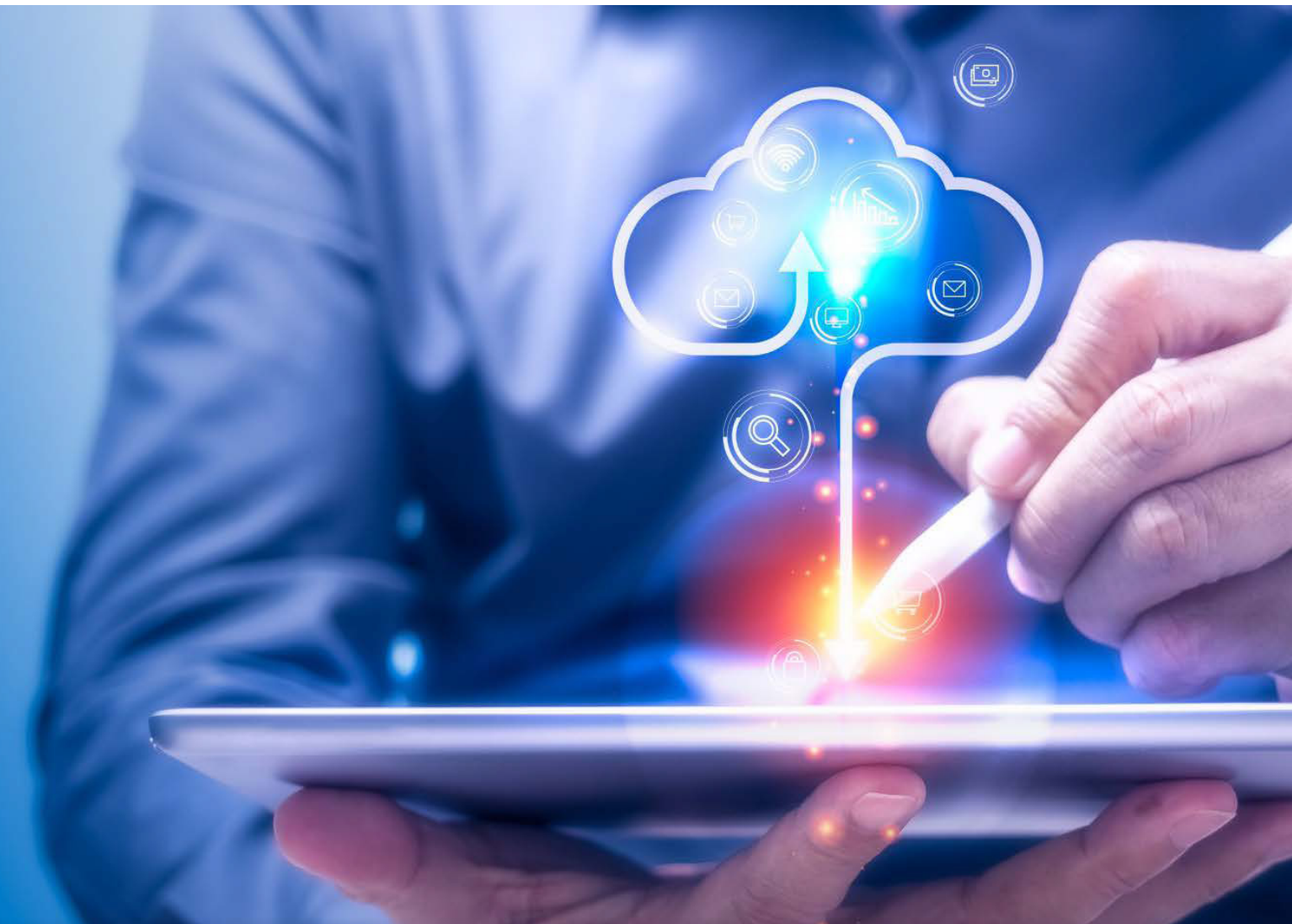


WHITEPAPER

# Is it Better to Build or Buy Construction Equipment Management Software?





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# Is It Better To Build or Buy Construction Equipment Management Software?

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**Today, businesses focus on achieving efficiency across the organizational landscape.** While making decisions around construction equipment management software, one must take into account IT and HR as well as operations and maintenance in an organization.

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The construction industry is constantly changing and highly competitive. Even during the COVID-19 pandemic, it continued to grow. This means you should be able to adapt quickly to the demands of your customers, or else they'll go somewhere else. Being agile and responsive will give your business a major advantage over others in this field.

When it comes to buying construction equipment management software, you have two options. You can either build it yourself or buy it ready-made. Both options have their advantages and disadvantages. This whitepaper highlights five key areas to consider in the decision process of building or buying construction equipment management software.



# Key Differences Between Building and Buying Construction Equipment Management Software

Here are the main differences between building and buying construction equipment management software:

## 1. TIME NEEDED FOR DEVELOPMENT

Building custom construction equipment management software takes a considerable investment in time before the software is functional and efficient enough to replace your existing systems. We estimate that developing a CMMS (computerized maintenance management system) from the ground up typically requires about 100,000 hours to complete. Depending on the size and complexity of the system that you need, it could take longer to get your custom-built system up and running in daily operations. Few companies can invest the time and funds needed to support this size of a project while continuing other operations.

If you need construction equipment management software quickly, developing a custom solution may not be the most efficient use of your time. It can be possible to adopt, deploy, and optimize a pre-built system within a few months. There are excellent out-of-the-box solutions readily available with the functionality that most businesses need.

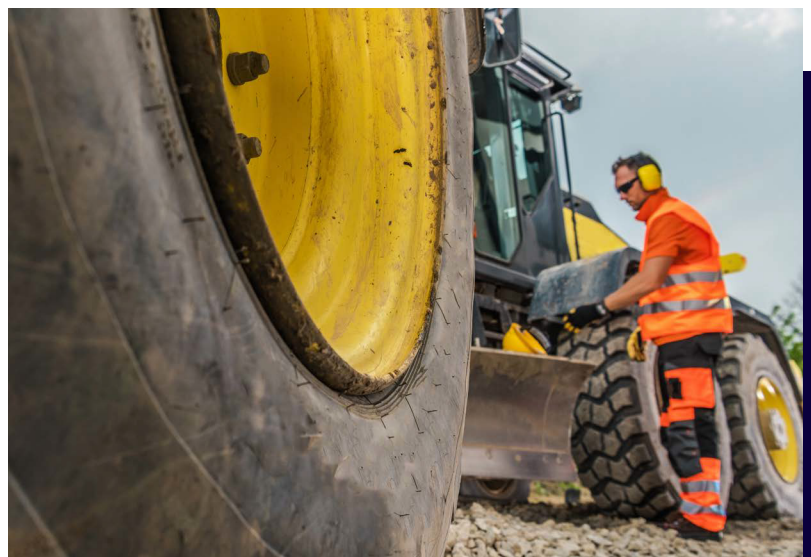
## 2. IT SKILLS AND COSTS

This is one of the major reasons why businesses prefer buying construction equipment management software. Developing any type of business software requires extensive expertise in several

fields of IT technology and infrastructure. Your company will need a team to:

- manage the project
- identify technology needs
- plan the new system
- set up and maintain the infrastructure
- develop cybersecurity systems
- test the new system
- monitor operations after deployment
- coordinate updates and enhancements to the system
- and many other parts of system development

Buying a software program means you don't need to hire professionals to develop and maintain it, although you may need a few people on staff to help administer the system depending on which program you choose. This saves you time and money. Instead of hiring staff to maintain and operate the system, you can turn to the software vendor. Based on our industry expertise with software development, we estimate that developing a homegrown erp can cost upwards of \$8.8 million just to launch.



## KEY DIFFERENCES

### 3. MAINTENANCE COSTS

Construction equipment management software vendors take complete responsibility for the maintenance, support, upgrades, and hosting. In essence, you can outsource your needs to the company that built and manages the software. This can be a major benefit in reducing costs while still getting access to top-tier support. For an organization to cover such work themselves would require approximately 27,000 man-hours (to the tune of approximately \$1.75 million).

However, that support will come at a cost that you must continue to pay monthly or yearly to get the most out of your software. Any costs will be included with the software licensing fees.

Another benefit is that the software company has insight into how the software works to help you choose the best software and configuration options for your needs. These companies can take a look at your operations and tell you how their software should be used to get the best performance, which lets you easily compare their plans and choose which one you think fits

you best. This can cut costs from having to try different software packages or figure out how to build and optimize a system yourself.

### 4. USER COLLABORATION TOOLS AND FUNCTIONALITY

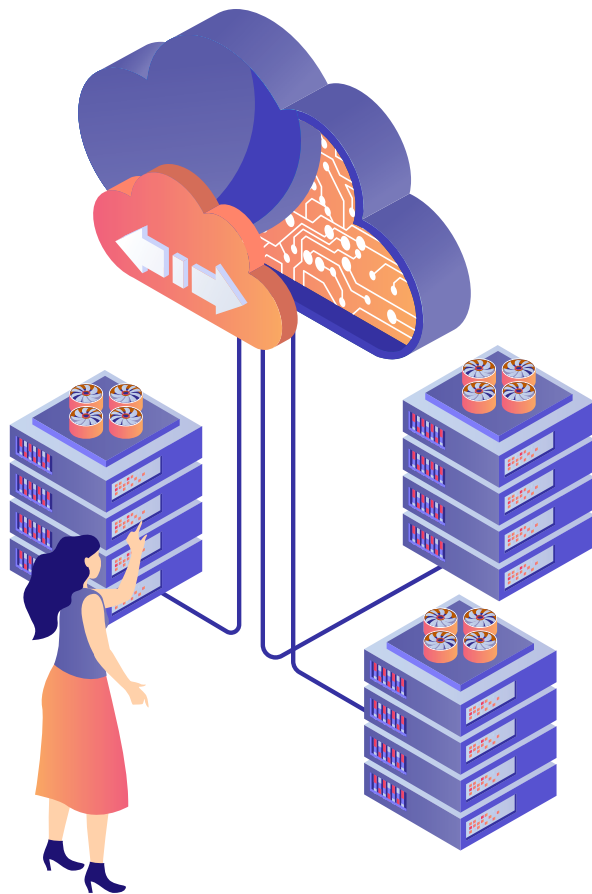
User collaboration tools help team members to work together effectively. This is important in an organization where various departments, such as operations, maintenance, and finance, depend on each other. These tools keep everyone informed about the status of equipment. You should look for software that integrates with your current technologies and is easy to use.

Choosing software that integrates well leads to better communication and more efficient work. However, choosing the wrong software will create communication problems for your staff. While it may seem like a small inconvenience, managing a communication system and construction equipment management software that do not work well together can cause major delays in operations thanks to a breakdown in communication.



## KEY DIFFERENCES

If you need construction equipment management software quickly, developing a custom solution may not be the **most efficient use of your time**. It can be possible to adopt, deploy, and optimize a pre-built system within a few months.



### 5. LONG-TERM SCALABILITY OF THE SYSTEM WITH MINIMAL EFFORT

Companies grow, change, and expand over time, and they need software to do the same. If you want to extend your construction equipment management software beyond what it currently offers, you can do that easily and quickly with a pre-configured software program.

These systems provide expansion capabilities to incorporate new components and other programs to build a cohesive network. While you are using the system, the company that manages it is likely also continuing software development to keep that software up-to-date or add new functionality. This means that you don't have to divert resources to figure out how to improve the system and make it match your needs as your needs change.

A system that you build yourself will see a delay in solving specific problems as your team has to develop the internal systems needed to meet your changing needs. This could take months to finish and optimize.

If your business uses other software applications or mobile apps, you'll want to make sure your new rental equipment software integrates with them. It should also offer an API so developers can add new solutions in the future. You'll want to take full control of your construction equipment management software, which means it should allow you to make changes and customize it according to your business needs. In some cases, you won't be able to force an out-of-the-box software program to integrate with other business systems and may need to build a better solution for your company's needs. For example, RentalResult boasts more than two hundred integrations to leading CRMs (such as Salesforce), ERPs (including Oracle, sap, and Microsoft Dynamics), IoT devices, and more.

### 7. FUNCTIONAL REQUIREMENTS

Before you decide between building or buying

## KEY DIFFERENCES



construction equipment management software, you need to ensure that it meets your business needs. The more functional requirements you have, the more time developers need to customize the system. In some cases, building your own construction equipment management software is not cost-effective.

### 8. DATA SECURITY

As you build your own construction equipment management software, you'll need to ensure that the system is secure and allows for proper rights management. The system should let your business systems share data while adhering to security protocols.

More than anything else, whichever program you use must be able to protect data and connections to the system. Companies face more cybersecurity threats than ever, which is why software developers are spending more

than ever to make sure that the software they develop is as secure as possible.

### 9. SPECIAL FEATURES NEEDED

Some construction equipment management software packages feature a wide range of special features, depending on the needs of your business. A good example is managing customer services. Some customer service software will allow you to integrate with other business software and create a single customer database. Other systems offer different functions, such as making payments and generating invoices.

### 10. RISK MANAGEMENT

Buying construction equipment management software reduces the risk of mistakes and lost time in custom software development. It also ensures there are no major bugs or system crashes, which could put your entire operation at risk.

# Importance of Creating Stronger Technology Procurement Governance



Most organizations follow loosely spun policies that govern technology procurement. However, this can leave companies vulnerable to selecting the wrong software or making decisions that end up costing them money. Companies should create a formal process that is more structured, transparent, and consistent.

Technology procurement can be quite complex, making it necessary to have a formalized process between the business, it, and procurement teams. Technology governance is a structured process that enables organizations to maintain control over technology investment. This process includes visibility of the outcomes of technology decisions and continual improvement of processes. It is important for companies to devise a strategy that aligns with the company's business strategy and goals.

The first step is to identify the set of technology services and products that are important to the company. This includes prioritizing services based on business objectives and identifying strategic relationships with suppliers.

A second step is to understand what methods should be used in evaluating suppliers, as well as the criteria being applied for evaluation. One of the most important criteria related to pricing is cost-of-service. This is the cost of the product or service when it is in use.

Technology procurement decisions should be made with the most rigorous and informed scrutiny. This ensures that decisions are based on solid data and thorough analysis. Technology procurement should also be impactful, so it needs to have close discussions with project teams to ensure that decisions are well thought out and will positively impact the business.

A third step is to ensure that there are adequate resources for monitoring and evaluating services throughout their life cycles.

A fourth step is to enforce technology governance. This requires a structured process that is well documented, allowing internal and external review of the process. The main objective of technology procurement should be to achieve improved service levels and value for money, with the lowest risk in terms of cost and delivery time.



# Why You Should Buy Construction Equipment Management Software

If you're having a tough time deciding whether to build or buy construction equipment management software, here are some reasons why purchasing an off-the-shelf software package may be the best option for your business:



## 1. Easy to deploy

Ready-made construction equipment management software programs are easy to install and get started with. This means you don't have to waste time hiring programmers or IT personnel who know how to write and maintain custom software. This will save you money and time on maintenance, support, and upgrades.



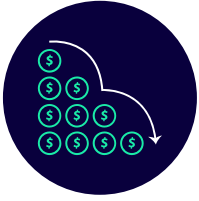
## 2. Faster time to value

Choosing a ready-made construction equipment management software program will save you the time and energy of hiring IT professionals to build your own construction equipment management software. It also saves you money in developing and maintaining the software from scratch. Buying construction equipment management software means faster time to value, improved productivity, and better management of your business operations.



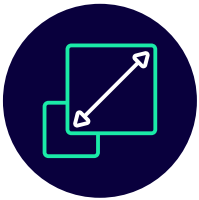
## 3. Risk reduction

If you purchase pre-built construction equipment management software, it will minimize the risks of having problems with custom programming. The software vendors are already aware of the latest needs and will be able to meet them with limited help. You'll get the right set of features and functionality that you will find useful in your business. You can also select modules or add-ons you need per your business requirements.



### 4. Reduced maintenance costs

This is another short-term gain, as you won't have to hire IT staff to develop, maintain, and operate your construction equipment management software system. The software is designed to meet your requirements, which will also reduce the cost of maintenance and support.



### 5. Scalability

If you can't build a good construction equipment management software system from scratch, you can go for a ready-made solution. The pre-built software allows you to have the flexibility to scale your system whenever needed and in the way that works best for your business needs.



### 6. Access to support

Buying premade construction equipment management software means that you have access to IT support. Most software companies offer support services for their systems. Your company won't have to worry about the high costs of managing the IT infrastructure needed to manage the software. The software company handles all of that for you.





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**Ready-made construction equipment management software programs are easy to install and get started with. This will save you money and time on maintenance, support, and upgrades.**



### **7. Access to Updates**

Software companies continue to develop updates and upgrades to their software, even while you are using it. Getting access to updates over time lets you keep your software up-to-date and expand it as your needs change. It helps you adapt to changes in your business by giving you access to more features and resources as they become available.



### **8. Better Cybersecurity**

One of the best benefits of buying pre-built construction equipment management software is access to cybersecurity support and updates. Every company is under a greater threat of attack from cybercriminals. Software companies invest heavily in keeping their software safe, and you get access to those security updates. Your systems will be secure without having to invest in increasing cybersecurity.

# What are the Key Factors You'll Need to Consider When Choosing Between Building or Buying Construction Equipment Management Software?

**When it comes to deciding whether to build your own construction equipment management software or purchase a ready-made one,** there are several different factors you should consider. The best candidate for each solution will depend on the needs of your business and the type and volume of data you handle.

## What to consider when choosing to build construction equipment management software

If you choose to build rental equipment software over buying it from a software company, there are several things that you should consider.

### **COST AND BUDGET NEEDS**

The most important factor is the price since the project relies entirely on funding to power development. Having an idea of what the project should cost, as well as an understanding that costs can exceed expectations, is important before starting the project. Once started, failing to finish the project wastes a lot of vital resources.

### **IT TAKES A LONG TIME TO DEVELOP SOFTWARE**

Another issue to consider is the amount of time that it will take to build the software. Software development can proceed quickly, but it is not a fast process. Your company has to commit to completing the system and continuing to operate without it until development is finished. It is not uncommon for a software project to take more than a year.

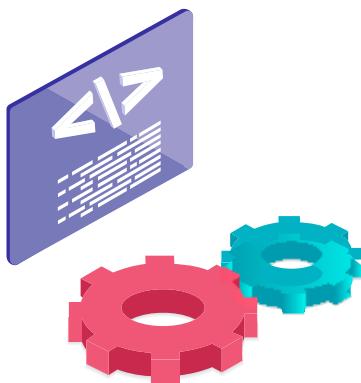
## KEY FACTORS

### DEVELOPMENT STAFF

Unless your company already has the staff to develop software, you will incur significant costs (in time and money) and organizational strain in hiring the staff needed for the project. Putting together a software development team can be a benefit and a curse in some ways. A team built for this specific purpose can produce high-quality software. However, it often takes several months or years for a software development team to reach peak productivity. The performance of your team can vary based on a variety of factors.

### SOFTWARE DEVELOPMENT MAY CONTINUE INDEFINITELY

One of the most difficult issues to deal with in software development is scope. Depending on how the project is managed, it may or may not have a defined scope of work (the list of things to be accomplished). It is entirely possible that the project to develop your custom rental software will have problems with scope creep, an issue where the goals of the project and the contents of what needs to be developed continue to change. A project that falls victim to scope creep can last long past its intended end date, leaving your company with a large problem to deal with.



# Risks of building construction equipment management software

**Despite all of the potential benefits of building the software, there are several inherent risks to deal with. Some of these include:**

## 1. RISK OF MAKING POOR CHOICES

As a business owner, you might be tempted to build construction equipment management software on your own or hire a freelancer who has no experience in this area. Even if you choose to outsource the project to an agency, they may not have the experience or expertise required to produce quality results. This will lead to wasted money and time, which could have been avoided if you had chosen a suitable option from the start.

## 2. RISK OF GETTING STUCK WITH A SOLUTION THAT DOES NOT WORK

If you choose to build construction equipment management software internally, you might face delays or problems and find yourself unable to finish the project. You could also end up with a solution that doesn't fit your business needs, which will add more time and money to the overall cost of development.

## 3. RISK OF GOING OUT OF BUSINESS

If you choose an application development vendor that's not capable of delivering the right results, you could miss important deadlines and lose customers as a result. This can also lead to cash-flow issues and going out of business completely if the problem is not addressed in time.

## 4. RISK OF BEING OUTPACED BY COMPETITORS

A risk associated with building construction equipment management software is falling behind in the latest technological standards set by competitors in this industry. This can lead to

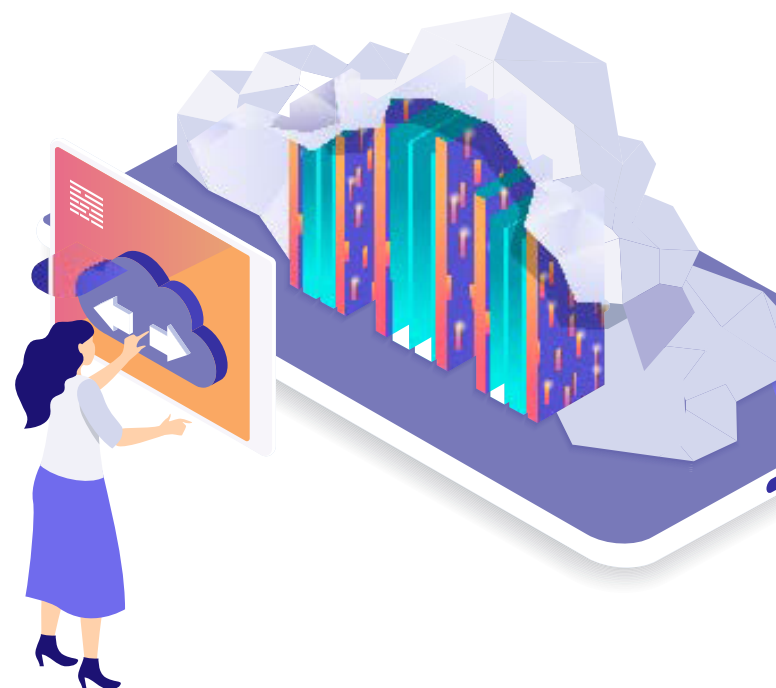
a diminished reputation, a loss of competitive advantage, and even going out of business. Another risk is that you may be missing out on opportunities by not using the latest technologies.

## 5. RISK OF INCREASED COSTS

Building construction equipment management software also comes with higher costs associated with building, maintaining, and upgrading the software as well as providing security and data protection. It's also important to consider any additional quality assurance or testing required, which will add to the overall cost of development.

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**Ready-made construction equipment management software programs are easy to install and get started with. This will save you money and time on maintenance, support, and upgrades.**



# Benefits of Buying Construction Equipment Software

**There are many benefits to buying construction equipment management software** instead of trying to build a custom solution on your own. Here are some of the benefits that drive most construction companies to choose to buy construction equipment management software:

## 1. IT'S LESS EXPENSIVE

One of the benefits of buying construction equipment management software is that its less expensive than building your own solution. This is especially true if you need to get a solution up and running as quickly as possible. According to the executives surveyed in the Deloitte 2021 global shared services and outsourcing report,



88% of executives reduced costs and 78% improved efficiency through outsourcing.

## 2. SAVES TIME

Another benefit of buying construction equipment management software is that it saves you time that would otherwise be spent managing development in-house or hiring a third-party vendor to do the work for you. This can allow you to devote more time and resources to growing your business while minimizing risk.

## 3. MINIMIZES RISKS

Building your own solution from the ground up or outsourcing the project to an inexperienced developer or agency are two examples where buying software can help minimize risks for your business.

## 4. WORKS WITH YOUR EXISTING SYSTEMS

Using construction equipment management software is an option that works well with your existing systems, as it integrates seamlessly and requires minimal changes to the way you manage your construction equipment inventory. This will help ensure that the new solution fits seamlessly into your overall business processes and eliminates potential problems down the road.

## 5. STANDARDIZED SOLUTIONS

This option provides standardized solutions that are available out of the box, so you don't have to spend time building or tweaking them to fit your exact requirements. This is especially true if you need to build multiple systems or add new features down the road, which is often the case with a custom solution.

# Evaluation Criteria

Whether your company decides to buy or make its software, having a set of evaluation criteria is crucial to the success of the project. Here are the criteria that you should use to evaluate any software options.

## RESOURCES

To build and operate the software, your company needs access to people, time, and money. In terms of people, your company needs staff members specifically trained in software development or in using the software. The development will take significant investments of time (likely more than a year) and money for software, hardware, and other costs of development.

## FINANCES

Can your company support the project over its projected lifetime? If your company buys software, it needs to be able to support that cost while continuing to manage the rest of its operations on a budget. If you build the software, your company needs to account for the increase in long-term costs during the development phase.



## RISKS

Is the potential benefit worth more than the potential risks? Adopting new software is a risk for the company. Every step is a series of decisions that can impact your company's ability to function. It is critical to know if the benefit to the company when completing the project significantly outweighs the potential risks.

## ENGAGEMENT

Does the software effectively engage the end-users in a way that provides the features they expect? In essence, you want to make sure that the software effectively addresses the problems that you need it to in ways that provide benefits. Know what your software needs to do to be successful. Then, keep the project on track to make sure the results align with what you need.



# Interested in Investing in **Industry- Leading** Construction Equipment Software?

Over time, an enterprise ecosystem experiences a loss of functional agility due to the accumulation of hardware and software entities across business silos. The result is that maintenance becomes a nightmare, leading to an increase in technical debt and a lack of focus. **Using industry-leading software, such as RentalResult from Wynne Systems**, is an ideal way to streamline your company's software in a way that integrates well with other software you rely on.

Want to learn more about the impact of buying the right construction equipment management software for your business? Talk with one of Wynne Systems' dedicated experts today at **949-224-6300** or email us at **[marketing@wynnesystems.com](mailto:marketing@wynnesystems.com)**.

