



# Guide to Avoid Running Facilities to Failure

Far too often, facilities professionals say they only have the resources to fix things when they break. Limited resources are a reality for many of us, and trying to figure out how to take care of maintenance while sticking to budget limitations are a daily challenge. When you respond to failures or breakages, however, you can quickly find that you're stuck in a reactive cycle that prevents planning for the future, which actually costs the organization more in the long run. This state rarely happens overnight; it's almost always the result of a practice referred to as "run to fail" or the "Normalization of Deviance."

With over a decade of working hand in hand with our clients' operations within multiple industries, **we have created strategies that will help you not only improve your day-to-day workflow, which prevents the Normalization of Deviance, but also helps you plan for the future.** These guidelines truly allow you to do more with less by making valuable alterations to your planning processes, including how to assess your facility's condition, prioritize the tasks that will create the most return on investment, and minimize last minute and reactive maintenance.

## What is the "Normalization of Deviance"?

The Normalization of Deviances stems from a few common causes, and it's almost never done to purposefully create harm. Dr. Diane Vaughan first wrote about the Normalization of Deviance when researching the Challenger explosion.<sup>1</sup> Dr. Vaughan referred to it as the "gradual process through which unacceptable practice or standards become acceptable. As the deviant behavior is repeated without catastrophic results, it becomes the social norm for the organization."<sup>1</sup>

Dr. Vaughan found that NASA had its own Normalization of Deviance, as the scientists chose to use the shuttle's O-rings despite negative warnings because there were no negative consequences (up until the tragedy).<sup>1</sup> This is an extreme example, but it shows how a seemingly simple decision can lead to greater problems because at first there are no negative outcomes.

**"Social normalization of deviance means that people within the organization become so much accustomed to a deviation that they don't consider it as deviant, despite the fact that they far exceed their own rules for the elementary safety." –Dr. Diane Vaughan<sup>2</sup>**

If, say, your organization needs to cut down on facilities costs, you may decide to avoid installing new gutters on your roof to save money. Although the roof is fine for a while, the gutters aren't able to drain water efficiently as they wear down. As a result of one small decision, greater financial consequences will eventually occur. In this example, the clogged gutters could eventually lead to roof or foundational damage as a result of all the pooling water. Our goal as maintenance professionals is to do our best to keep our facilities in the best shape possible. Budget concerns are a reality for almost all of us, but you can prevent the Normalization of Deviance with diligence in two key areas: Preventive maintenance (PM) and capital planning.

## Prevention is Key

When your resources are already limited, budgeting can feel like a major challenge. Working hand in hand, **PM and capital planning help you understand where your assets are in their life cycle, when they will likely fail, and how much you should be putting into a reserve fund each year for their eventual replacement.** By planning for the replacements ahead of time, you can get a better handle on how to allocate your funds to projects that are the most valuable to you. You'll then be able to create the best return on investment (ROI) for your efforts while ensuring that you have time to tackle bigger projects that will create additional benefits.

One way to ensure that you're staying on track towards your facility's long-term goals, like new construction projects or retrofitting for energy conservation, is to limit the amount of outside distractions – AKA, last minute tasks that become a drain on budgets and time. **PM not only keeps your facilities in good working order but also helps you extend the life of your equipment and assets, which will save you money down the road.** Over time, it will also reduce the amount of work orders you receive on equipment or assets that break unexpectedly.

## Do You Need a CMMS?

A computerized maintenance management system (CMMS) is key for both capital planning and PM. Having a CMMS in place to keep track of your operations will help you stay on track toward your goals and further prevent the Normalization of Deviance. The right solution will help you:

- › Schedule your preventive maintenance
- › Set reminders for upcoming maintenance
- › Hold yourself or your contractors accountable

In addition to work order management, the data collected from a CMMS can help you identify areas for improvement based on historical data. You'll be able to develop a contextual point of view on your tasks, such as the months when HVAC may typically break down, and understand how much money has been spent on maintenance so you can begin to plan for your financial future. For example: You may see that continued repairs on a piece of equipment costs more over time than buying a new one, so you can justify purchasing a replacement.

One of the benefits of a CMMS with strong capital forecasting capabilities is that you can plan projects out for the next fiscal year, decade and even further out, ensuring that you're well prepared for the future. Truly preventing the Normalization of Deviance is an ongoing process, however. PM and capital planning are great ways to maximize your resources (particularly manpower), but to really get the most ROI, you need to continuously improve. At Dude Solutions, we refer to this cycle as "APPEM."

## The APPEM Cycle

When you do more with the resources you have, you're prioritizing the things that matter most. It may sound like a large task to take on, but it's doable (and effective) with just five steps:

### 1. ASSESS

Assess what you currently have, this can include everything from light fixtures to how many employees you have on staff and the remaining useful life of your equipment. Some important information you want to make sure you have includes:

- › An up-to-date facility condition assessment (FCA)
- › All of your equipment and assets in your facility, which includes everything from doors to room numbers, and its remaining useful life

- › Your current resources, i.e. the manpower you have
- › The method(s) you currently use for work order management
- › Your team's workload, including daily tasks and time to completion

Having this data will help you get a feel for where you currently are, and then you can begin to see opportunities for improvement. For example: Are there certain assets that have repeated requests for maintenance? Is some equipment near to the end of its useful life? Do you have a backlog of work orders without visibility into who is assigned the task and what the status is?

When you're in your Assessment stage, you want to make sure that the insights you gain lead to actionable goals. Some guiding questions include:

- › What items are urgent, i.e. things that are broken or must be replaced?
- › What are the things that are most important to your long-term goals, such as more proactive maintenance or reducing breakdowns?
- › Do you have big upcoming projects that will take a lot of time and manpower?

## 2. PRIORITIZE

In the first step, you identified the urgent and important items, so these are the tasks that will have the highest priority. You may decide that the highest priority is to take on a big project for your facilities, or it may be to get a handle on your reactive maintenance. From the Assessment stage, you can also see major problems that need to be addressed quickly, such as equipment that is about to fail. To ensure that your priorities are in line with the objectives that make the most impact, ask yourself:

- › Do the tasks I have prioritized support the objectives every day?
- › Is each task or project defined with a clear, actionable goal?
- › Do my daily plans support my long-term plan?

**Whatever priorities you create out of this step, the key is to choose what's most important to you, whether it's seemingly small changes or something much bigger, you can scale the cycle up or down.**

This stage should provide you with clear, actionable goals that you can make plans for, which is why Prioritization and Planning go hand in hand.

## 3. PLAN

Once you have your priorities set, it's time to make a plan. This could mean upgrading your CMMS (or adopting one if you haven't yet) or proactively fixing assets before they break. Through proper Assessment (Step 1) and Prioritizing (Step 2), you've been able to identify the tasks that take up your day and order them by level of importance. At the same time, you should create a plan for PM. **PM will work as a defensive system that will prevent last minute tasks from popping up and stop reactive maintenance from taking over your workday.**

Another major part of this stage has to do with budgets and financial planning. Taking a look at information from Steps 1 and 2, you can plan to take on certain projects that will create the most ROI and schedule the other tasks for a later date, including your regular PM schedule.

### THREE FOCUS QUESTIONS

1. Do the tasks I have prioritized support the objectives every day?
2. Is each task or project defined with a clear, actionable goal?
3. Do my daily plans support my long-

term, “grand” plan for my department?

#### 4. EXECUTE

At this stage, you’ve prioritized and your plans are set. All that’s left to do is execute. During this step in the process, you may experience growing pains. As with any change management process, it’s important to support your team and address any concerns that may arise. Make sure that you emphasize that these changes will make the best impact in the long run. Collecting data is also crucial. By tracking your progress, you can see how effective your plans are at reducing reactive work, last minute requests and other items that take your focus away from your priorities.

#### 5. MAINTAIN

In order to maintain the process as you intended, you need to make sure that you’re still balancing reactive and proactive work. This includes using the data that you’ve accumulated to make better decisions for the future that will allow you to maintain your level of service while continuing to minimize tasks that aren’t beneficial to objectives. Whatever data you choose to utilize, metrics you collect from your day-to-day work will empower you to make stronger decisions to management based on your insights. If, for example, you find that you really do need to hire another team member or invest in an expensive new piece of equipment, you’ll be able to back it up with objective data. As you maintain, you’ll begin the cycle again, continuously improving upon your success and raising the bar.

## Doing More with What You Have

Keep in mind that when you partner with the right CMMS company, you will have a client advisor just a phone call away to provide their expertise when needed, so taking time to choose the right solution with the right people is just as important as making sure the software has the features you need. Dude Solutions has a team that is dedicated to ensuring that their clients get the most out of their solution and also help them identify areas for improvement based on their unique needs. With a suite of solutions that includes work order management, utility bill tracking, capital forecasting and business analytics, clients from multiple industries have reaped the benefits that a CMMS can bring.

Budget constraints and limited resources are a tough reality for many of us. But with the right tools, you can create a cycle for success. That’s why Assessing, Prioritizing, Planning, Executing and Maintaining (our APPEM model of success) is a scalable set of guidelines that helps you stick to the projects that will create the most ROI, and if something fails, you can pinpoint where in the process it broke. More importantly, these steps provide you with standards for the data you collect so that you can create reports that prove the worth of your department, highlight cost savings opportunities and minimize reactive maintenance, setting your facilities up for success regardless of your budget.

## ABOUT DUDE SOLUTIONS

Dude Solutions is a leading software-as-a-service (SaaS) provider of operations management solutions to education, government, healthcare, senior living, manufacturing and membership-based organizations. For nearly two decades, Dude Solutions has inspired clients to create better work and better lives. We combine innovative, user-friendly technology with the world's smartest operations engine, empowering operations leaders to transform the most important places in our lives. Today, more than 10,000 organizations use our award-winning software to manage maintenance, assets, energy, safety, IT, events and more. For more information, visit [dudesolutions.com](http://dudesolutions.com).

## SOURCES

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