CMMS Basics & Beyond

How to get the most out of your maintenance management system

A Guide by Hippo CMMS, Maintenance Solutions Experts

An Introduction to Maintenance Management Software

The benefits of maintenance management software are vast, from cutting maintenance costs to increasing workplace efficiencies to adding transparency and organization to your entire department. Although many businesses understand the benefits of such software, acquiring the right software can be tricky. They must ensure that the correct mix of features, functionality, user friendliness and support services are available. An extensive search for the right product, pilot testing, and a steady roll out strategy all play an important role in ensuring smooth implementation and software adoption. But what are the next steps? Even trickier than acquiring software is the task of fully understanding its ins and outs and making sure you're getting the most out of your solution.

In this 1-hour interactive session, Hippo CMMS software experts will cover tips and tricks on how to find the right software and how to optimize your existing system. We'll relay insider info and best practices that we've learned after years of helping our clients harness the true potential of maintenance software! This session is perfect for those who already have a maintenance management system or those in the process of acquiring the right software for their organization.

This comprehensive manual will be your systematic guide to improve your software practices and aid in your hunt for the right CMMS. Use this document as a reference for yourself or others on your team. Follow along with our software experts as they guide you through the manual. You can complete exercises from each section and refer to the key takeaways at the end of each chapter for a quick summary.
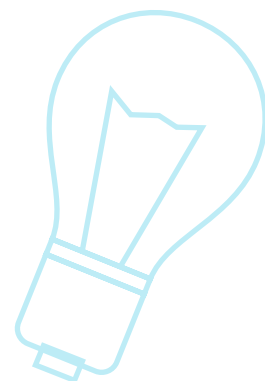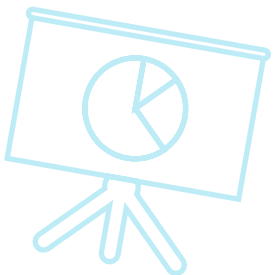
Part 1

CMMS Research

Although most CMMS products contain similar modules and features, some vendors boast a variety of unique services, special functionality, different pricing schemes, and so on. Some vendors cater to niche markets such as the education sector or healthcare, while other vendors provide robust solutions containing all available maintenance management features at a price point well beyond most yearly budgets. With a long list of feature and cost differences, the process of finding the right software to meet your budget and needs is a real balancing act. This section helps to reduce your research headaches by outlining a simple framework to first discover what your maintenance software needs are, and then to pinpoint the right questions to ask vendors you are evaluating.

Take It Offline First

Let's face it, for most of us research (at least in the preliminary phases) is conducted online. Although the internet is full of useful info, it can also be a place of clutter and selling-propaganda, which can hinder your research process. Don't get caught up in the selling hype, conduct an offline needs assessment first. A needs assessment covers the benefits and drawbacks of software for your business before you even speak with a software vendor. It provides a more focused approach to shopping for what you need instead of aimlessly browsing for what you don't.

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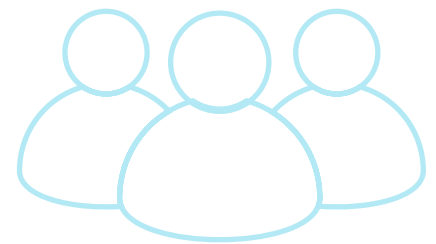
Get Everyone Onboard

Throughout this assessment, it is critical that you have the perspective of your entire team at all organizational levels that will be involved. From the maintenance tech to the C-Level manager to the IT department, all users must be on board with the same system but have different needs. By better understanding these differences, you will ensure that the software provides a thoughtful solution for all stakeholders. We often find that organizations who leave users out of this initial process have a harder time getting them to buy-in later; either the software may not meet their particular need or it may be too difficult for some to use. By understanding the unique needs of your entire team, you can ensure that you find a suitable product that will stand the test of time.

Needs Assessment Process

A thoughtful needs assessment can be broken down into four main quadrants:
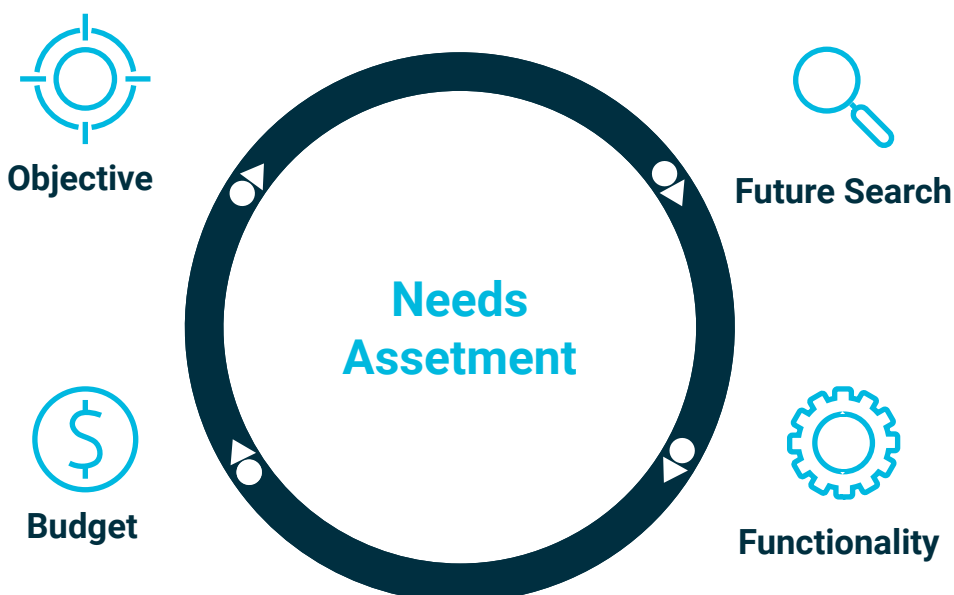
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Objective

Future Search

Needs Assetment

Budget

Functionality

1 Objective

What is the primary objective of maintenance software for your organization? What do you ultimately want it to do for you and for other roles in your company? Determining what you want to get out of your software is a very important step in ensuring that you get the "right solution". The right solution implies a perfect match between product features that you need and your maintenance software budget. Discovering your software objectives can come from a series of questions. Which particular maintenance process are you looking to track or measure? Do you want to report on key maintenance activities? Are you simply looking to reduce the amount of paper used in your maintenance department? Because there are so many reasons an organization may want to implement software, it is important to determine which benefits are the most important. Rank these benefits in order of importance. Once these objectives are determined, you can move onto Quadrant 2- match these objectives with the software features that will get you there!
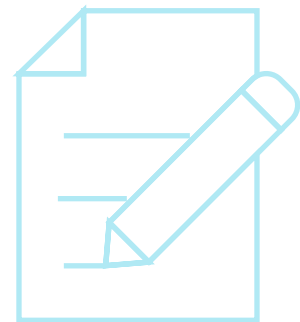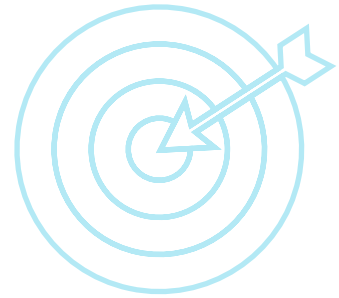
2 Feature Search

Find the software features that will ultimately produce your identified objective(s). If you're not familiar with CMMS features or industry jargon, this is the step where you may want to do a little research. There are many sites dedicated to CMMS information and content. These websites are jam packed with feature overviews and CMMS benefit descriptions that will help you to be better acquainted with maintenance software terms and features. See Appendix 1 for a list of great online resources to support you in your search!

3 Functionality

Separate from the actual features that a maintenance software has to offer are its functionality and architecture. When you buy a car the sound system, heated seats, and back up camera are features, whereas the cars' transmission and the way it drives is its function. Software function describes its navigation and structure. This is the part where many buyers have trouble. Often the barrier stems from resistance to automated processes or not feeling tech savvy enough to make an accurate decision about software. Some buyers turn to the expertise of their IT departments while others simply give up the search and go back to manual methods for the time being. Become confident in your abilities by knowing the right things to look for. By ranking the degree of importance for each of the four items below, you will have a better understanding of the functionality that you're looking to get out of a system.
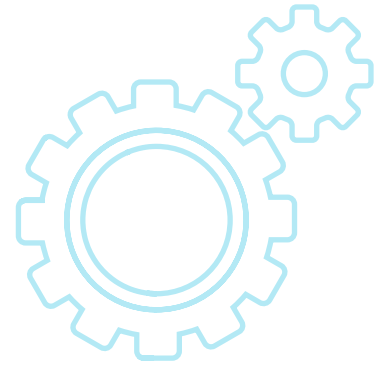
a | User friendliness

This is the degree of how simple, clean, and easy to use the software is. Perhaps it shows through simple software navigation, big buttons, and few but simple software features. You want it to be as simple as

If you're already aware of common CMMS features, then write out a list of those you would like to investigate or eventually acquire. Mark features that are most important to have. Because you've already determined your ultimate goal(s), this process will be easy as you're simply matching the goal to the feature that will accomplish it. **To make it even easier, we've developed a simple table that matches common software objectives with the basic CMMS features that'll get you there.**

possible to add users, equipment, and assets to the backend of your system. You also need to ensure that all users at different technical levels can use the system. If the degree of software difficultly is too high, users will not take well to the software implementation and high resistance is probable. This is a primary software pitfall so take the time to evaluate the user friendliness of any software you are investigating.

b | Web based vs Installed

The primary difference between these two systems is where they are hosted. Web-based systems are hosted by your software provider on servers that they manage. It is deployed to users via internet connection, with subscription-based service being a primary payment method. In comparison, installed systems are hosted on internal company servers and managed or controlled by the company themselves. There is a lot of literature on the benefits and drawbacks of each type of system.

You and your team must decide which system is best for your organization,but here are a couple of aspects to keep in mind.

Control Installed systems are purchased outright giving you all the ownership and rights as you would a brand new car. Web-based or SaaS models work on more of a rental or lease basis. By paying monthly or annual fees, you gain access to the vendor's system and servers that house your data. Because of this "lease" system, webbased models are traditionally viewed by some companies as lacking control over the security of their data. As technology becomes more innovative and strict data safety measures become commonplace for web-based software models, more and more companies are shifting away from this former notion. Despite

Pro Tip #1

Just because some of your users have high tech literacy doesn't mean all of them will. Always push for extremely user-friendly software!

Feature and Objective Table

I want

- To track maintenance costs

- To have better communication between maintenance team

- To rid organization of paper and disorganized manual methods

- To be proactive in maintenance repair

- To easily report activities to upper management or the team

- To have simple work order forms that can be tracked and easily managed

- To be able to easily manage and track assets, equipment, and/or inventory

So I should acquire

- Demand Work Order Management
- Preventive Maintenance Management
- Vendor and Resource Management
- Reporting Tools
- Mobile

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- Vendor and Resource Management
- Reporting Tools
- Mobile

- Demand Work Order Management
- Preventive Maintenance Management
- Mobile

- Preventive Maintenance Management
- Predictive Maintenance & Down time tracking

- Reporting Tools

- Demand Work Order Management
- Preventive Maintenance Management

- Asset and Equipment Management
- Inventory Management
- Interactive Floor Plans

this shift however, there are still organizations that prefer complete control of both their data and their system.

Price Because SaaS solutions are quicker to deploy to all clients and work on a subscription-based service; they are usually less expensive than installed solutions. Smaller monthly or annual fees are paid over the course of the subscription. On-going costs for occasional upgrades are also less expensive or free- again due to quick deployment via the web. Installed solutions are paid for outright with a higher onetime upfront cost. They are also usually more expensive both in the initial setup phase and in ongoing upgrades as new versions must be installed on site as they are released.

Ongoing Support Apart from ongoing price differences between these two systems, support services also vary. Handling of support requests in a SaaS model are done through the software vendor with minimal to no support required from the buyer's IT department. Some SaaS systems provide technical support free of charge while others charge hourly or annual fees. When software updates are released, vendors often provide users with training

Web Based vs Installed Pros and Cons Grid

	Web based		Installed	
Control	Less	🟠🔽	More	🔼🔵
Price	Lower	🟠🔽	Higher	🔼🔵
Ongoing support	More vendor support	🔼🔵	Less vendor support	🟠🔽

webinars to go over new features. Because installed solutions are purchased outright with whatever software version is available, any upgrades to the system are viewed as additional costs to the buyer. This makes it more difficult and costly to ensure companies have the latest software version, as more internal IT resources must be used to support these upgrades. If companies opt not to update their software, they risk being outdated, leaving them exposed to security threats and stuck with outdated or obsolete software.

c | Customizability

How much control do you need to have over the look of your software? Do you want to create and customize each field on a page or use a more standard template? What is the degree of customizability that you would like? Is it important for your unique brand identity (colors, logo, and company images) to be incorporated into your account? Being able to customize your work order forms, account look, reports, etc. may be very important for a business, however be prepared for the work involved to set up a fully customized system. You may want to allocate more money for setup services so you won't be tasked with doing all the heavy lifting yourself. In addition to this, it's
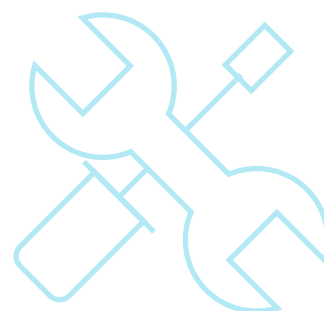
Note: Because our CMMS expertise is in the web-based world, the majority of this manual focuses on SaaS systems although much of its contents may still be applied to both model types.

easy to get lost in customization. Being able to manipulate all aspects of your software can get overwhelming and may cause you to deviate from your original software objectives.

d | Scalability

Scalability is the degree to which the software can grow with your business as you add more facilities, buildings, assets and other departments to be tracked. Most software can be extended to additional areas of your business but have higher fees as you track more assets and equipment. Make sure you understand the cost and time it takes to grow your software.

Vendor Search

When creating a preliminary budget, make sure you consider allotting professional service fees in year 1. After year 1 with your account setup properly and all users having undergone basic training, you may not require a budget for additional services in subsequent years. Outlining a preliminary budget before you even begin to look into vendor options will help you to keep costs low and meet software expectations.Flashy software features and pushy

Now that you've determined your ultimate software goals and the basic features and functionality that you require, it's time to craft a preliminary budget. When creating a CMMS budget remember that you'll need to include more than just the annual license fee in the equation

Total Budget = License Fee + Training + Setup

sales people can quickly cloud an otherwise clear goal, increasing prices quickly and giving you features that you may not need.

Once your needs assessment is completed and you have ensured that multiple stakeholders in your organization have voiced their opinions about software features and functionality, it's time to start shopping!

Searching for the right software vendor may seem daunting as they promise a variety of features, best prices, and service guarantees. But with your primary needs in hand, you'll be able to easily cut through the clutter to find the right product. We've devised a list of common questions that buyers often ask themselves when searching. Just to be helpful we've added answers too!

How many vendors should I compare?
We recommend that you compare and contrast 3 to 4 vendors. If you look at too many you'll risk getting confused with the company names and features. You may even experience buyers-burn out, either turning you off maintenance software completely or- in a moment of weakness- making the wrong decision. If you compare too few vendors, you run the risk of missing out on options that may have fit your organization better or that offer better value.

What is the best approach to finding maintenance software vendors? One of the most convenient ways to find a software vendor is to visit software comparison websites that specialize in matching buyer needs with software providers. Sites such as Software Advice and Capterra are excellent resources for buyers to shop for free. Simply search the kind of software you're looking for and indicate your key requirements. The service will then match you up with vendors who meet that description. You only need to fill out one simple form and hit submit the vendors will do the rest. From there,

Pro Tip #3

Don't "cheap out" on professional services or training options. These fees are often in addition to annual license fees. Knowing how to use your system and setting it up correctly will reduce stress and increase savings in the long run!
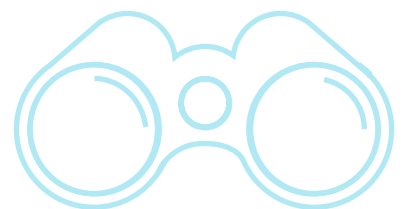
vendor reps will contact you with company info and to setup a demo at a time of your choosing! Those sites also list vendor ratings, client reviews, vendor profiles, and maintenance management content. It's a one-stop shop for convenient software shopping online. See Appendix 1 for a list of software comparison websites.

What should I expect when I'm going into my software demos? Software demos (or live virtual walkthroughs of the software) are the best way to become acquainted with the look and feel of a particular product. Intro demos are usually around 30 min to 1 hour, taking you through a broad overview of the product. Make sure you go into every demo with key objectives or goals that you want to get out of the software. Do you remember that needs assessment you did? This is where you can put it into action! Have your needs ready and come prepared with a critical lens on the product you're viewing. Don't compromise on key software features that are a must for your company. Knowing what you want before you go into a demo will help to weed out pushy sales people and lack luster software. Keep in mind that simplicity is best. Opt for a system that feels the most simple to use and easy to navigate. If you're confused in the demo chances are your other team members will be too. Ask as many questions as possible and don't feel foolish if you need to schedule another demo to go over additional features or more in-depth items.

Do you have any advice on pricing expectations? Software systems have a wide range in price point with many different factors to consider. In web based models, we've seen single user licenses run as low as $25/mo to as high as $200/mo. Often you are required to pay annual subscription fees upfront with the list price usually stated as a monthly fee to make it seem lower. The license fee renews annually. The license fee includes the cost of using the system and whatever features are included in that package level. The pricing structure can vary between vendors. Primary factors that affect the software license cost are:

At the same time, take advantage of this shopping experience. While many vendors have similar features, some stand out with unique modules and a fresh take on functionality. Evaluate if these features such as interactive floor plans, bar coding abilities, or space management modules would benefit your organization.

# Primary factors that affect the software license cost

a | Number of users

Many solutions price per user, per month. Know how many people in your organization will need to use the system (all vendors will ask you this in order to give you a proper quote anyways). Know how many users AND how many requesters you will require. Pricing usually allows more requesters to access a system on one license than users. Some companies offer unlimited user licenses, which are much more cost efficient if you have 3+ users that need access to the software.

b | Number of facilities

The number of buildings and facilities in your maintenance operations is very important in most price quotes. This is because more buildings will increase the number of assets that the software tracks, the amount of data to input, and the number of people to train. Some vendors may also ask the general size of your facility to help them understand the amount of assets that will be tracked. As a general rule of thumb, a 20,000 sq/ft building contains between $900K- $1.2M worth of assets. Some pricing schemes are based on the number of facilities in your organization and will increase by nominal amounts as you add buildings.
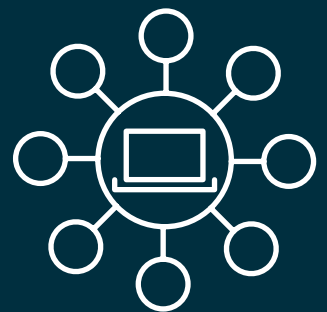
c | Size of your maintenance department

This factor is similar to the amount of users in your system. Vendors may ask how many people are in your department in order to get a better gauge on how many people require access to mobile or other features that primarily apply to your maintenance department. This also gives vendors a better sense of how many people will need to be trained on specific topics.

In addition to your license fee, setup and training fees should also be factored into your budget as these costs are often above and beyond. For better budgetary planning, speak with your team to determine setup timelines and the roles and responsibilities of setup. You will learn more about implementation in Part two, however understanding the advantages and disadvantages of full and partial setup is a crucial step towards meeting timeline expectations. At this phase, we recommend that you begin to think about your setup strategy and get ready to budget a significant amount in year 1 towards setup fees and training in addition to the license fee.

How long can I expect this process to take?
The entire process usually takes between 3 to 6 weeks. Often vendors want you to see their product as soon as possible because they know you're viewing several other competitors. You'll want to have vendors fresh in your mind when you are deciding on which ones to follow up with. Take a week or two to run through the initial three to four vendors that you're searching. After the first demo with each vendor, narrow the choice down to two options. Request one or two more demos with each to get into more detailed analysis of the software. Most vendors have free trials that you can use to get more familiar with the software on your own. Take this time get feedback from your team and make sure that all technical skill levels are somewhat comfortable with the software. Once you have played around for a while you may want to have another round of discussions with your vendor rep to ask questions that you've come up with during the trial or to get other stakeholders in on the conversation. At this point, your organization should have a clear understanding of each vendor product and will be able to make a thoughtful buying decision.

Pro Tip #4

Keep in mind that users and requesters play two different roles in the system. A requester is one who does not require much functionality. A simple WO request form to submit through a standard ticketing system will do. They are usually office staff who don't have direct ties to the maintenance department. A user is one who needs more software functionality. Their roles often stem from the maintenance department but can also consist of corporate managers to IT workers to office administrators

Key takeaways

Needs Assessment

- Conduct a comprehensive needs assessment offline before you begin to compare vendors
- A needs assessment will help you to outline your ultimate software goals
- It is important to get input from your entire team when conducting your needs assessment
- A needs assessment consists of four main quadrants:
    a. **Objective:** What do you want to get out of your software?
    b. **Feature Search:** Which features do you want your software to have?
    c. **Functionality:** How do you want your system to work, based on:

    User Friendliness: The degree of simplicity a software offers
    Web Based vs Installed: The type of hosting model you choose
    Customizability: The extent to which you are able to customize your software
    Scalability: The ease of which a system is able to grow with your organization
- **Budget:** Create a preliminary budget that allocates resources towards the license fee AND professional service fees, including training and setup.

Needs Assessment

- When comparing different software vendors, ask yourself the following questions:

    Q: How many vendors should I compare?
    A: About 3-4.

    Q: What is the best approach to finding maintenance software vendors?
    A: Use an online software comparison website such as Software Advice or Capterra.

    Q: What should I expect when I'm going into my software demos?
    A: Demos last between 30 min to 1 hour. Make sure you go in with clear goals and your needs assessment in mind.

    Q: Do you have any advice on pricing expectations?
    A: Pricing structures vary between vendors. The factors affecting this structure are a) number of users and work order requesters, b) number and size of facilities in your operations c) size of your maintenance department.

    Q: How long can I expect this process to take?
    A: The entire process usually takes between 3 to 6 weeks.

Appendices

Appendix 1

Online Buyer Resources

What do you want to get out of your software?

Software Advice
www.softwareadvice.com

Capterra
www.capterra.com

G2 Crowd
www.g2crowd.com

VentureBeat
venturebeat.com

CMMS Software Insight
www.betterbuys.com/cmms/

Gigaom
www.gigaom.com

Get your free copy of Parts 2, 3, and 4 of this series at
www.hippocmms.com

About Hippo CMMS

Hippo CMMS is a powerful, user friendly web-based maintenance management system. Its flexible platform includes all the CMMS features required to streamline maintenance operations of any size in a variety of industries; healthcare, manufacturing, retail, hotels, college campuses and more. Hippo makes the complex simple with its easy to use interface, unlimited users and lifetime customer support.

Contact Hippo CMMS for information about the software or a live demo.

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