



How to Switch from Reactive Maintenance to Preventive Maintenance

Complete Transition Guide



Making the switch from **reactive maintenance to preventive maintenance** can save thousands to millions of dollars, extend the life of your critical assets, and relieve your team of the stress and anxiety of dealing with frequent unpredictable equipment failures.

Despite widely proven benefits of switching to preventive maintenance, [around 60% of facilities](#) are still relying on reactive maintenance as a major part of their overall maintenance strategy.

Even though we can't say for sure what the reason for that is, we would put our money on **fear that the implementation will fail** or that **the switch will simply cost too much**.

Both reasons are often unfounded. Why?

For one, with the right maintenance software and a step-by-step approach, the chances of a successful transition to a preventive maintenance program are rather high.

Secondly, this transition doesn't have to be a huge capital investment. Software such as Limble can be started for as little as a few dollars a month or you can utilize free tools such as Google Sheets and Google Calendar. Be warned that in a relatively short amount of time the free tools will actually cost you more money as they are not nearly as efficient or powerful as a modern CMMS.

To show you that the switch from reactive to preventive maintenance doesn't have to be hard, complicated, or expensive, we devised this comprehensive step-by-step guide that will guide you through the whole process.

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Benefits of Preventive Maintenance

Why is preventive maintenance better than reactive maintenance? Well, that is an easy question.

Reactive maintenance is a strategy based on performing maintenance operations only after a breakdown occurs (which is why it is often called **breakdown maintenance** or **run-to-failure maintenance**). In practice, that approach translates to costly unexpected shutdowns, breakdowns that decrease the lifespan of your assets, and many other drawbacks that significantly increase your overall maintenance costs.

Preventive maintenance (also called **preventative maintenance**) is the direct opposite. It relies on routine maintenance tasks to keep equipment up and running. Significantly reducing reactive maintenance with preventive maintenance (and the help of a CMMS) provides more control over maintenance operations and helps prevent equipment breakdown and unplanned shutdowns.

Let's review a few key benefits of preventive maintenance:

1.1. Eliminate lost profits and productivity

Poorly maintained equipment will not run at its peak performance. This causes increased energy consumption, lower output, extra waste, and additional work by key personnel when things go wrong, resulting in loss of productivity and profits.

A preventive maintenance strategy backed up by a CMMS enhances productivity by providing key personnel with quick access to information needed to complete preventive maintenance (such as **step-by-step procedures, lists of the required spare parts and tools, historical repair data** and other pertinent information). This allows maintenance tasks to be performed more accurately and in less time, causing the equipment to have a higher chance of running at peak performance.

1.2. Reduce the number of emergency repairs and overtime labor costs

A critical system failure is a stressful event for everyone involved, from the maintenance manager and different staff members, to

the overall operation of the business.

Additionally, emergency and overtime labor rates are cost prohibitive. Not only do you lose productivity, it has a direct negative impact on your company's profits.

If you take proper care of your equipment through preventive maintenance, then your assets will not break down nearly as much, causing a significant reduction in emergency repairs. Having fewer emergencies automatically minimizes overtime labor costs as technicians aren't forced to stay late to fix a breakdown of a critical piece of equipment.

1.3. Improve maintenance operations and extend the life of critical equipment

Under a preventive maintenance plan, an asset can meet or exceed its life expectancy. Periodic tune-ups, oil changes and filter changes, part replacements, and other upkeep activities will keep equipment running at an optimal capacity which, in turn, will maintain the equipment's value.

Overlooking small repairs and needed tweaks will eventually cause extended equipment damage and failure, sometimes beyond repair.

Those are just some of the most important benefits you can expect when you switch to a proactive maintenance approach.

Now, let's see what steps you need to take (and in which order) to successfully plan and implement a **preventive maintenance strategy**.

Planning the transition from reactive to preventive maintenance

Transitioning from a reactive to a preventive maintenance strategy is a collaborative effort involving the whole maintenance team with some support from upper management.

The core team members on this project are both the **maintenance manager** and **maintenance technicians**.

The maintenance manager has a complete picture of your maintenance operations, while technicians have unique insights that can only be obtained by actually turning the wrench.

Ensure their participation from beginning to end as both roles have invaluable insights allowing them to catch potential technical problems with the implementation early on.

2.1. Get everyone on board

Incorporating new maintenance strategy will often affect more than just your maintenance team.

For example, employees from other departments will use new procedures to report potential problems and malfunctions and they must get used to planned shutdowns for regular inspections and maintenance work. Upper management will get new (more detailed and accurate) cost reports, and so on.

To ensure smooth implementation, everyone should be aware of the upcoming changes.

If we are talking about a huge facility and large maintenance teams, there is one preceding step you need to take before we can talk about any plans or implementations. That is, of course, getting the support of upper management as the transition could require considerable capital investment.

The best way to earn that support is to show the potential return on investment. Just for illustration, your argument could go in this direction:

We estimate that we will have to spend \$2000 and 100 hours on this project. The estimation also shows that, by the end of the year, we can save 400 hours' worth of time and decrease downtime by 20%, resulting in X dollars gained.

2.2. Choose and customize your CMMS

An important step to developing an effective maintenance

program is **having the ability to track, manage and organize a lot of data from different sources.**

While it's not impossible to do this manually, it is often a system riddled with human error that is ineffective at providing true and accurate data. If you want to accurately and efficiently manage your maintenance operations, you'll need a [modern maintenance software that is designed to support your preventive maintenance efforts.](#)

Finding the right software that fits your company and can be customized to fit the specific needs of your facility and that your workflow will **ease the transition into preventive maintenance.**

With the ability to **track work orders, schedule PMs and track parts**, a CMMS is designed to ensure the efficiency of your preventive maintenance operations. Additionally, a good CMMS will assist in **maintaining historical data of asset performance** which becomes a powerful diagnostic tool when servicing equipment. It also helps you to coordinate your preventive maintenance operations in a more **cost-effective manner.**

We could go on and on about different [features and advantages that a computerized maintenance management system brings to the table](#) so if you are still not convinced, be sure to check out that post.

2.3. Define measurable goals

Before investing your time and dollars, the transition team should first determine the major goals that this change aims to accomplish.

What is the current state of the reactive maintenance strategy that needs redefining? What are the goals for the preventive maintenance program?

The goals can look something like this:

1. Reduce repair costs due to reactive maintenance practices by 15%
2. Reduce number of breakdowns by 20% by the end of the year
3. Increase company profits and productivity by reducing unplanned equipment downtime by 40%
4. Increase current response times by 10%

You can even break those goals into several milestones to track your progress and see if you are moving in the right direction.

Planning the transition from reactive to preventive maintenance

If you don't have historical data showing your costs, number of breakdowns, downtime, or response times, don't worry. Get started with your CMMS and you'll start to quickly get those numbers before your PMs begin to take effect.

Implementing a preventive maintenance strategy

Now that the team is in place, the right software is selected, and the implementation goals are defined, it's time to bring the plan a step closer to realization.

Implementation usually happens in phases to provide time for actual performance of duties and assessments at each step.

3.1. Decide which assets to maintain

The first step towards an effective preventive maintenance plan is to identify which assets need to be on the preventive maintenance list as **not all assets have to have a preventive maintenance plan**.

Some assets are critical to the daily function of the business. Others only cause minor productivity delays.

The best candidates are:

- equipment that is expensive to repair or replace
- assets that serve a critical function
- older equipment you don't plan to replace in the near future (as you need to regularly maintain it to prolong its lifespan)

Equipment for frequent maintenance needs should be first in line with a preventive maintenance plan.

You can start by creating an inventory of a couple assets that will be placed on the preventive maintenance plan (the rest can be added later).

To complete this step, you need to record, at a minimum, the following information into your maintenance software. Keep in mind that the complete list of necessary information may



Asset information you need to enter into your CMMS to create a **preventive maintenance plan** for that asset*:

-  Make and model of the equipment
-  Serial numbers



Type of equipment
(HVAC, production, etc.)



Asset location



List of replacement parts
(with part numbers)



Parts cost

** The complete list might slightly vary depending on
your business needs and workflow.*



vary from business to business, depending on your needs and workflow.

This data will help you track and manage costs for parts replacement and provide valuable insight on all equipment maintenance needs. It is also a great idea to **assign priority levels** to the equipment from highest priority (assets that must operate at all times) to non-essential (assets that would not make a huge impact on operations if they were to go down) for the purpose of tracking and responding to equipment failures.

3.2. Create a list of maintenance tasks

The second step is creating a list of maintenance tasks your team will perform at regular intervals.

Using the manufacturer's manual and the insight you get from your technicians, you can create a list of tasks for every piece of equipment that will be on the PM plan and write down their specific maintenance needs.

Creating a list that outlines all the areas that should be inspected helps maintenance personnel confirm that the necessary components were looked at, and whether or not they passed or

failed. They can record their findings and leave notes through your chosen maintenance software.

Maintenance tasks can be broken down depending on their frequency.



Maintenance tasks broken down by their frequency		
INSPECTION TYPE	DESCRIPTION	TASK EXAMPLES
DAILY INSPECTIONS WEEKLY INSPECTIONS	Usually quick and dirty. Consist of looking for abnormal sights, sounds, and smells and making simple adjustments where necessary.	READING TEMPERATURES CHECKING PRESSURE GAUGES CHECKING FLUID LEVELS
MONTHLY INSPECTIONS	Can contain everything mentioned above, in addition to other maintenance measures (listed on the right) that keep the machines running at an optimal level.	CHANGING FILTERS REPLACING BELTS ADDING LUBRICANT TIGHTENING OR REPLACING VALVES
QUARTERLY INSPECTIONS	Usually more involved and take longer to complete than regular inspections.	INSPECTING LARGER PARTS REPLACING FLUIDS CLEANING HARD-TO-REACH PLACES TESTING & MEASURING FUNCTIONS
SEMI-ANNUAL INSPECTIONS ANNUAL INSPECTIONS	Often require considerable resources to conduct as they consist of time-consuming maintenance activities. Sometimes require planned shutdowns to complete.	CHECKING FUNCTION OF CRITICAL ASSET COMPONENTS REPLACING MAJOR PARTS DRAINING PIPES CLEANING UP CORROSION



3.3. Create a preventive schedule

Now that you know which assets need which maintenance tasks, the next step is creating the schedules.

You can start with one or two pieces of equipment (possibly the ones that have the highest repair cost) to test the CMMS and ensure that all the data entered into the system is correct and that the data is being utilized by the system properly. This is your opportunity to work out kinks and make any corrections to data or system functions.

As we already mentioned, you can use the manufacturer's guidelines and the insight from your technicians to create customized maintenance schedules, tailored to the needs of

every piece of equipment.

To speed up the creation of your PM schedules for all the assets on your preventive maintenance list, Limble allows you to copy schedules between assets and do batch PM updates.

Another reason why CMMS is an integral piece of your preventive maintenance strategy is that it can **schedule and generate work orders** for future maintenance tasks, as well as **send notifications for open work** that needs attention. You only need to assign work orders to specific team members and track the progress of open work orders. Fast, intuitive, and efficient.

Here is how you can do it in Limble: <https://www.youtube.com/watch?v=yyTa23x3AgM&t=1s>

If you need more detailed information, check out this post on [how to start a preventive maintenance plan](#).

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Starting with preventive maintenance work

Congrats! You now have everything ready and your technicians can start doing preventive maintenance work according to your defined schedules.

4.1. Start with a manageable workload

While you might want to pull the trigger and roll out all schedules at once, we advise that you put the safety back on and reconsider your actions.

Giving someone 50 daily tasks right off the bat while he is still learning how to use the CMMS is the biggest mistake you can make in this phase. Instead, start with a manageable workload. This will give technicians and anyone else interfacing with the new software time to adjust and learn the system in real time.

Make sure technicians have clear guidelines and information on each asset's needs and maintenance schedules. If that is taken care of, all that is left is for you to keep a close watch to ensure the CMMS performs the way it should. Track that the PMs are being completed and that the technicians are recording their findings and closing out the work with accurate cost metrics such as part usage and time spent.

4.2. Turn on the rest of the schedules

Once there is solid evidence that the CMMS is functioning properly, equipment is being maintained on schedule, and there are no major hiccups, you can gradually turn on the rest of the schedules for your other assets.

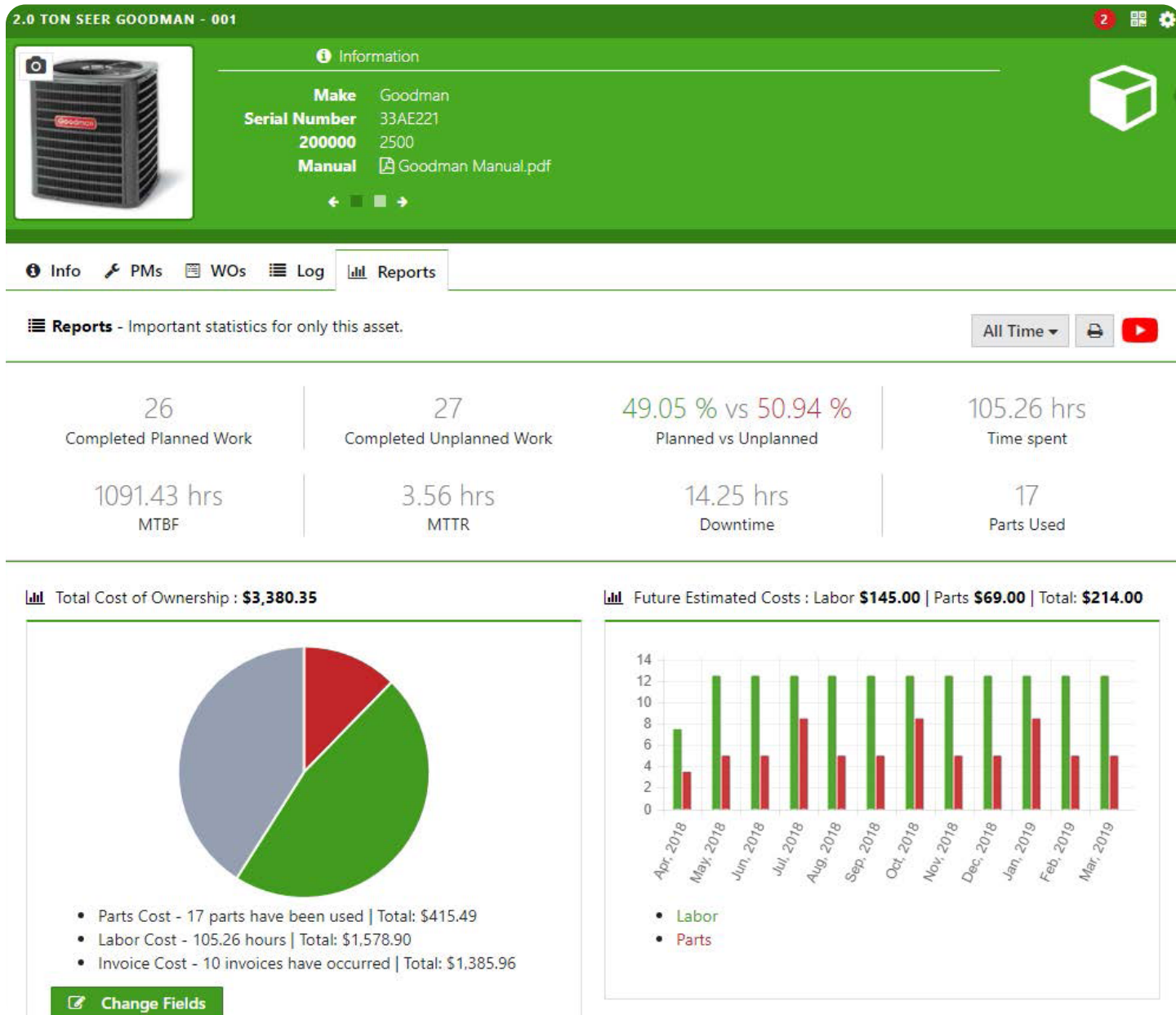
Maintenance personnel should feel comfortable operating in the CMMS environment and understand the key functions before adding more assets.

Get feedback and address any concerns immediately to keep operations running smoothly.

4.3. Continuously improve your preventive maintenance plan

The preventive maintenance plan may require some tweaks, changes, and updates as you and your company grow into the system. The CMMS will record historical data like frequencies of

breakdowns, parts usage, types of malfunctions, etc. That means you will be able to generate and view a range of useful reports that will assist you in making data-driven decisions.



While emergency breakdowns and repairs will still happen from time to time, with the amount of control you will have gained over your planned maintenance system, you'll soon begin to enjoy a reduction in emergency repairs, visibility into your operational spending, and improved life expectancy for your equipment.

Common reasons why transition to preventive maintenance fails

We have already mentioned many common pitfalls throughout the article, but here are some additional challenges you will want to avoid if you want to have a successful transition from reactive maintenance to preventive maintenance.

5.1. Incomplete or incorrect preventive maintenance groundwork

When structuring your maintenance program, you have to understand your goals for the program and set the right parameters to evaluate your system's performance. Then procedures should be accurately documented and uploaded into the CMMS.

Additionally, a CMMS is only as good as the input information you provide it with. To maximize the effectiveness of your preventive maintenance schedules, you need to ensure that the schedules are based off either manufacturer recommendations or the real-world expertise of your maintenance team.

5.2. Delayed implementation

Implementing a preventive maintenance plan is a time-consuming project with a lot of moving parts, targets, and people. If it is not a company priority to allocate the resources to see the program through, it can fail due to a lackluster effort in the development and implementation stage.

5.3. No management buy-in

If the ROI is not believed to be significant enough or is not realized by key stakeholders, participation and/or funding for the project may face serious limitations that will hinder the success of the program.

5.4. Premature and incorrect rollout

Rolling out the CMMS in small phases is critical. Beta testing and constant tweaking and feedback will ensure that all systems are operating as they should. Rolling out a CMMS/PM plan too fast can overwhelm and burn out maintenance workers. Proper training should be provided to frequent CMMS users to ensure ease of operation.

On top of that, you need to **ensure an open line of communication** so that no one is afraid to speak up and ask for additional help with the new software and procedures.

5.5. Not correcting bad habits early on

It is important to track how well your maintenance team is following new procedures according to presented strategy. It is not unheard of for technicians to think some steps are unnecessary or that they don't have to log certain activities into the maintenance software.

Catching these kinds of things early on is really important to ensure you have a coordinated team and real data insight. Not to mention bad habits are much easier to correct if caught early.

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Setting up best practices

Having your basic preventive maintenance plan up and running is great, but to ensure the long-term success of this transition and enjoy all the benefits that come with it, we recommend documenting your company's procedures that will be regularly used by your maintenance staff.

This is yet another instance in which CMMS proves to be a real asset; by becoming a **central hub where all asset documentation and procedures are stored**.

And the more it is in use, the more up to date and accurate the data will be. This can later be used for future staff training and as a way to monitor your program's success. Any deficiencies or missteps will be easily identified and it will make evaluating and updating procedures easier as new information and situations arise.

Let's review the most common procedures and best practices.

6.1. Creating, responding to, and closing out work

Effectively managing tasks is an integral part of any maintenance strategy. For tasks to be dispositioned, assigned, and prioritized in an effective manner, your whole maintenance team needs to be on the same page.

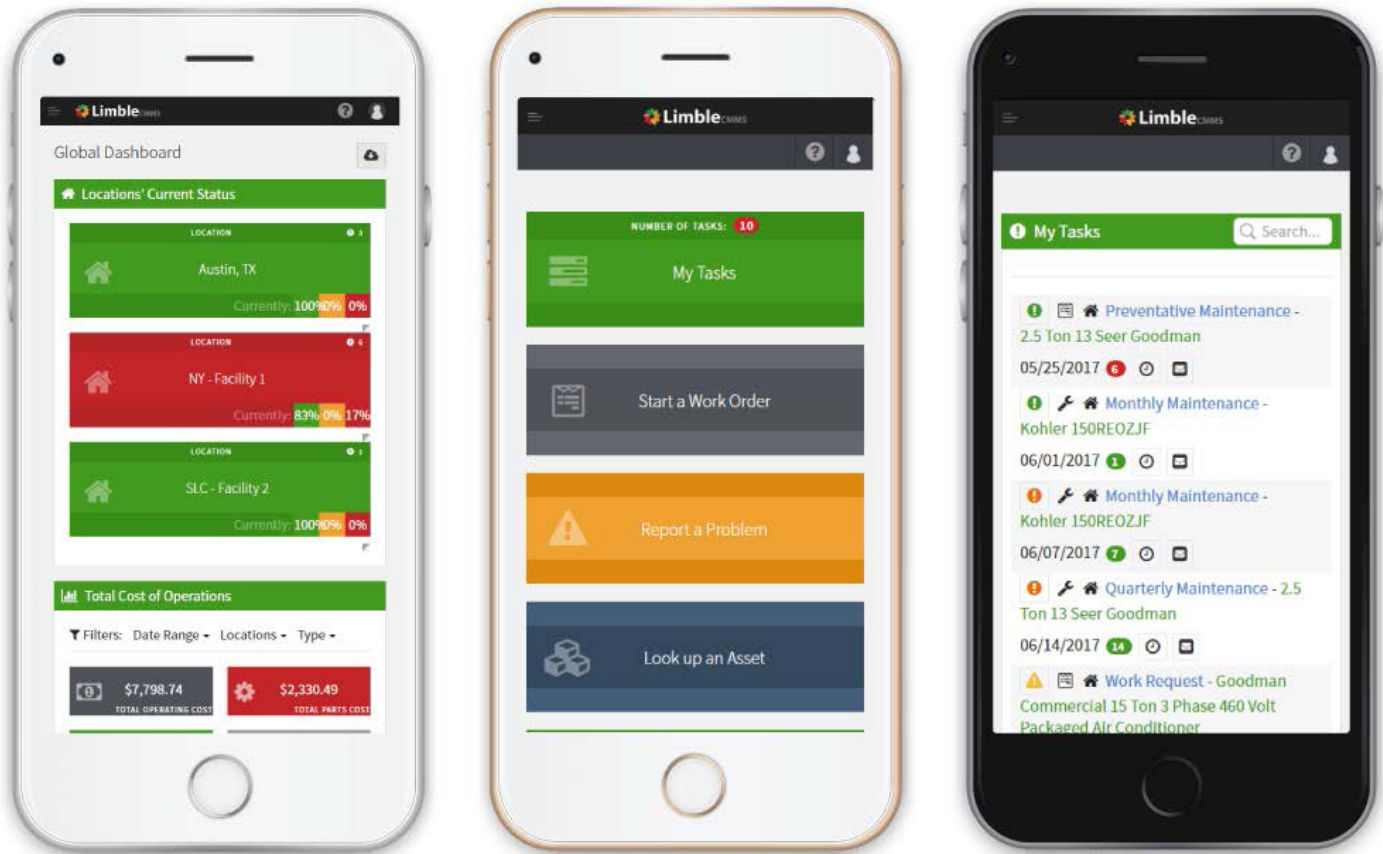
That is what you have to define:

- Who is responsible for creating new unscheduled tasks?
- Who on your maintenance team is responsible for what type of work?
- Who will be reviewing open and closed work to make sure things are getting done?
- Whose responsible for reassigning work as technicians become available?
- What are the criteria for escalation and emergency identifiers?

This is an area where **having CMMS available on mobile devices is a huge plus**.

Limble, for example, will send every technician a notification when they are assigned to a particular work order. If you can equip your team with an appropriate number of handheld devices, through a mobile CMMS, they will also be able to seamlessly communicate and cooperate on bigger maintenance

tasks, as well as update the progress of particular work orders at any time.



6.2. Reporting problems and work requests

Having a systematic way to report issues or abnormal performance will ensure that anyone performing inspections will be monitoring the proper areas that can cause potential issues. More importantly, it will help to track budding defects in the system's operation so small anomalies can be caught and quickly resolved.

Problems are usually reported in one of two different manners. Either by your maintenance staff that can report a problem through your CMMS's mobile app, or by non-maintenance staff who report a problem through a [Work Request portal](#).

Showing non-maintenance staff how to submit a work request is a large time saver but only works if it is implemented and documented.

6.3. Recording critical information

Each time an inspection takes place, anyone performing the inspection should record critical data like date, time, temperature and pressure levels or any other critical information that determines the state of the asset in question.

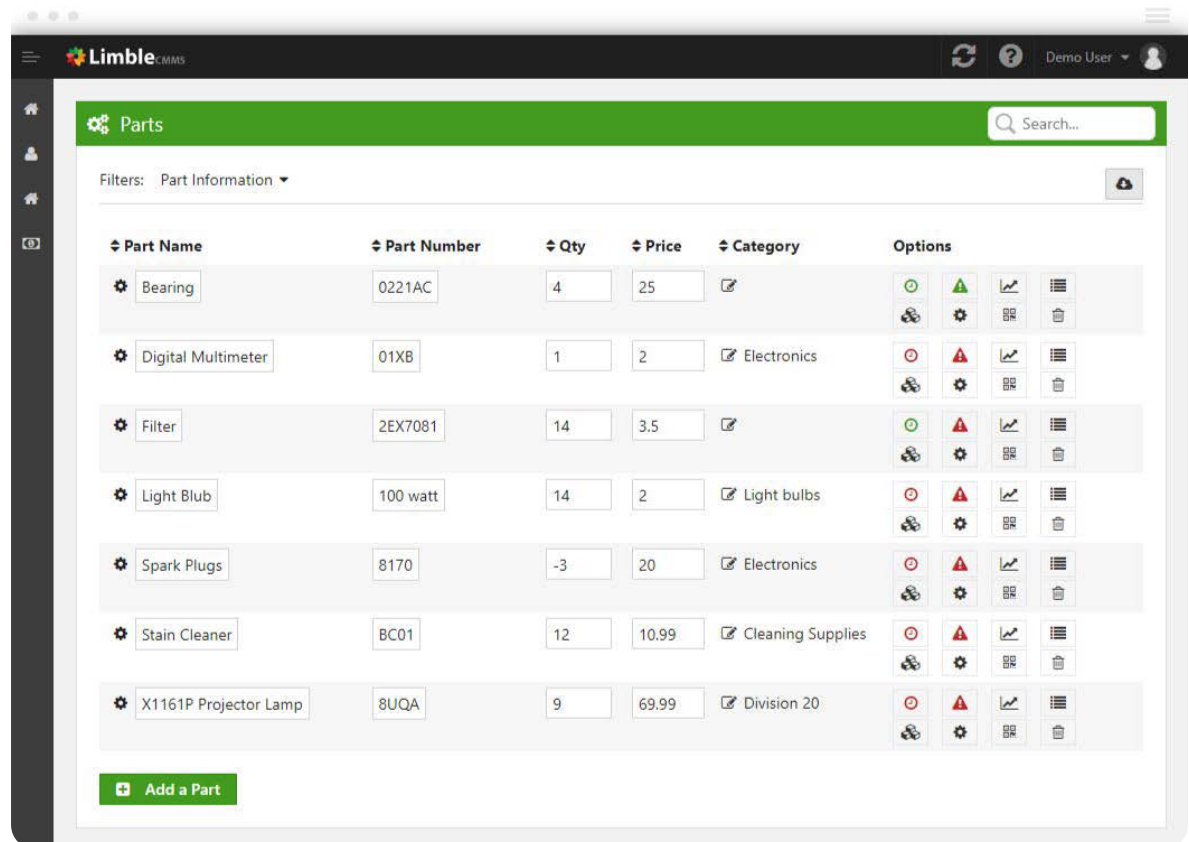
Depending on the type of asset, this information could prove extremely beneficial in the future.

6.4. Identifying how your inventory will be kept up to date

An up to date inventory is incredibly important as it will make sure when something breaks, you have the needed materials to fix it.

You can either perform manual audits of your inventory or have your CMMS automatically keep track for you as parts are used.

When work is closed out in a CMMS, attached used parts will automatically be subtracted from your inventory records. This can ease the burden of having to manually check parts and update spreadsheets.



Another feature you might find useful is the option to have set thresholds for your parts and instruct CMMS to send you an alert whenever the number of spare parts in stock falls below that threshold.

6.5. Managing your vendors

Having everything running smoothly means that you can quickly get in touch with all of your outside contractors.

According to the recent *Plant Engineering's Maintenance Survey*, 74% of facilities outsource at least one part of their maintenance operations. The main reasons being lack of time and manpower and too many specialized skills required.

An approved or qualified vendors list should be readily available complete with each asset specific identifier (equipment ID, serial/ make/model number etc.), account numbers, contractors email address and all phone numbers.

Other helpful information includes hours of operation, separate after hour service call procedures, Account Representative's name or the name of specific service personnel with direct contact information, and any notes that are needed to place a service call with minimal hassle.

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Team training

Ensuring that everyone is comfortable with the new workflow and knows what to do is key to having unobstructed information flow and an effective preventive maintenance strategy.

Here is some advice on how to introduce the new workflow and software to your team.

7.1. Introducing new software and procedures

If you have a bigger maintenance team, the chances are that only a few of them were actively involved in the whole implementation process. Spend some additional time to ensure they know how to use it properly and then use them to train the rest of your maintenance staff.

During the training sessions, the written materials along with truncated step-by-step guides (cheat sheet) and a hands-on demo of your selected CMMS will best communicate the changes to your maintenance approach.

Training sessions may be broken into seven segments to provide a comprehensive illustration of the PM program.

1. Presentation of the new maintenance strategy
2. Instruction of newly adopted procedures
3. Demonstration of new technology
4. Defining roles and responsibilities within the new strategy
5. Hands-on CMMS training
6. Assignment of mobile devices for CMMS users (if applicable)
7. Q&A

7.2. Ask for vendor support (if you are using a CMMS)

This is something you should never actually need to ask for since it should be in the vendor's own interest to make the implementation as smooth as possible.

In any case, your dedicated CMMS vendor should have a lot of expertise and experience, so their involvement in this process is crucial.

Besides their advice, [video tutorials](#) and training documents are the two things that will make the transition faster and easier.

7.3. Beta test your preventive maintenance plan

Allocate a week or two (depending on the activity level of your maintenance environment) to allow the implementation team to follow the procedures in real-time. Providing this training ground will identify areas for clarification, reveal any gaps in instruction and provide the opportunity to work out kinks in the program.

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Last words

Implementing a preventive maintenance program will not only save your operational budget from leaking profits, it will ease the burden of reacting to unexpected equipment failure and having that feeling of general unpreparedness.

With a comprehensive preventive maintenance plan in place, you'll enjoy the confidence of knowing the intricate parts of your core operating equipment and all of its repair needs upfront.

In addition, with CMMS automation, your company will run a more efficient and productive operation for staff, and enjoy predictable planned maintenance, control spending, and increase business productivity overall.

We hope that this guide helped you understand the full scope of what a preventive maintenance strategy entails and how can you incorporate it into your facility. If you have any questions or need any additional clarifications, don't think twice and [get in touch](#).