

BEST PRACTICES FOR IMPROVING THE MANAGEMENT OF JOB SITE EQUIPMENT



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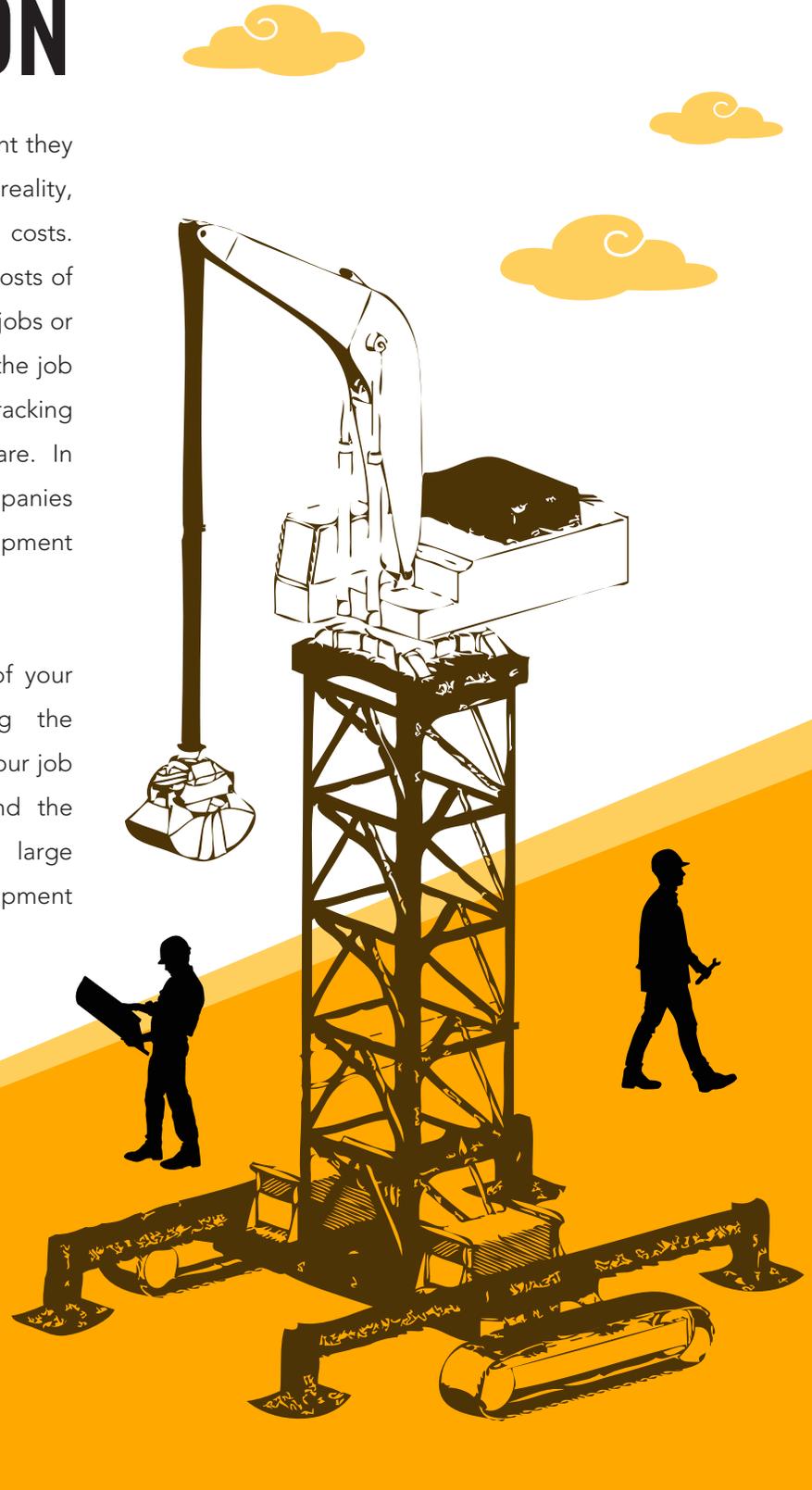
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INTRODUCTION

Construction companies estimate that equipment they own or lease represents 20% of their costs. But in reality, most are not sure of their exact equipment costs. Companies are unable to track or allocate the costs of their equipment and small tools to their various jobs or projects. Equipment gets lost in the yard or at the job site, rental equipment is mismanaged, and tracking assets and invoicing jobs can be a nightmare. In addition, without proper asset management companies many not be depreciating or insuring their equipment properly.

Whether you are managing the deployment of your own construction equipment, or managing the procurement of external rental equipment for your job sites, this e-book is for you. We recommend the following best practices from leading, large construction companies to improve your equipment management processes and control costs.



MANAGING DEMAND AT THE JOB SITE



REQUISITIONING EQUIPMENT

Traditionally, equipment requisitions tend to fall outside of normal construction ERP functionality; often the “requisitioning process” is a phone call, a fax or an email. As a result, equipment facilities find themselves either having to enter data manually into systems or having to chase foremen and supervisors for more information on what is actually needed.

When it comes to streamlining your equipment management process, it’s best to start with the demand itself. If your requisition can become part of your management software you have the opportunity to standardize terminology, eliminate the need for multiple phone calls and capture information directly into your equipment management system.

By standardizing the process you can also take advantage of your equipment management software to define accessory or attachment lists, recommend or make additional items mandatory, and provide educational information about safe loads, working heights, specification information, etc. You can also take advantage of the internet to make materials such as equipment training videos easily accessible through your requisition process.



KEY DATA TRACKED

 Requestor	 Category Class	 Job Costing information	 Required accessories
 Quantity required	 Date required on-site and expected duration	 Special instructions	

Taking your management software into the field is now easy with the adoption of smart phones and tablets across many enterprises. Your requisitioning process needs to take advantage of these technologies so that you aren't dependent on a foreman having to go into a site office to place a requisition on a computer. He or she can just pull out a mobile device and enter the requisition from wherever they stand on the site.



COMMUNICATING EFFECTIVELY BETWEEN JOB SITE AND EQUIPMENT FACILITY YARD

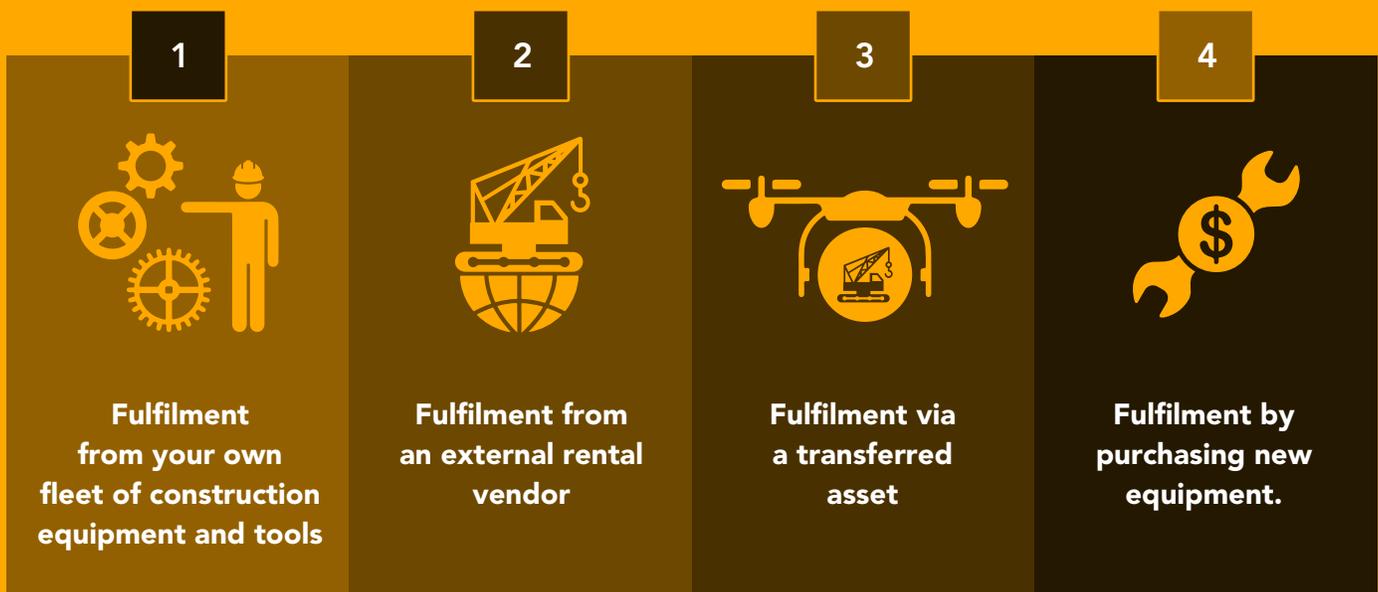
A requisition is just one half of a conversation; the other half comes at the equipment facility (or procurement office) when you need to act on that requisition. The first thing you need to ensure is that your requisition information comes into the equipment facility in real-time. Any kind of delay in the process and you'll automatically lose the trust out at the job site.

To help build trust, you might want to consider email confirmation of requisitions received, or even have your equipment management team individually assigned to inbound requisitions so that the guys out at the site can see immediately that their requisition is "owned" by someone. Whatever method you choose, both the job site and the equipment facility need to be able to check on the progress of the requisition electronically and visually. That means data needs to be maintained in real-time and visible to both parties. It also means that if something needs to be changed, updated or even cancelled, both parties can see the change immediately.

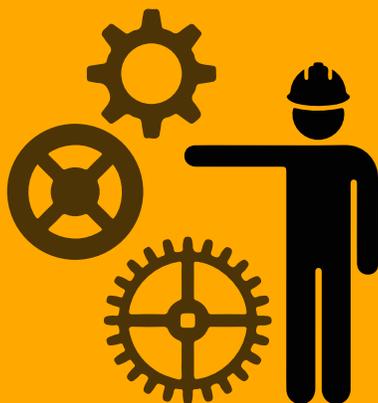
FULFILLING EQUIPMENT DEMAND



Once you have a requisition you need to work out where you are going to source your equipment. In most construction businesses, equipment can come from four sources:



Your equipment management software needs to be able to manage all four options effectively.



FULFILMENT FROM YOUR OWN FLEET

Your equipment management solution needs to be able to convert your job site requisition into a firm equipment deployment. Some construction businesses are used to using the same terminology as a rental company when they look at equipment deployment: so the requisition will become a rental contract. Others are more comfortable with simply talking about reservations or allocations. Whichever your preference, the same fundamental rules apply: you need to be able to assess your available equipment, check on equipment readiness, check that it's the right equipment for the job and then assign the equipment.



AVAILABILITY

If you only have one facility or yard, then tracking availability should be relatively straight forward. But if you have multiple facilities or yards, then you need to make sure that you can see availability across all locations. There is no point in renting equipment in from outside or buying new equipment for particular jobs if that same equipment is sitting idle elsewhere.



STATUS & READINESS

Availability is not simply a question of physical existence, it's also about equipment readiness. You need to consider using equipment workflows to track equipment status through your facility. If after returning something from the job site it needs to be cleaned, inspected or serviced before it can be sent out to another job, then that needs to be visible to all parties. You need to ensure that when you tell a job site their equipment is available and will be on its way shortly, then you should deliver on that promise. If your "available" equipment is actually sitting in the shop with its engine in pieces on the shop floor, then you'll lose credibility at the job site.



EQUIPMENT ASSIGNMENT / YARD PICKING

Depending on the type of equipment you are deploying you may have teams out in the yard or in the warehouse picking equipment to fulfill requisitions. You want the process to be as real-time as possible so that the progress of their requisition is visible to the team out at the site. If they can literally see your progress, then you can limit phone calls and reduce the 'black hole' feeling that many foremen and supervisors complain of when they just don't know what's happening.

When it comes to real-time, the obvious solution is going mobile. Your equipment management system needs to have integrated mobile applications to allow for yard picking. Ideally you want to be able to split large requisitions across multiple devices or people so that you can make your pick process as efficient as possible. Equally if your job sites are particularly demanding and put a lot of requisitions in during the course of a day, you may want to consider grouping requisitions together into single pick lists or deliveries to make the best use of your vehicles.



ADDED VALUE: COMPETENCY & QUALIFICATIONS

Just because a job site asks for a specific type of equipment doesn't necessarily mean they should have it. In some instances, there may be specific competency or qualification information that you need to take into account. For example, a job site operator may need a particular qualification to use the piece of equipment they are requesting, or the job site itself has a specific restriction on the type of equipment that can be sourced. There may be times when your search for the right equipment may involve modification of the original requisition, but again the key is that your software assists with the process so that it isn't all dependent on human memory or post-it notes stuck on the sides of monitors.



FULFILMENT FROM AN EXTERNAL RENTAL VENDOR

Some construction companies no longer use their own equipment, or perhaps have a very limited fleet of owned equipment. Even if your own equipment fleet is very large, the chances are that at some point you'll need to rent equipment in from an outside vendor. Your equipment management system needs to be able to manage that process not just in terms of ensuring the equipment is delivered to the job site, but also in terms of managing the associated costs on the accounts payable (AP) side of the transaction.

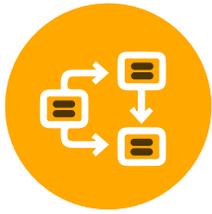


ONE-OFF RE-RENT PROCUREMENT

When you simply need to top off your fleet because you're running at 100% utilization, or it's just a one-off, your equipment management software needs to be flexible enough to let you incorporate the occasional re-rental within the core process. That also means that if the decision to re-rent happens late in the process (for example, you discover while loading the truck that your excavator has blown a hose) it needs to be an easy process to turn your own equipment fulfillment into external equipment fulfillment without having to re-write the documentation from scratch.

The decision to fulfill all or part of a requisition from an external vendor should also feed directly into how that equipment is going to be deployed. That means that you need to be able to track drop-shipments rather than create back office paperwork to mimic a delivery via your own facility, or even worse, have no process at all to track the shipment to the job site.

Mobile apps come into their own in this environment and prevent disputes when job sites complain that something never arrived or fail to let anyone know when it's off-rented. Enabling the job site to confirm the receipt electronically with a simple mobile app makes it a lot easier for all parties to stay in control.



TOTAL RE-RENTS PROCUREMENT

If your construction business doesn't own a single piece of equipment or a single tool, or if you have specific lines of equipment that you know upfront will only be supplied externally then make sure your equipment management software can handle rentals. Your process workflow should be able to drive a re-rental workflow so that your requisition flows neatly into a re-rent procurement process that expects drop shipments and external charges as part of its normal flow.



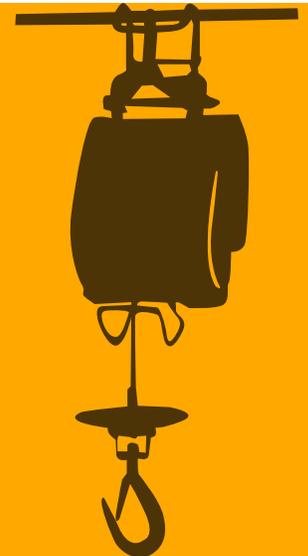
ADDED VALUE: AUTOMATING THE RE-RENT PROCESS

If you know that certain categories or product lines are always going to be re-rented, then you should consider automating the re-rent process. For example, if you have three preferred vendors for mobile cranes, then think of the advantage of being able to auto-generate a request for quote to all three vendors the moment a requisition is created. You can also provide a supplier portal that lets all three vendors log into your portal, confirm the price and time they can deliver to your job site, and give you the option to manually or automatically confirm the order with the one that matches your need.

Real added value comes from reducing the elapsed time between a requisition and vendor confirmation so that you have plenty of time to look for other sources if none of your preferred vendors can supply your appropriate parameters.

FULFILMENT VIA A TRANSFERRED ASSET

If you are operating over multiple equipment facilities or yards then obviously there may be times when you need to consider moving equipment and tools between your facilities. While sometimes a decision to transfer assets is a strategic planning move based on utilization, project starts or project ends, at other times the decision to move assets is likely to be driven by immediate short term needs. If this is the case, then it's useful to be able to tie the original demand that necessitated the move to the transfer of equipment. That way, you can use the information for reporting purposes and keep track of any financial implications. Obviously to make this efficient you need to be able to tie the two together directly in your equipment management software and not just on a spreadsheet.



TRANSFERRING DEMAND TO THE ASSET

If you are moving assets around because you have an immediate demand, then consider eliminating part of the transportation process. Rather than moving your asset from Facility A to Facility B in order to get it to Job Site XYZ, consider simply requesting that Facility A deliver directly to Job Site XYZ. Your equipment management software should allow you to fulfill equipment from multiple locations.



ADDED VALUE: SHARING COST & MARGIN

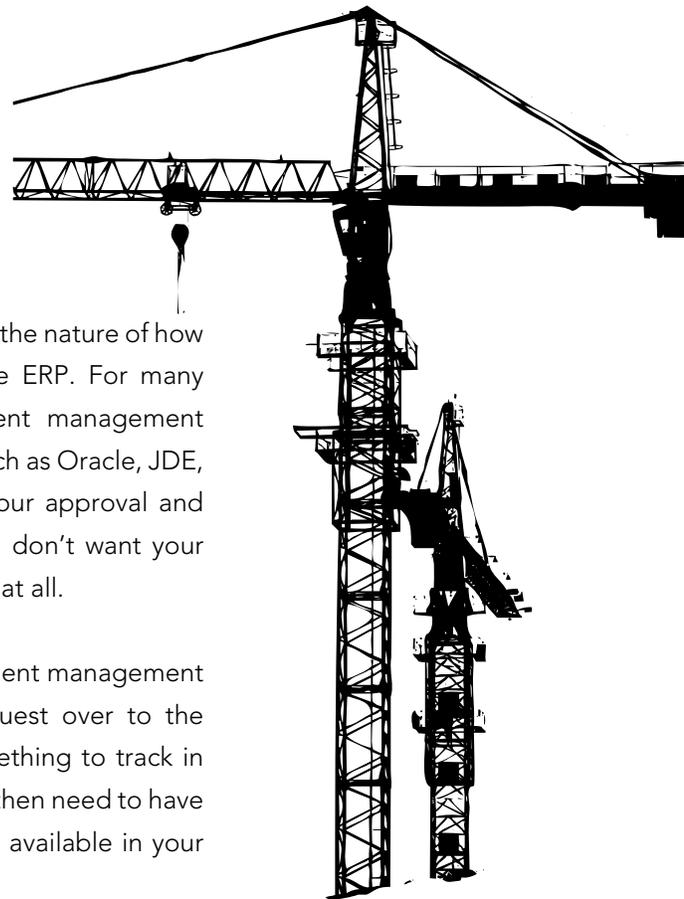
If you are transferring equipment between facilities and measure any kind of equipment margin or cost-based performance, you may want to think about how you match costs to the exact amount of time used. In other words, if you transfer an asset mid-way through a month and depreciation is run at the end of the month, you don't necessarily want the facility that happens to have it in the yard at the end of the month to be hit with a full month's depreciation. Consider using depreciation re-charges to automatically split costs between locations to ensure that cost and margin calculations remain consistent across the organization.

FULFILMENT BY PURCHASING NEW EQUIPMENT

There are always times when a particular project creates particular procurement needs. Just as you need to be able to link re-rent purchases directly to your demand, being able to tie certain types of procurement to your demand can also be helpful.

This is one of those areas that is likely to raise questions depending on the nature of how your internal equipment business is integrated with your corporate ERP. For many construction companies, managing re-rents through the equipment management software makes perfect sense as it's not an area where ERP systems such as Oracle, JDE, SAP or CMiC shine. However, when it comes to buying assets, if your approval and budgetary processes are all embedded firmly in your ERP then you don't want your equipment management software involved in the purchasing process at all.

If this is the case, then consider using the functionality in your equipment management software as a trigger to either send data or at least email a request over to the procurement team or into the ERP system. That way, you have something to track in terms of requested data and reason for why you want the asset. You'll then need to have a mechanism (either manual or automated) to make your new assets available in your equipment management software once they are received.



ADDED VALUE: FULLY MANAGING EQUIPMENT PROCUREMENT

If your corporate policies, finance and IT folks are all agnostic on where equipment purchasing is done, then it's a great idea to explore your equipment management software's capabilities. After all, that's where you'll be working 99% of the time, so being able to completely manage your equipment procurement in the same system can make life much easier. It puts you in control of your own metrics and removes any delay in making equipment available for use.

EQUIPMENT LOGISTICS

Whether you use your own trucks and drivers or use third party logistics you need to be able to plan for your equipment deployment. That means the moment you have a confirmed demand you need to be able to start your logistics planning to ensure you can get the equipment to the job site at the scheduled delivery date and time.



MOBILIZATION & DEPLOYMENT

Transport is one of the most expensive costs that any equipment company has to control so it makes sense to include transportation management inside your equipment management solution. For efficiency and planning, make sure you can define both internal and external trucks and assign loads to those trucks. Ideally you want this to be integrated with your picking process so that you can see the progression of the allocation of equipment and therefore work out when a truck is likely to be ready to leave.

If you are using external trucking, then consider tying your purchase process into your transport logistics management so that you can assign actual costs for trucking against deliveries and pickups for later analysis. Visibility means everything, so look for on-screen clarity to ensure that your logistics planning doesn't shift to white boards and manual entry.



ADDED VALUE: GOING MOBILE

Since transport is a mobile activity it makes sense to bring mobile solutions into your equipment management process. Key applications include:

- Mobile picking and equipment allocation
- Load confirmation (particularly useful if you want third party drivers to acknowledge their loads)
- Job site signatures for delivery confirmation
- Online visibility of progress for the job site
- Receipt of re-rents at the job site via mobile app for cost management



PICK UP & RETURN

One of the most common issues we hear about on construction projects is the issue of equipment sitting unused on the job site. Whether you are managing the job site directly, analyzing the margins in the PMO office or trying to manage your utilization back at the yard, unused equipment that is sitting on the job site is one of the most difficult problems to combat. So what's the solution?



MAKE IT EASY TO ARRANGE A PICKUP

Your online job site portal needs to make it as easy as possible to arrange a pickup. Simply select the equipment to be returned by job site, confirm the date and let the software take care of the rest. Notifications are sent to the equipment facility so that they can arrange for physical pick up and a confirmation is sent to the PMO that no further costs are going to be incurred. This makes it easy for the job site to follow the process and notify everyone involved.



AUTO OFF-RENT WITH YOUR VENDORS

If the piece of equipment is re-rented, you want the same act of requesting a pickup online to notify your vendors that their equipment is ready for collection. There is no reason why your software shouldn't be able to automate this process for you. It knows that the equipment is re-rented so the moment the pickup request is processed it can email your vendor, confirm the date and time for the off-rent and then it is your vendor's problem, not yours.

From an AP point of view, once you've confirmed you want the equipment picked up you can lock down your financial processing so that you don't end up paying for things that are no longer being used.

DEALING WITH BREAKDOWNS

If you've got equipment on site that isn't working, it has an immediate and potentially catastrophic effect on your project. How you deal with that may vary according to the nature of the problem and the specialization of the piece of equipment. To make processing as efficient as possible, look for the following:

1. Ability to notify the equipment facility as soon as a problem is recognized.
2. Ability to manage an equipment swap out effectively and get the replacement item to the job site as quickly as possible, potentially while the broken item is still waiting for repair.
3. Ability to send a field mechanic or technician out to the job site and manage a remote repair. Most likely this option will include use of mobile apps to control and track the repair process and capture an accurate idea of cost.
4. If your problem is an external asset, make sure that your swap out process can also work with re-rent assets to keep things simple from an end-user perspective.





ADDED VALUE: MAKE IT EASY TO VALIDATE WHAT'S ON THE JOB SITE & ACT

Many things can change in the course of a day on a job site. Emergencies happen, clients change the scope of a project, even when you mark something for pickup it is possible that before a truck actually gets there to pick the piece of equipment up someone else on the job site finds another use for it. So you are looking for two kinds of information:

1. The ability to quickly have a real-time view of everything that your software thinks is on the site – with the ability to see what should have been picked up and what is active.
2. The ability to cancel your pickups if you find a genuine reason to do so.

General housekeeping is a very dull task, but it is an important component in your job site solution.



PROJECT COSTING / JOB COSTING

Tracking your construction costs against a job and ultimately against a task or sub-code within a job is an essential requirement for most construction equipment management software. There is little point in putting huge amounts of effort into managing the process if you don't also get better cost and margin data to help your job site analysis.



TRACKING COSTS FROM DEMAND TO FULFILLMENT

Understanding how something should be costed starts at the point of requisition. Right at the beginning of your process your online requisition needs to make it easy to enter project and task/WBS codes. Obviously those codes need to be in line with your project and ERP systems, so the easiest method is to use real time data integration to ensure the codes are always accurate and up to date. The last thing you want is unnecessary double entry.

CHANGING COST CODES DURING THE LIFE OF A PROJECT

Once you've got the cost code information in place, then you need to be able to update it if things change – whether that is before the equipment is dispatched or once it is onsite. It is important to allow online access for your personnel to edit and change cost codes to reflect the actual use of the machine. Of course, there will be times when the update needs to be done through the equipment facility or even the PMO office, but giving that option to the relevant people shouldn't be difficult. As long as your equipment management software has the capability to manage security access based on role and field level permissions you can address these challenges.

COST ACCRUALS & CHARGES

It is all very well capturing cost codes and project costing data but the whole point is to get those numbers back into your project system for analysis so you can better understand your equipment costs. Effectively assigning cost accruals or charges to individual job sites is critical and accurate data reduces disputes.



COST ACCRUALS

For many construction companies billing to the customer happens on a monthly or bi-monthly basis. For the job site however, costs are being accrued every moment a piece of equipment is sitting on the site whether it is idle or in use. Cost accruals give you a great way of tracking how much cost your job site is incurring even if your project system isn't ready for billing right now. Cost accruals take into account not only the internal cost of your own equipment, but also external

charges such as re-rent costs and even sales if your equipment orders includes consumables or service charges.

Cost accruals are something that you may choose to make available purely through dashboards and reports directly from your equipment management system, or they may be something that you choose to pass back to your project or ERP system so that the data is visible alongside all your other project data in your core systems.



CHARGES

For some construction companies, equipment is charged out to the internal job site as though they were in a standard vendor to customer relationship. There may be an actual genuine invoice, or it may simply be a pseudo invoice without tax, but in either case there is the concept of a rate sheet and the value of the equipment is calculated much like it is by your external rental vendors. Rates can be based on the going market rates or job site specifics.

For other construction companies, equipment charges are tracked as internal costs without any formal invoice being created. In this type of charge, the rate sheet is regarded more as a cost sheet and may be based on standard cost type data, agreed project costs for a specific project or some other factor.

In either case the charges or costs are split out by job/project code or by task/sub-code/WBS (work breakdown segment) codes. If your cost codes have changed during the period of the charge, then your equipment management system needs to be intelligent enough to break out those charges on a pro-rated basis to split the costs across the different cost codes.



ADDED VALUE: INTEGRATION INTO YOUR CORPORATE SYSTEMS

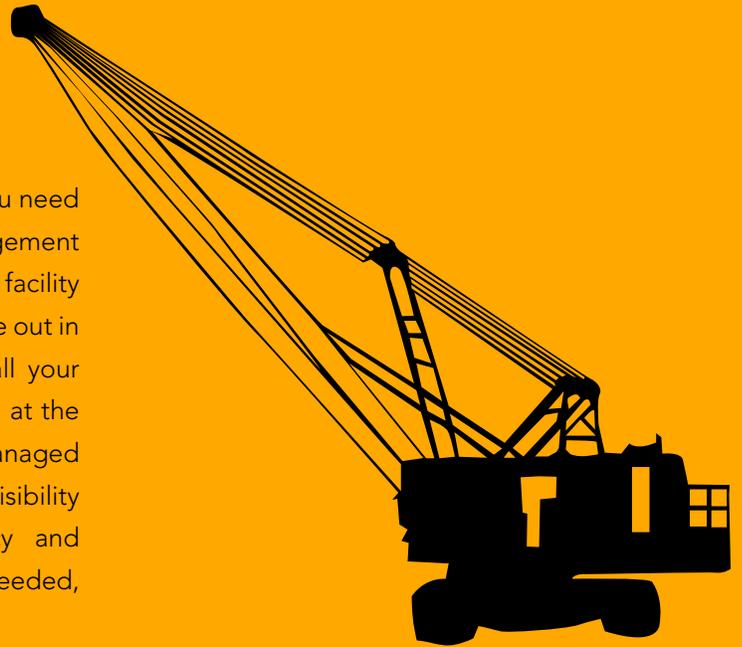
Whether you are working with accruals or equipment billing, the real value comes from your system being able to send the data straight into your job costing or ERP system.

Managing data in real time, with no need for manual data entry or manual calculation of costs creates huge added value by reducing administration time and simplifying your month end processes.



CONCLUSION

To deliver real benefit to your construction business you need to be able to bring the entire equipment management process together. Whether you are an equipment facility manager, logistics driver, field technician or on a job site out in the field you need to have visibility and access to all your assets in real time. The entire process from requisition at the job site to fulfilment at the equipment facility can be managed with a robust software solution. Real-time processing, visibility and information are the key drivers of efficiency and productivity to deliver the right equipment, when it's needed, in a timely manner.



Accurate project costing is another area that having the right tools can help reduce the time spent on preparing charges and resolving discrepancies. Misplaced equipment or rental equipment that is not returned costs your business real money. Charging back your job sites for equipment they are using is critical to containing costs and ensuring appropriate margins.

Wynne has the equipment management software that can address these areas and provide the communications and real time visibility to improve your business processes and reduce your equipment costs.



ABOUT WYNNE SYSTEMS

Wynne Systems is a global software company producing construction and rental equipment software and tools for a variety of sectors. Established in 1989, Wynne recognized the need for a truly complete enterprise resource planning solution, and committed itself to developing software that would meet the rapidly evolving and growing needs of the equipment industry. Today, Wynne is now in 37 countries, serving over 3,500 locations.

Contact us at marketing@wynnesystems.com.

