THE
UNDERESTIMATED
VALUE OF
DOCK SCHEDULING

Beneath the automated schedules, communications features, and web portals lies a hidden feature that will transform your business.

C3 Solutions

WHITE PAPER

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IN BRIEF

There are underestimated benefits to implementing a dock scheduling solution, primarily because these are overshadowed by the planning, scheduling and communication features of the application. These benefits, derived from the reports and dashboards which capture the key performance metrics related to your dock activities, provide management the right data to make the right decisions at the right time. How much are reports and dashboards worth to your organization?

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DOCK SCHEDULING

If your role at the warehouse is related to scheduling, receiving/shipping, logistics, or management, your priorities probably include maximizing warehouse throughput; that is making sure trucks come in and out of your warehouse at the right time, as quickly as possible while maximizing your labor utilization rate. You rely on your dock scheduling process to help you achieve these efficiencies, and rightly so. Once again, is there a reason to care about reports and dashboards?

As we talk with companies that range from the largest retailers in the world to small wholesalers, we find that not only did they care; they were actually looking for solutions. They also have some common frustrations.
Here are some of their stories.

SOME COMMON FRUSTRATIONS?

HOW CAN I MEASURE MY SCHEDULER'S EFFICIENCY?

A $1.3 billion retailer has a scheduler for each of their three distribution centers. The business has grown significantly over the past 15 years and today the warehouse space and flow of goods is at critical capacity. Without doubting that the schedulers are doing a great job planning the incoming loads efficiently, the logistics/DC manager wants to have arrival and unloading times readily available in order to compare with the planned schedule. "Are we allowing too much time for certain types of loads?", was one of the questions asked during a meeting. Although their scheduling process was well established, combining in house IT systems, emails, calendars and lots of experience, the managers had no reporting capability in order to analyse the scheduling efficiency.

AT THE VERY LEAST, CAN I MEASURE THE TIME IT TAKES TO UNLOAD THE TRAILERS?

On a smaller scale, a regional wholesaler in the beverage industry only has two receiving teams. Loads arrive as "first come, first serve" and they have little influence, still today, to enforce a "by appointment only" process. "Can I at the very least measure the time it takes our staff to unload the trailers, as well as driver wait times?", was at the topmost of his priorities. Why? These managers are eager to have productivity data in order to measure their unloading staff's efficiency.

HOW CAN I AUDIT CHARGEBACKS AND DEMURRAGE FEES?

One of the Vice-presidents at a third-party cold storage warehouse is responsible for signing off on all the chargebacks, penalties and demurrage fees. Without proper reporting from the dock, he has to triple check the information, creating an accumulation of paperwork on his desk. "If I could have a summary report indicating who arrived late with the respective unloading times, I would save myself hours of work and much aggravation", to paraphrase his comment.

Stories like these are commonplace, demonstrating that despite their best intentions, managers starve for data in order to make educated decisions for the betterment of their operations.

WHAT IS MEASURABLE AND WHY IS IT USEFUL?

Acknowledging that a scheduling application is the cornerstone of managing your inbound and outbound traffic; measuring, with the intent of improving your process, is what will drive your dock operations to excellence. Rather than dealing purely in the abstract we will present some reporting options most frequently used by our customers to demonstrate the true value of timely data.

IS YOUR RECEIVING DOCK OFTEN OVER BOOKED?
CONSULT THE DASHBOARD DISPLAYING YOUR EXPECTED BOOKINGS VERSUS WAREHOUSE CAPACITY.

As a receiving manager, do your buyers purchase items with little consideration for your warehouse capacity? The solution is to have a dashboard showing the number of units (line items, pallets, cases, etc.) that are expected and compare this volume with your warehouse capacity. With data integration [1] or file uploads, this dashboard provides advanced visibility to the receiving team, allowing them to be proactive. Not only will you be able to adapt to upcoming volumes, but you'll also now be able to advise buyers when you're at overcapacity and prioritize the shipments. At the very least, you'll have useful reports for your operational meetings in order to address capacity issues.
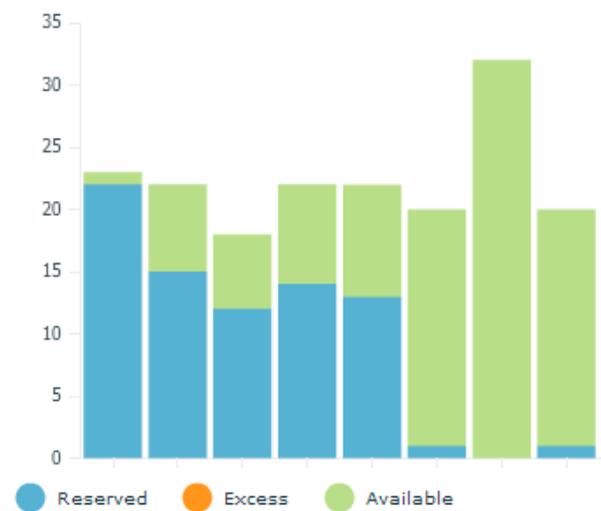
TROUBLE TRACKING 'DROPPED' TRAILERS?
CONSULT THE 'DROPPED VS. LIVE UNLOAD' REPORT.

Although tracking dropped trailers in your yard is relatively simple, we regularly hear stories about lost trailers. Unless you're using a YMS [2] (possibly the size of your operation can't justify this investment), keeping track of your trailers can turn into a headache. In addition to tracking, keeping tabs on the length of time a trailer or container is sitting in your yard will help prevent wasteful detention fees. The solution is to work with your dock scheduling application in order to capture, either at the gate house or receiving office, the arrival time, the load type (drop or live) and other relevant information such as trailer number, seal number, etc. Based on this information, your warehouse operations can report when trailers arrived, when they need to be returned, and help prioritize the unloading at the dock.

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[1] Data integration defined: When POs are sent electronically to the vendor, selected information is also fed into the appointment scheduling application in real-time.
[2] YMS = Yard Management System. For more information, please refer to C3 Solutions' White Paper 'Understanding Yard Management'

Scheduled Date	Status
27 Feb 2012 06:00	Late
27 Feb 2012 06:00	On Time
27 Feb 2012 07:00	On Time
27 Feb 2012 07:00	On Time
27 Feb 2012 07:00	On Time
27 Feb 2012 08:00	On Time
27 Feb 2012 09:00	On Time
27 Feb 2012 10:00	Late
27 Feb 2012 11:00	Early
27 Feb 2012 11:00	On Time
27 Feb 2012 12:00	No Show

CARRIERS DON'T RESPECT THEIR APPOINTMENTS?
START CAPTURING ARRIVAL TIMES TO GENERATE REPORTS TO BE SHARED WITH CARRIERS.

You already have a scheduling process in place, whether it is a manual calendar, a spreadsheet, or a subset of a larger WMS or TMS; however you are unable to readily produce a report indicating who arrived on time, late or didn't show up at all! This is where time stamps, available in a dedicated dock scheduling application, give you the ability to capture important time events such as: a) gate-in, b) arrival at dock, c) unloading start, d) unloading finish, e) leaving dock, f) gate-out. If you consider your vendors and carriers partners in your supply chain, sharing this data with your partners is essential in making everyone more accountable. If you are managing chargebacks or considering implementing such a system, you'll want these reports in order to avoid an administrative burden.

YOU NEED TO MEASURE THE RECEIVING TEAMS' PRODUCTIVITY?
CUSTOMIZE YOUR UNLOADING TIMES REPORT, BY TEAM OR BY SITE.

Labor management software is traditionally found in unloading services 3 and often used for the general warehousing staff 4. Although your dock scheduling solution isn't a labor management system, it does provide you a valuable productivity measure. Since the unloading times are measured, including the load types and unit counts, you may customize and streamline standard reports; thus providing you the means to measure unloading start and finish times, as well as comparing them by team member and by site.

Shift Levels: Weekday

	Shift	Day
Lines:	15	15
Cases:	19,206	19,206
Pallets:	342	342
Reservations:	15	15

HOW MUCH PRODUCT DID WE RECEIVE?
CONSULT THE DASHBOARD, PROVIDING A UNIT COUNT BY SHIFT, AREA, SITE AND ENTERPRISE.

In general, companies are able to estimate the volume of business (usually expressed as a monetary value) that is being received by gathering information from the ERP or WMS systems. Although this may be acceptable from a high level perspective, from an operation's standpoint, it may be more useful (if not critical) to evaluate the volume in measurable units such as pallets, floor loaded trailers, units, cases, etc.

These factors are the ones which affect the unloading times and affect your productivity.

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[3] For measuring the productivity and calculating the pay for third-party unloading services companies, we recommend you visit www.inboundtechnologies.com
[4] Examples of labor management providers for warehousing include www.Kronos.com or www.WestmonroePartners.com

DUE TO THE UNIQUE NATURE OF MY BUSINESS, THERE ARE SOME SPECIAL DATA ITEMS THAT I NEED TO TRACK.
YOU CAN REPORT REPORT ON UNIQUE BUSINESS DATA AND STANDARD APPOINTMENT INFORMATION TO PROVIDE AN ALL-ENCOMPASSING REPORT.

As an example, fresh produce wholesalers find it essential to track the 'best before date' or 'rotation date' at the dock. The receiving team, in this case, has the authority to refuse loads and it is essential for them to track these date fields. In other cases, seal numbers (inbound and outbound) need to be recorded and communicated efficiently. Specific fields of information like these can be captured at different times through the dock scheduling cycle: i.e., at the time of requesting an appointment, the approval time, upon receiving the load or gating out. All these time stamped events and other custom fields are stored. If your dock scheduling application has an extensive report generator, it may be possible by using filters and custom columns settings to sort through the data at either the appointment level, the purchase order or line items level. By these means, your custom reports will easily portray the relevant information for your business.

AS YOU MIGHT EXPECT, THE LIST OF POTENTIAL REPORTS AND DASHBOARDS IS EXHAUSTIVE.
THEY COULD EASILY ANSWER ADDITIONAL QUESTIONS SUCH AS:

★   WHICH CARRIERS AND VENDORS CHANGED THEIR APPOINTMENT TIMES AND HOW OFTEN?

★   WHICH CARRIERS AND VENDORS MAKE THE MOST DELIVERIES PER SITE?

★   WHAT IS MY TOTAL CAPACITY ALLOCATION PER SITE OR FOR THE ENTIRE BUSINESS?

★   WHAT PERCENTAGE OF APPOINTMENT SLOTS IS OPEN?

★   ANY PENDING TASKS WHICH MY SCHEDULERS HAVE YET TO RESOLVE?

★   WHAT IS THE SCHEDULER'S WORKLOAD?

WHO USES REPORTS AND DASHBOARDS?

The sheer quantity of reports and dashboards available may sometimes appear overwhelming, other times interesting but irrelevant, and often times badly adapted for its users. No single person will ever use all the reports. For this reason, it is important to understand in which way these tools can be useful for the various members of your team.

THE BUYERS AND PURCHASING DEPARTMENT:

How often do buyers phone the warehouse to check on the status of a shipment? The status report on appointment bookings will save unnecessary phone calls and emails between the buyers and the schedulers.

THE DOCK MANAGER:

Providing the dock manager a list of the expected inbound and outbound shipments in advance facilitates his labor planning and priorities.

THE UNLOADING TEAM:

Having visibility, via a monitor or door display, of the incoming shipments helps the unloading team prepare themselves. They can be proactive in managing their time, floor space and additional resources.

Supplier Ranking Report - Month of July 2011						
Volume Group A						
	Compliance % Rank			Demeritus/Reservation Rank		
Rank	Supplier	%	Rank	Supplier	Pts	
1	Supplier a1	98%	1	Supplier a2	0.5	
2	Supplier a2	97%	2	Supplier a1	1	
3	Supplier a3	94%	3	Supplier a3	1.1	
4	Supplier a4	87%	4	Supplier a6	1.5	
5	Supplier a5	86%	5	Supplier a4	1.6	
6	Supplier a6	84%	6	Supplier a5	2	
7	Supplier a7	81%	7	Supplier a7	3	
8	Supplier a8	73%	8	Supplier a8	4.1	
9	Supplier a9	43%	9	Supplier a9	5	
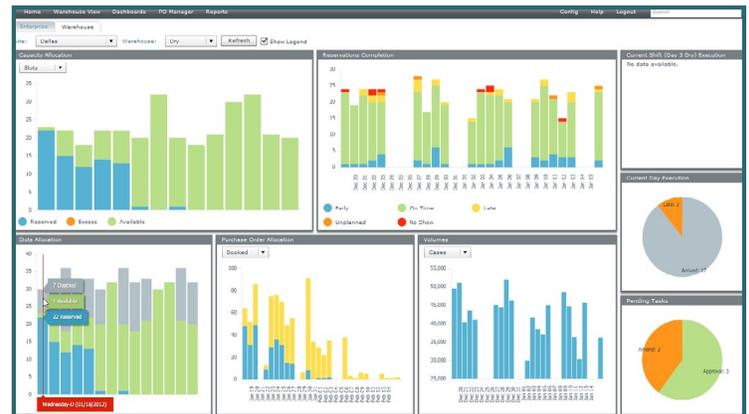
THE TRANSPORTATION MANAGER:

Often accountable for carrier relations, the transportation manager may want to see a breakdown of the load types and units counts brought in or shipped out by carrier; and especially their punctuality scorecard.

THE COMPLIANCE DEPARTMENT:

Having real-time access to on-time, late arrival, early and no shows is an essential for this department. Score carding and receiving audits, incorporated with the standard dock scheduling application, would be a significant value-added benefit to this group.

The following table summarizes which reports may be useful for various roles within your business. Have you surveyed which reports are useful for your team members?

PROVIDING THE RIGHT REPORTING TOOLS TO THE RIGHT ASSOCIATES

THE FOLLOWING TABLE SUMMARIZES WHICH REPORTS MAY BE USEFUL FOR VARIOUS ROLES WITHIN YOUR BUSINESS.

HAVE YOU SURVEYED WHICH REPORTS ARE USEFUL FOR YOUR TEAM MEMBERS?

	On-time, Late, No shows	Dropped vs. Live-Unloads	Capacity Allocation by site, area	Unloading times by site, area	Appointment history	Deliveries by carriers / appts / pallets / units	Historical unbooked capacity by site	Schedulers' open task report	Schedulers' workload	Tracking specific fields	Status on appointment bookings
Buyers			✓		✓					✓	✓
Receiving / shipping team		✓		✓							
Receiving / shipping manager	✓	✓		✓	✓		✓				
Transportation	✓	✓				✓				✓	
Compliance	✓		✓							✓	
Logistic Management				✓		✓				✓	
Warehouse / DC Manager	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Scheduler							✓	✓	✓		

ESTABLISHING WHICH REPORTS AND DASHBOARDS WOULD BE PRACTICAL IS NOT EASY.

Hopefully, these tips may help you focus on the essentials.

MEET WITH YOUR STAFF TO DISCUSS YOUR REPORTING NEEDS.

Most SaaS or licensed software applications are implemented following a rigorous examination of the applications' operational functionality but with very little attention paid to the reports and dashboards. This is understandable since:

★ Most operations never had reports in the past.

★ During the evaluation and testing phase before implementing an application, emphasis is usually on the process itself – 'how do we make our process more efficient'.

Prior to purchasing a new solution, how much time do you spend questioning your staff on the reports they would like to have in order to make their job easier? Therefore the first 'pearl of wisdom' we offer is to encourage you to plan meetings strictly on the topic of reporting and dashboards: identifying who needs what and why.

IS THE INFORMATION PRODUCED RELEVANT?

Reports and dashboards have to be productive – going beyond the 'nice to have'. It is the only way people will continue to use them regularly. To test the relevance of the reports, you need to answer positively to the question: "Can I act on this information?"

HOW QUICKLY CAN I OBTAIN THE FINAL REPORT?

The whole purpose of having information technology is to save time. Business is going to continue to increase its pace and your time will be pressed even more. Ask yourself how much time do you spend preparing those weekly reports? Do you have to export it, change the layout, add formulas and reformat? Demand the final reports be readily available and hassle free.

IN CLOSING

We understand that warehouse managers are not only expected to operate their dock activities with the greatest efficiency, but also to recommend actions which will improve the process and prevent anomalies from occurring. In order to make the right call at the right time, they can either rely on their gut feeling or on hard cold data. So how much are the reports and dashboards worth to your organization?

REMEMBER, YOU CAN'T IMPROVE WHAT YOU CAN'T MEASURE!

About C3 Solutions

Founded in 2000, C3 has become the leader in Yard Management and Site Flow solutions, including dock scheduling, with an impressive roster of Global 5000 clients in manufacturing, grocery, retail, logistics and parcel post across four continents.

The web-based appointment scheduling system, C3 Reservations, allows you to improve the productivity of your logistics operation by enabling third parties to book appointments for goods delivery and pickup. C3 Reservations eliminates site congestion and improves your operations productivity by helping you plan, control and monitor access to your facility.

Yard Smart, C3's award winning yard management system (YMS) provides the ability to totally automate your yard operations. Yard Smart will manage your gates, provide visibility for both trailers and the product inside the trailers and dramatically increase the productivity of your yard, drivers and dock workers.

FOR MORE INFORMATION

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