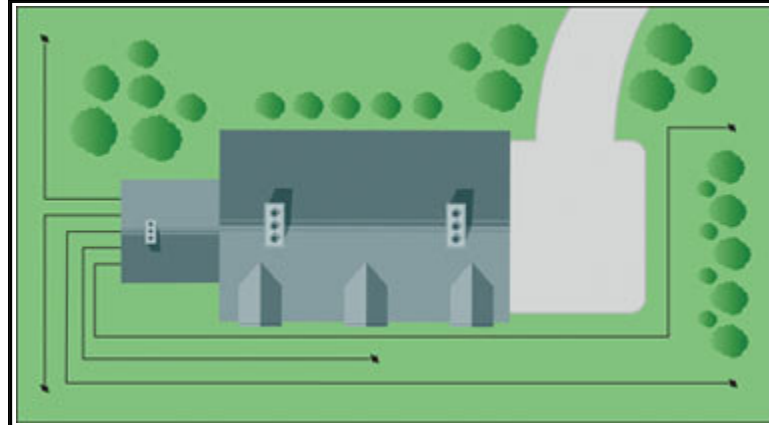


Figure 1: House with lawn irrigation system and a healthy lawn.

Allow me to set up an analogy. Think about the lawn watering system in your yard at home. (See figure 1 above) The key factors to the success of this system and your lawn are:

1. Sprinkler head placement which insures the water gets to the right areas based on a given pressure.
2. Time which insures at the given pressure and sprinkler placement that the grass gets the penetration of water which is vital for its roots and the future growth of grass.
3. Sprinkler line pressure. which distributes the much needed water to all areas around the sprinkler.

If you have a limited supply line, which most do, and you turn on all of the sprinklers in the whole yard at once, how effectively are you watering the lawn? The short answer is probably not very, due to low line pressure and lack of water distribution. In fact, in most cases we get a little puddle around each sprinkler while the rest of the yard dries up and blows away. When we try to do it all at once, our pressure is diluted and the results are ineffective. (See figure 2 below)



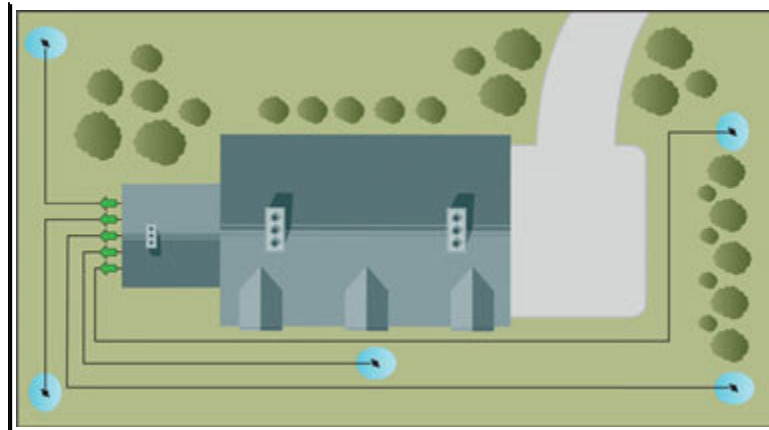


Figure 2: *Lawn is dying even though all the sprinklers are on.*

What if I don't leave them on long enough? Typically, the result is that the grass and its roots become weak and never grow to the depth that insures a long lasting healthy lawn in the future. Yes, it may take less time to water the yard, but again the results are ineffective.

Now let's think of it this way:

1. The sprinkler heads are the initiatives and projects that you and your leaders are turning on and off. (See figure 3 below)
2. The element of time still governs penetration but now it is penetration of the initiatives into your new changed culture as opposed to the earth below the lawn.
3. Water or line pressure represents your people or resources.

This leaves us with many new initiatives popping up every month and the same amount of time and people to effectively implement them. When this occurs, we notice the results are spotty at best.

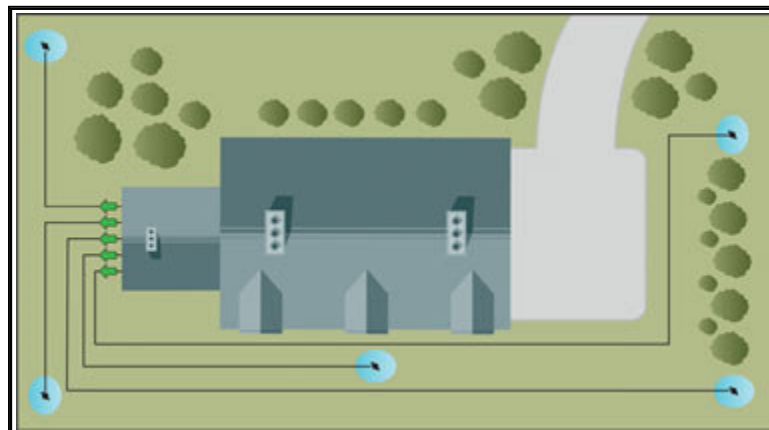


Figure 3: *Many initiatives and limited resources.*

Eliminating the underperforming sprinkler heads

So we have a list of initiatives that have surfaced. Now we need to understand the business case for each. In other words, which

sprinkler heads bring the most value to the yard as a whole and which ones just look good spraying water?

The facility leaders must sit down as a group with all the initiatives that have been suggested and analyze them based on resource requirements, initial cost, ongoing support cost, risk if postponed or canceled and return on investment (ROI).

It may help if the group sets a goal in available resource hours or the number of initiatives in advance of the analysis to limit themselves to a realistic final list.

Sometimes politics play a bigger role in these discussions than it should, so try to make this as much about the ROI and risk avoidance as possible.

In the end, to keep new random sprinkler heads from popping up, you may want to create a process for initiative approval, not unlike your capital approval process, because in most facilities, time is more valuable than capital.

Once the group has picked a core group of initiatives that have a solid return on investment, then they are ready to move to step two in our sprinkler head strategy.

How long does it take to water grass?

Next, the facilitator of each approved initiative should finalize the initiative project plan. This could be done in a software program like Microsoft Project or in something as simple as Microsoft Excel.

The plan should contain the refined resource hours needed to insure that each item can be fully completed and in some cases ingrained in the new way of doing business. These hours should be assigned to the subtask or logical groups of subtasks in the project plan if this was not done in preparation for the review.

To follow the sprinkler analogy, we need to know at least approximately how long each area or zone in our sprinkler system must be on to get the green healthy grass that we desire.

This breakdown of tasks in each of the project plans and required resources becomes crucial in step three when we begin to level and sequence all of these tasks into our site master plan. This is where we insure we have enough resources at the right time to get each step completed effectively.

Creating a watering schedule

We all know that the number of people in our organization is limited, just like the supply line for our sprinkler system. In fact, in today's environment it may not just be limited, it may be shrinking due to cutbacks or overseas outsourcing removing resources. This means we have to manage and use these resources more effectively and efficiently than ever.

Now that we have eliminated the initiatives that did not meet our hurdle rate, and defined the needs of the remaining initiatives, we

can create a plan and a schedule, not just for the completion of the initiative, but for the completion of all of the initiatives.

In many of the sites I see today, they have great plans for each initiative but they never make a link between initiatives. This allows each initiative to exist in its own silo, which leads to competing initiatives where the facilitator of one initiative is fighting with another over people's time.

This is exactly what happens when we try to run all the sprinkler heads at once. (See figure 2 above) All of the heads need the water but they are all starved and we don't get any of the results. In many of these locations, people are just checking the boxes without completing the task to the best of their ability and embracing the changes into the way they do business. This is all they have time for in the current system.

So to eliminate in-fighting over resources and check-the-box behavior, we must make all the facilitators and sponsors sit down together and create the site master plan.

In the context of our analogy, this is the "watering schedule." For example, we may begin by turning on Zone One for one hour. Which zone will go next and for how long to insure that the whole yard gets what it needs? (See figure 4)

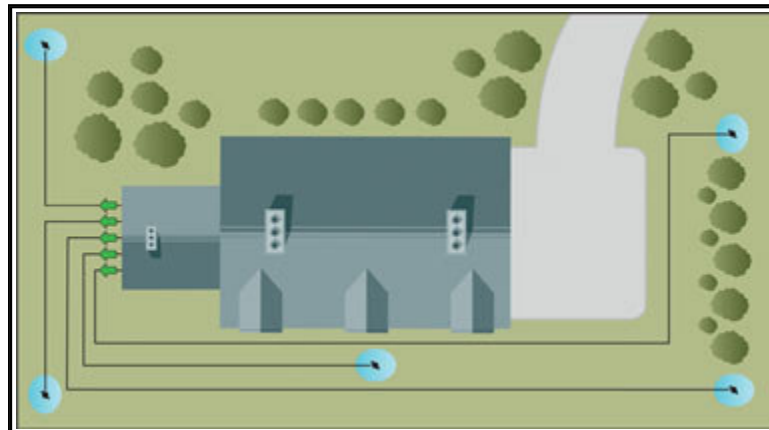


Figure 4: With a watering schedule, each sprinkler and area gets the water required for success.

Each facilitator should bring the plan for their approved initiative with resource hours and an open mind. The point of this session is to understand the number of resources that the facility has available and how they will be used to allow the facility to be successful with each and every approved initiative.

The group needs to look for overlapping tasks that can be simultaneously completed in less time or more effectively. It should also consider where outsourcing tasks might make sense.

The output of this session should be a plant master plan and schedule that shows all of the initiatives working together to improve the facility as a whole.

The final schedule may work on parts of one initiative, and then another. Sometimes it may work on two steps from various initiatives in parallel or, in some cases, it may completely implement an initiative before moving on to the next step. This is based on the resources available at that particular time. Don't forget those times of the year when resources drop even lower due to holidays and vacations.

The point is to have a final plan and schedule that everybody can agree on which allows completion of tasks with current resource levels and success in all of the planned activities.

A healthy lawn

Whether the plan is to have a healthy lawn or a healthy facility, we have to insure that within the resources we have, every part gets the portion that it needs to insure holistic success.

This process takes more up-front time and planning and will feel awkward and overbearing at first, but it allows for success and the desired results in the end. Many have tried to do everything all at once, but few have succeeded at more than just staying very busy. We know that we have to perform the right steps at the right time for the right reasons to get the right results — and our site master plan insures that we stay on track. We also know we have to give each project or initiative the time it needs to become part of the way we do business and become ingrained enough in the culture to deliver sustainable results.

It is possible that in the past we implemented many initiatives just so we could tell the corporate folks that it was in progress, regardless of the results we were getting. But now, with a prioritized, load-leveled site master plan we can show headquarters our plan, our progress and our results.

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