

# Final TTCS System Proposal for Orenda Marine Engines by JGRC Consulting

# Introduction

## JGRC Consulting

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# Introduction

## Our Task

- Analyze the current system and identify the major issues
- Build a brand new system from the ground up
- Develop a system that will fix the major issues

# Introduction

## Major Issues Identified with the current system

- Break down in communication causing inefficiencies
- Lack of reporting
- Lack of accountability
- Slow manual processes

# Introduction

## What we will be covering

- Our proposed system
- Implementation plan
- Hardware overview
- Costs vs Benefits analysis

# Intro to Dispatcher Dashboard

Orenda Marine Engines - Trailer Traffic Control System

### Trailer Management

Log an Arrival

Departure Queue

Trailer List

Trailers by Shipper

Broken Seal Incidents

Trailer Repair Incidents

### Driver Management

Drivers / Availability

▼ Driver	▼ Availability
Driver 1	Available
Driver 2	On Task
Driver 3	Off Duty
Driver 4	Off Duty
Driver 5	Available

Driver Manager

### Request Management

Current Open Requests

▼ Dock	▼ Time
North	4:00pm

Request Management

Logout

# Trailer Management

- Log arrivals
- Mark departures
- Manage trailers
- View trailer information

## Trailer Management

Log an Arrival

Departure Queue

Trailer List

Trailers by Shipper

Broken Seal Incidents

Trailer Repair Incidents

J	G
R	C

- ### Driver Management

Drivers / Availability

▼ Driver	▼ Availability	▲
Driver 1	Available	
Driver 2	On Task	
Driver 3	Off Duty	
Driver 4	Off Duty	
Driver 5	Available	
		▼

Driver Manager



# Request Management

- Contains a List of all Unhandled requests from the dock foremen
- Requests with the soonest delivery time take priority

**Request Management**  
Current Open Requests

▼ Dock	▼ Time
North	4:00pm

Request Management

# Trailer Arrivals



# Trailer Arrival

- A trailer arrives at the Orenda Facility and pulls up to the dispatch office
- The dispatcher receives the bill of lading from the driver
- The dispatcher compares the trailer number and seal number to the one on the bill of lading

# Dispatcher Dashboard

Orenda Marine Engines - Trailer Traffic Control System

Trailer Management

Log an Arrival

Departure Queue

Trailer List

Trailers by Shipper

Broken Seal Incidents

Trailer Repair Incidents

Driver Management

Drivers / Availability

▼ Driver	▼ Availability
Driver 1	Available
Driver 2	On Task
Driver 3	Off Duty
Driver 4	Off Duty
Driver 5	Available

Driver Manager

Request Management

Current Open Requests

▼ Dock	▼ Time
North	4:00pm

Request Management

Logout

# Log Trailer Arrival

- The Bill of Lading is sent through electronically prior to the trailers arrival
- Dispatcher enters the number on the bill of lading to bring up the correct trailer

The screenshot shows a web application titled "Orenda Marine Engines - Trailer Traffic Control System". It features three main panels: "Trailer Management", "Driver Management", and "Request Management".

- Trailer Management:** Contains buttons for "Log an Arrival", "Departure Queue", "Trailer List", "Trailers by Shipper", "Broken Seal Incidents", and "Trailer Repair Incidents".
- Driver Management:** Includes a "Drivers / Availability" table with columns for "Driver" and "Availability". Below the table is a "Log an Arrival" button, a "Bill of Lading No." input field with the value "10001", a "Submit" button, and a "Driver Manager" button.
- Request Management:** Includes a "Current Open Requests" table with columns for "Dock" and "Time". Below the table is a "Request Management" button.

A "Logout" button is located at the bottom right of the interface.

# Trailer Admission

- Contains all of the trailer information from the Bill of Lading
- The dispatcher compares the bill of lading to the information on the screen
- If there are any problems with the two he can click the report an issue button and make any notes or changes

Orenda Marine Engines - Trailer Traffic Control System

Dashboard > Trailer List > Trailer No.

Back Report an Issue Admit

**Trailer Information**

Trailer No. T56	Shipper Name	Current Status: Pending
Shipper No. 101	Alang Marine Services	Current Location:
Seal No. S8908	Shipper Address	Overdue Status: N/A
B.O.L No. 10001	123 Main Street	Overdue Cost Incurred: N/A
P.O No. 59001	Ottawa, On K2K 7D3	

**Current Contents**

▼ Handling Units	▼ HU Type	▼ HM	▼ Description/Special Marks/Exceptions	▼ NMFC#	▼ Class	▼ Weight(KG)
1	Pallets		Ignition Packs	360 22	100	5937.50 kg

**Change Log**

▼ Fields Changed	▼ Changed By	▼ From	▼ To	▼ Time of Change	▼ Note

# Choosing Parking Spot

The admit trailer dialog is used to tell the system where the trailer will be parked.

The dispatcher can manually type the lot number or select it on the yard map.

Orenda Marine Engines - Trailer Traffic Control System

Dashboard > Trailer List > Trailer No.

Back Report an Issue Admit

**Trailer Information**

Trailer No. T56 Shipper Name Alang Marine Services Current Status: Pending  
Shipper No. 101 Shipper Address 123 M Current Location:  
Seal No. S8908 Shipper Address 123 M Overdue Status: N/A  
B.O.L No. 10001 Ottawa Cost Incurred: N/A  
P.O No. 59001

**Admit Trailer**

Lot No.  
145

Submit

**Current Contents**

▼ Handling Units	▼ HU Type	▼ HM	▼ D	ations	▼ NMFC#	▼ Class	▼ Weight(KG)
1	Pallets		Ignition Packs		360 22	100	5937.50 kg

**Change Log**

▼ Fields Changed	▼ Changed By	▼ From	▼ To	▼ Time of Change	▼ Note

J	G
R	C

- [illegible]



# Requests for Trailer Movements



# Requests – Dock Foreman

- Contains a list of all request from the currently logged in foreman
- The foreman can search using and of the filters available
- New requests can be created by selecting the new requests button

Orenda Marine Engines - Trailer Traffic Control System

Request Management

New Request Request Report

Filter/Search

Status :

Dock :

Bay :

Product:

Time of Delivery  
4/22/2012

1 32 am

Start Date:  
4/22/2012

Exclude :  
☒ Closed

Search

Request List

▼ Request No.	▼ Dock	▼ Bay	▼ Part	▼ Status	▼ Time of Delivery
12342	North	9		Open	4:00pm

Back 1 of ## Next

# Requests – Dock Foreman Cont.

- The dock foreman can make 3 types of requests Part Request, Request for an Empty trailer and a Trailer removal request.
- Dispatcher can make a request using different combinations of materials, not everything is required

Orenda Marine Engines - Trailer Traffic Control System

Dashboard Request Management Request Report

Back New Request

**Filter/Search**

Status:

Dock:

Bay:

Product:

Time of Request: 4/22/2012

1 32 am

Time of Delivery: 4/22/2012

1 32 am

Search

**Request List**

Request No.	Dock	Bay	Part	Status	Time of Delivery
12342	North	9		Open	4:00pm

**New Part Request**

Part Request Request Empty Trailer Trailer Removals

Part:

Shipper:

Dock:

Bay:

P.O.:

Delivery: 11/14/2012  2 00 pm

Notes:

Submit

Back 1 of ## Next

# Requests – Dock Foreman Cont.

Request Management

New Request

Request Report

Filter/Search

Status :

Dock :

Bay :

Product:

Time of Delivery  
4/22/2012

1  32  am

Start Date:  
4/22/2012

Exclude :  
☒ Closed

Search

Request List

▼ Request No.	▼ Dock	▼ Bay	▼ Part	▼ Status	▼ Time of Delivery
12342	North	9		Open	4:00pm
1001	North	7	Ignition Packs	Open	2:00pm

Back

1 of ##

Next

# Requests – Dispatcher

Orenda Marine Engines - Trailer Traffic Control System

### Trailer Management

Log an Arrival

Departure Queue

Trailer List

Trailers by Shipper

Broken Seal Incidents

Trailer Repair Incidents

### Driver Management

Drivers / Availability

▼ Driver	▼ Availability
Driver 1	Available
Driver 2	On Task
Driver 3	Off Duty
Driver 4	Off Duty
Driver 5	Available

Driver Manager

### Request Management

Current Open Requests

▼ Dock	▼ Time
North	2:00pm
North	4:00pm

Request Management

Logout

# Requests – Dispatcher cont.

- The dispatcher request screen contains all of the information that was entered by the dock foreman
- The dispatcher assigns a trailer by selecting the trailer information and assigns a driver by selecting the driver selection button

The screenshot displays the 'Orenda Marine Engines - Trailer Traffic Control System' interface. The top navigation bar includes 'Dashboard', 'Request Management', and 'Request (1001)'. A 'Back' button is located below the navigation bar. The main content area is titled 'Request (1001)' and includes a 'Change Log' button. The 'Request Information' section contains fields for Dock (North), Bay (7), Foreman (Foreman North), Status (Pending), P.O. No., Delivery (11/14/2012), Time (2:00 pm), Part (Ignition Packs), and Shipper Name (Alang Marine Services). The 'Trailer Information' section has a 'Trailer Selection' button and fields for Trailer Number and Shipper Number. The 'Driver Information' section has a 'Driver Selection' button and fields for Driver Name and Current Task. A 'Notes' section is located below these sections. A 'Submit' button is at the bottom right.

Request (1001)					
Request Information					
Dock :	Bay :	Foreman :	Status :	P.O. No.	
North	7	Foreman North	Pending		
Delivery :			Part :	Shipper Name :	
11/14/2012	2	00	pm	Ignition Packs	Alang Marine Services

Trailer Information		Driver Information	
Trailer Selection	Trailer Number :	Driver Selection	Driver Name :
	Shipper Number :		Current Task :

Notes:

Submit

# Requests – Dispatcher cont.

- The trailer list contains a list of all trailers that match the search criteria
- By default the list is sorted by the information entered into the request

Orenda Marine Engines - Trailer Traffic Control System

Dashboard > Trailer List

Back

**Search**

Trailer No.

Trailer Status

Bill of Lading No.

Shipper No.

Shipper Name

Purchase Order

Exclude :

☐ Empty

☐ Full

☐ Overdue

☒ Departed

☐ Pending

Contents

And/or/Excluding

And/or/Excluding

Arrival Date

Arrived After

Lot No.

▼ Trailer No.	▼ Shipper No.	▼ Shipper Name	▼ Contents	▼ Lot No.	▼ Arrival Date	▼ Overdue
T56	101	Alang Marine Services	Ignition Packs	145	11/14/2012	

Back 1 of ## Next

# Requests – Dispatcher cont.

Orenda Marine Engines - Trailer Traffic Control System

Dashboard > Request Management > Request (1001)

Back

**Request (1001)** Change Log

**Request Information**

Dock :  Bay :  Foreman :  Status :  P.O No. :

Delivery :    pm  Part:  Shipper Name:

**Trailer Information**

Trailer Number : T56  
Shipper Number : 101

**Driver Information**

Driver Name :  
Current Task :

Notes:



# Requests – Dispatcher cont.

- The driver list contains all drivers that are current on the job at Orenda regardless of their status
- The dispatcher can filter drivers as needed
- By selecting the number of tasks the dispatcher can see a list of all tasks assigned to the driver.

Orenda Marine Engines - Trailer Traffic Control System

Dashboard > Driver Manager

Back

Driver Manager

Search

Driver No.  Driver Name  Current Status

▼ Driver No.	▼ Driver Name	▼ Current Status	▼ Current Task	▼ # of Tasks
101	Driver 1	Available		
102	Driver 2	Available		
103	Driver 3	Available		
104	Driver 4	Available		
105	Driver 5	Available		

# Requests – Dispatcher cont.

Orenda Marine Engines - Trailer Traffic Control System

Dashboard > Request Management > Request (1001)

Back

**Request (1001)** Change Log

**Request Information**

Dock :  
North

Bay :  
7

Foreman :  
Foreman North

Status :  
Pending ▼

P.O No.

Delivery :  
11/14/2012 2 00 pm ▼

Part:  
Ignition Packs

Shipper Name:  
Alang Marine Services

**Trailer Information**

Trailer Selection

Trailer Number : T56  
Shipper Number : 101

**Driver Information**

Driver Selection

Driver Name : Driver 1  
Current Task : 1001

Notes:

Submit

# Driver Task Tracking System



# Task List View

- Main Screen for app
- Daily statistics with personalized information
- Grid with list of today's tasks. Shows information necessary to begin a task.
- Start a task from this view, finish it, or Report an issue identified before beginning.
- Menu options for switching views, going off duty or logging off.

## TTCS Driver Task Tracking

Charles Norris  
101

Tasks to complete: 3  
Tasks completed: 1

My Productivity

▼ Description	▼ Trailer #	▼ Seal #	▼ Due	▼ Comp
Deliver Trailer to North Dock	T56	S8908	2:00 pm	<input type="checkbox"/>
Remove Trailer from West Dock	T24	S2345	3:30 pm	<input type="checkbox"/>
Deliver Order to East Dock	T76	S1386	4:00 pm	<input type="checkbox"/>
Deliver Trailer to South Dock	T91	S9021	10:30 am	<input checked="" type="checkbox"/>
				<input type="checkbox"/>

Start

Finish

Report Issue

Task List

Current Task

Off Duty

Log Off

# Current Task View

- Trailer Information
  - displays information necessary to identify the trailer needed for this request
- Request information displays the details of the request; when and where you need to be
- Notes contains any additional notes added by either Dock Foreman or Dispatcher
- Finish your task from here or Report an issue on it.
- Menu options

The screenshot shows a tablet interface titled "Current Task". It features three main sections: "Trailer Information" with fields for Tailer Number (T56), Seal Number (S8908), Shipping Company (Transcon Trucking), and Task Due (2:00 pm); "Request Information" with fields for Pick Up (Yard - 145), Drop Off (North Dock - Bay 7), and Start time (N/A); and "Notes" with a text area containing placeholder text. Below these sections are three buttons: "Start", "Finish", and "Report Issue". At the bottom is a navigation bar with four options: "Task List", "Current Task" (highlighted), "Off Duty", and "Log Off". A home button is located at the very bottom of the tablet frame.

Current Task			
<b>Trailer Information</b>			
Tailer Number: T56	Shipping Company: Transcon Trucking		
Seal Number: S8908			
<b>Request Information</b>			
Pick Up: Yard - 145	Drop Off: North Dock - Bay 7		
Task Due: 2:00 pm	Start time: N/A		
<b>Notes</b>			
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla quam velit, vulputate eu pharetra nec, mattis ac neque. Duis vulputate commodo lectus, ac blandit elit			
Start Finish Report Issue			
Task List	Current Task	Off Duty	Log Off

# Task List View

## TTCS Driver Task Tracking

Charles Norris

101

Tasks to complete: 3

Tasks completed: 1

My Productivity

▼ Description	▼ Trailer #	▼ Seal #	▼ Due	▼ Comp
Deliver Trailer to North Dock	T56	S8908	2:00 pm	<input type="checkbox"/>
Remove Trailer from West Dock	T24	S2345	3:30 pm	<input type="checkbox"/>
Deliver Order to East Dock	T76	S1386	4:00 pm	<input type="checkbox"/>
Deliver Trailer to South Dock	T91	S9021	10:30 am	<input checked="" type="checkbox"/>
				<input type="checkbox"/>

Start

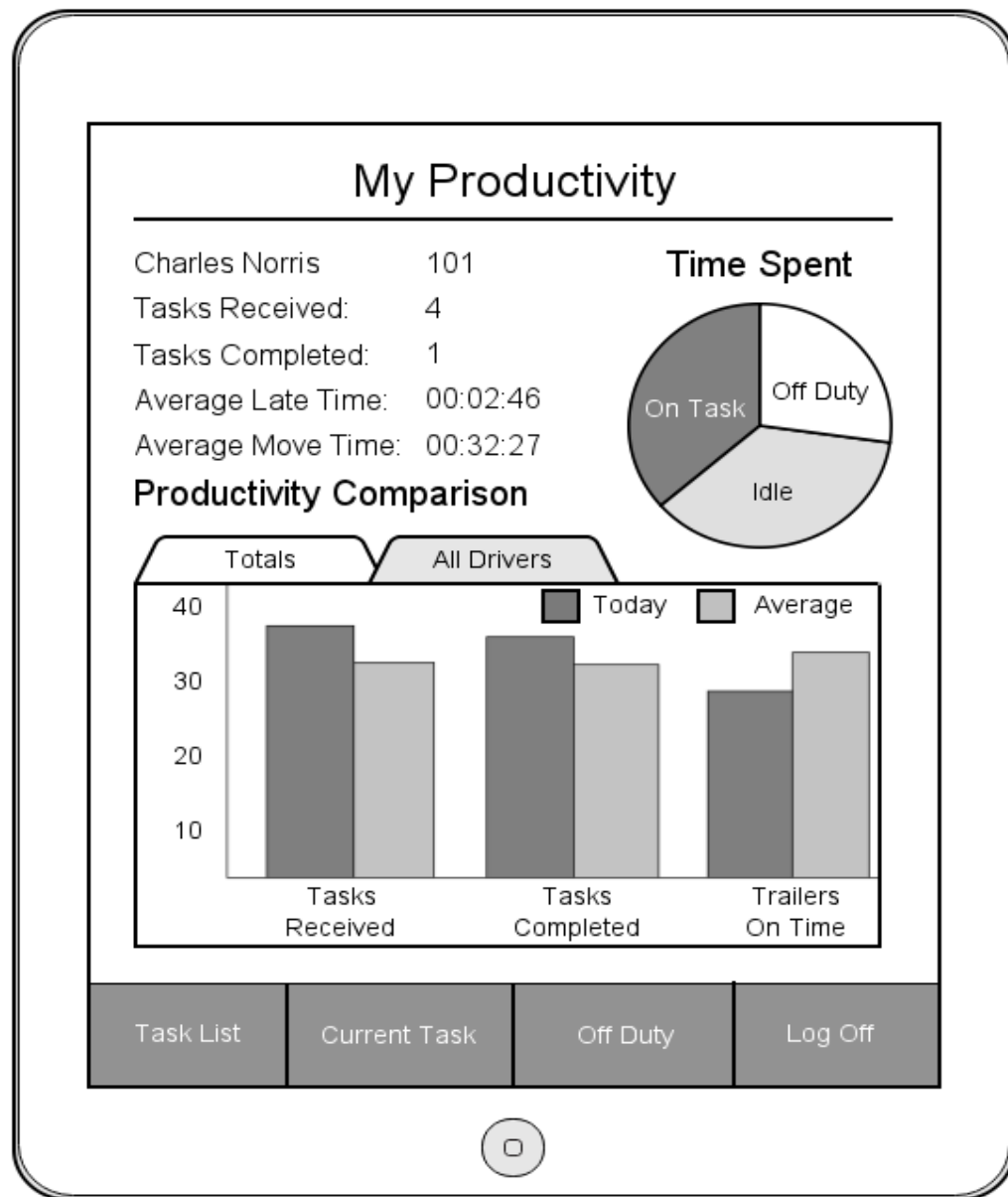
Finish

Report Issue

Task List
Current Task
Off Duty
Log Off

# My Productivity

- Personalized information
- Daily statistics for trailer deliveries
- Pie chart depicting how the driver is spending his/her time
- Bar chart displaying the driver's daily stats in comparison to the averages of all drivers for that day
- Menu options



# Task List View

## TTCS Driver Task Tracking

Charles Norris

101

Tasks to complete: 3

Tasks completed: 1

My Productivity

▼ Description	▼ Trailer #	▼ Seal #	▼ Due	▼ Comp
Deliver Trailer to North Dock	T56	S8908	2:00 pm	<input type="checkbox"/>
Remove Trailer from West Dock	T24	S2345	3:30 pm	<input type="checkbox"/>
Deliver Order to East Dock	T76	S1386	4:00 pm	<input type="checkbox"/>
Deliver Trailer to South Dock	T91	S9021	10:30 am	<input checked="" type="checkbox"/>
				<input type="checkbox"/>

Start

Finish

Report Issue

Task List
Current Task
Off Duty
Log Off



# Report Issue

- 'Reason' field to give a name to your reported issue (i.e. Broken Seal)
- Additional notes field to add anything the dispatcher might need to know
- Sends entered information to dispatcher along with current task information

Report Issue

Reason: Broken Seal

Additional Notes: Broken seal was found upon inspection before beginning the task

Submit

Q W E R T Y U I O P

A S D F G H J K L

↑ Z X C V B N M X

.?123 space return

# Trailer Departures



# Two Types of Trailer Departures

- Departure of an empty trailer
  - Selected by the dispatcher
  - Leaves from the yard
- Departure of a trailer with product
  - Is pre-arranged
  - Can leave from the yard or the dock

# Dispatcher Dashboard

Orenda Marine Engines - Trailer Traffic Control System

Trailer Management

Log an Arrival

Departure Queue

Trailer List

Trailers by Shipper

Broken Seal Incidents

Trailer Repair Incidents

Driver Management

Drivers / Availability

▼ Driver	▼ Availability
Driver 1	Available
Driver 2	On Task
Driver 3	Off Duty
Driver 4	Off Duty
Driver 5	Available

Driver Manager

Request Management

Current Open Requests

▼ Dock	▼ Time
North	4:00pm

Request Management

Logout

J G  
R C

Corey 36

# Trailer By Company Filter

- Used to select what companies will be displayed on the Trailer By Shipper List
- The dispatcher has the ability to filter out trailers based on different options.

The screenshot displays the 'Orenda Marine Engines - Trailer Traffic Control System' interface. A 'Trailer By Company Search' dialog box is open, allowing users to filter trailers by company. The dialog includes a search bar with 'Shipping Company X' selected, and buttons for 'Add All' and 'Add Company'. Below this, there are optional filters for 'Trailer No.', 'Due By' (4/22/2012), 'Status' (Empty), 'Due Status' (Overdue), and 'Total Cost'. A list of results shows 'Shipping Company A' and 'Shipping Company C', with a 'Remove Company' button. The background interface shows three main sections: 'Trailer Management' with buttons like 'Log an Arrival', 'Driver Management' with 'Drivers / Availability' and 'Driver'/'Available' dropdowns, and 'Request Management' with 'Current Open Requests' and a table of requests. A 'Logout' button is at the bottom right.

# Marking for Departure

- This screen contains a list of all trailers that match the criteria selected on the dialog

- Trailers are sorted by oldest to newest

Orenda Marine Engines - Trailer Traffic Control System

Dashboard
Trailer By Company List

Back
Print Report

Shipping Company A

▼ Trailer Number	▼ Location	▼ Arrival Date	▼ Status	▼ Due Status	▼ Overdue By	▼ Overall cost incurred	▼ Lot No.	▼ Depart?
T56	Lot	11/14/2012	Available		N/A	N/A	145	<input checked="" type="checkbox"/>
Q23	North Dock	On Task			N/A	N/A	12	<input type="checkbox"/>

1 of 1

# Departure Queue

- Contains a list of all trailers that are marked for departure.
- Used by the dispatcher when a trailer returns from the lot with a trailer.

The screenshot displays the 'Orenda Marine Engines - Trailer Traffic Control System' interface. It features three main panels: 'Trailer Management', 'Driver Management', and 'Request Management'. The 'Trailer Management' panel includes buttons for 'Log an Arrival', 'Departure Queue', 'Trailer List', 'Trailers by Ship', 'Broken Seal Incid', and 'Trailer Repair Incid'. The 'Driver Management' panel has a 'Drivers / Availability' dropdown and a 'Driver Manager' button. The 'Request Management' panel shows 'Current Open Requests' with a 'Time' dropdown and a 'Request Management' button. A 'Departure Queue' window is open, displaying a table with two columns: 'Trailer No.' and 'Trucking Company'. The table contains one entry: 'T56' and 'Trans Con Trucking'. A 'Depart' button is located at the bottom right of the 'Departure Queue' window. A 'Logout' button is positioned at the bottom right of the main interface.

Trailer No.	Trucking Company
T56	Trans Con Trucking

# Trailers Leaving With Product

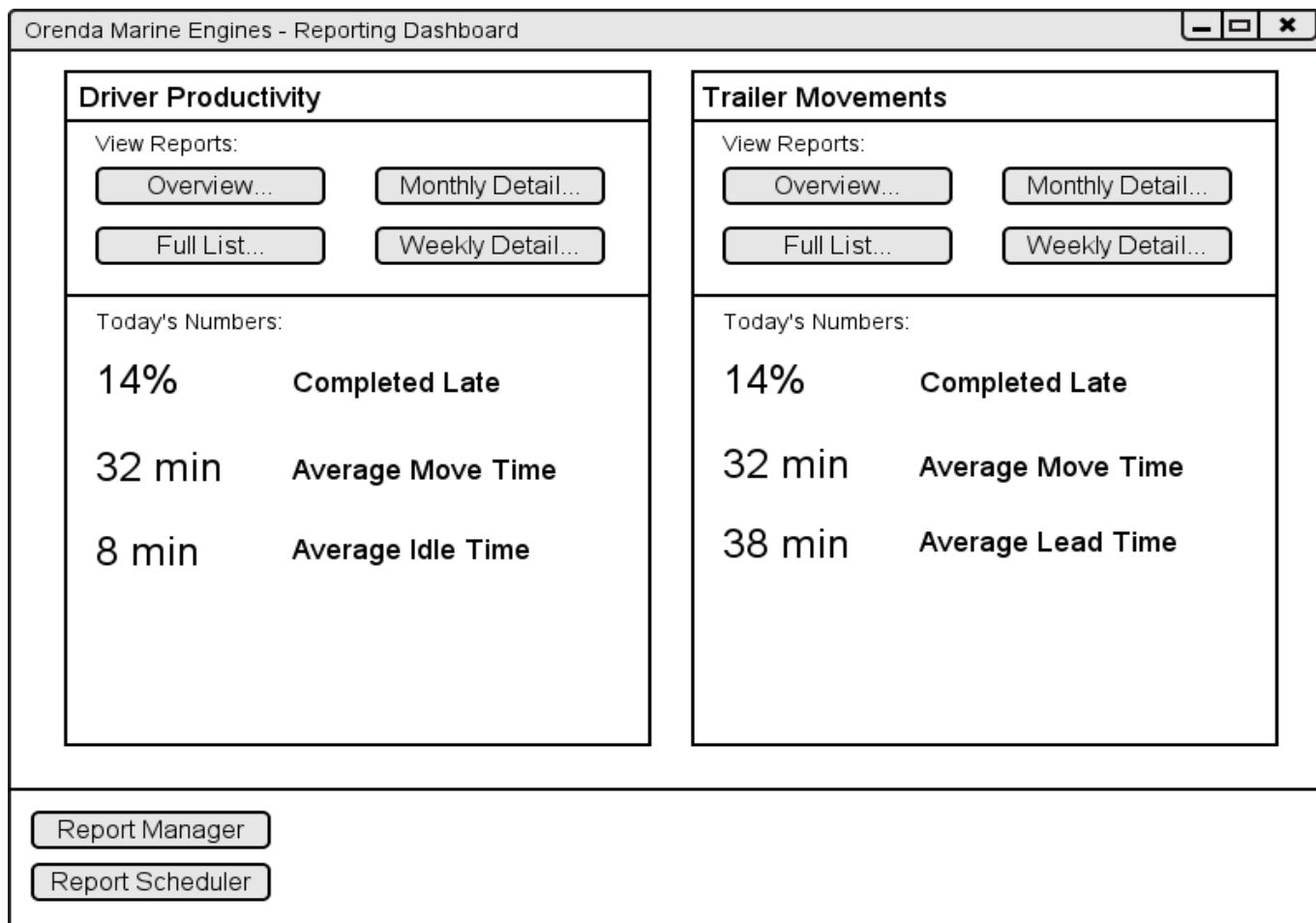
- Trailer can leave from the Dock or the Lot
- The Bill of Lading is used to check the trailer
- The trailer is marked as departed in the system once it leaves



# Executive Dashboards



# Executive Dashboard



# Report Panel Concept

Driver Productivity	
View Reports:	
<input data-bbox="332 436 610 486" type="button" value="Overview..."/>	<input data-bbox="672 436 950 486" type="button" value="Monthly Detail..."/>
<input data-bbox="332 515 610 565" type="button" value="Full List..."/>	<input data-bbox="672 515 950 565" type="button" value="Weekly Detail..."/>
Today's Numbers:	
14%	Completed Late
32 min	Average Move Time
8 min	Average Idle Time

- Access to all reports related to a category.
- Broad daily statistics.
- Fully configurable.

# Select a Report

Orenda Marine Engines - Reporting Dashboard

### Driver Productivity

View Reports:

Overview... Monthly Detail...

Full List...

Today's Numbers:

14% Completed

32 min Average Move Time

8 min Average Idle Time

### Trailer Movements

View Reports:

Overview... Monthly Detail...

Weekly Detail...

Completed Late

Average Move Time

38 min Average Lead Time

Driver Productivity - Overview

Report Begins: 4/22/2012

Report Ends: 4/22/2012

Run Report

Schedule Report

Report Manager

Report Scheduler

# Report View

- Filters depending on report selected.
- Sort by any column.
- Drill down into more detailed reports.
- Print reports based on current view.
- Export reports as PDF or spreadsheet.

Orenda Marine Engines - Reporting Dashboard

Dashboard Report Name Export...

Back

Moves Assigned: Max: 12 Min: 32

Moves Completed: Max: 12 Min: 32

Moves Incomplete: Max: 12 Min: 32

Late Moves: Max: 12 Min: 32

Move Time Less Than: 30 Minutes

▼ Name	▼ Number of Moves Assigned	▼ Number of Moves Completed	▼ Number of Moves Incomplete	▼ Percentage of Moves Complete	▼ Average Move Time	▼ Number of Late Moves	▼ Average Time Late	▼ Idle Time	▼ Break Time	▼ Total time
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Totals	# Value	# Value	# Value	--	--	# Value	--	HH:MM	HH:MM	HH:MM
Average Across Drivers	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM

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# Driver Productivity

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Figure 4-6

9 December 2012

## Driver Productivity

Reporting Period:

DD/MM/YYYY - DD/MM/YYYY

Name	Number of Moves Assigned	Number of Moves Completed	Number of Moves Incomplete	Percentage of Moves Complete	Average Move Time	Number of Late Moves	Average Time Late	Idle Time	Break Time	Total time
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM
Totals	# Value	# Value	# Value	--	--	# Value	--	HH:MM	HH:MM	HH:MM
Average Across Drivers	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM



# Driver Detail

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Figure 4-8

9 December 2012

Driver Weekly Detail

Reporting Period:

DD/MM/YYYY – DD/MM/YYYY

Name	Number of Moves Assigned	Number of Moves Completed	Number of Moves Incomplete	Percentage of Moves Complete	Average Move Time	Number of Late Moves	Average Time Late	Idle Time	Break Time	Total Time
Driver Name	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM	HH:MM

	Week Of	Moves Completed	Moves Assigned	Moves Incomplete	Move Time	Late Moves	Time Late	Break Time	Idle Time
Week Subtotal	DD/MM/YYYY	# Value	# Value	# Value	--	# Value	--	--	--
Average per day		# Value	# Value	# Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM
Week Subtotal	DD/MM/YYYY	# Value	# Value	# Value	--	# Value	--	--	--
Average per day	--	# Value	# Value	# Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM
Week Subtotal	DD/MM/YYYY	# Value	# Value	# Value	--	# Value	--	--	--
Average per day	--	# Value	# Value	# Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM
Week Subtotal	DD/MM/YYYY	# Value	# Value	# Value	--	# Value	--	--	--
Average per day	--	# Value	# Value	# Value	HH:MM	# Value	HH:MM	HH:MM	HH:MM
Month Subtotal	MM/YYYY	# Value	# Value	# Value	--	# Value	--		--
Average per week		# Value	# Value	# Value	HH:MM	# Value	HH:MM		HH:MM



# Trailer Movements

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Figure 4-9

9 December 2012

## Trailer Movements

Reporting Period:

DD/MM/YYYY – DD/MM/YYYY

Dock	Number of Moves Requested	Number of Moves Completed To	Number of Moves Completed From	Percentage of Moves Complete	Average Move Time	Number of Late Moves	Average Time Late	Average Request Lead Time
North	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM
South	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM
East	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM
West	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM
Totals	# Value	# Value	# Value	--	--	# Value	--	HH:MM
Average Across Docks	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM



# Trailer Movements - Weekly

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Figure 4-11

9 December 2012

## Trailer Movements - Weekly

Reporting Period:

DD/MM/YYYY - DD/MM/YYYY

Dock	Number of Moves Requested	Number of Moves Completed To	Number of Moves Completed From	Percentage of Moves Complete	Average Move Time	Number of Late Moves	Average Time Late	Average Request Lead Time
North	# Value	# Value	# Value	% Value	HH:MM	# Value	HH:MM	HH:MM

	Week Of	Moves Requested	Moves To Dock	Moves From Dock	Move Time	Late Moves	Time Late	Request Lead Time
Week Subtotal	DD/MM/YYYY	# Value	# Value	# Value	--	# Value	--	--
Average per day		# Value	# Value	# Value	HH:MM	# Value	HH:MM	HH:MM
Week Subtotal	DD/MM/YYYY	# Value	# Value	# Value	--	# Value	--	--
Average per day	--	# Value	# Value	# Value	HH:MM	# Value	HH:MM	HH:MM
Week Subtotal	DD/MM/YYYY	# Value	# Value	# Value	--	# Value	--	--
Average per day	--	# Value	# Value	# Value	HH:MM	# Value	HH:MM	HH:MM
Week Subtotal	DD/MM/YYYY	# Value	# Value	# Value	--	# Value	--	--
Average per day	--	# Value	# Value	# Value	HH:MM	# Value	HH:MM	HH:MM

# Additional Reports

- Dock Statistics
  - Request-focused view similar to Trailer Movements
- Trailer arrivals and departures
  - Matches purchase orders, bills of lading to arrivals, departures
- Drill down to a full list of every move or incident.

# Dashboard Features

- Report Dashboard Manager used to control the configuration of dashboard and panels.
- Report Scheduler used to view and modify scheduled reports.

The screenshot shows a web application window titled "Orenda Marine Engines - Reporting Dashboard". The interface is divided into two main columns: "Driver Productivity" and "Trailer Movements". Each column has a "View Reports:" section with four buttons: "Overview...", "Monthly Detail...", "Full List...", and "Weekly Detail...". Below this is a "Today's Numbers:" section with three rows of data. At the bottom of the window, there are two buttons: "Report Manager" and "Report Scheduler".

Driver Productivity	
View Reports:	
Overview...	Monthly Detail...
Full List...	Weekly Detail...
Today's Numbers:	
14%	Completed Late
32 min	Average Move Time
8 min	Average Idle Time

Trailer Movements	
View Reports:	
Overview...	Monthly Detail...
Full List...	Weekly Detail...
Today's Numbers:	
14%	Completed Late
32 min	Average Move Time
38 min	Average Lead Time

Report Manager

Report Scheduler

# Report Dashboard Manager

Orenda Marine Engines - Reporting Dashboard

Dashboard > Report Manager

Back

Driver Productivity ☒ Panel Active

Overview	<input checked="" type="checkbox"/>
Monthly	<input checked="" type="checkbox"/>
Weekly	<input checked="" type="checkbox"/>
Full List	<input checked="" type="checkbox"/>

Run Report Schedule Report

Trailer Movements ☒ Panel Active

Overview	<input checked="" type="checkbox"/>
Monthly	<input checked="" type="checkbox"/>
Weekly	<input checked="" type="checkbox"/>
Full List	<input checked="" type="checkbox"/>

Run Report Schedule Report

# Scheduling

- View all reports that have been saved.
- Schedule new reports.
- Edit details of existing scheduled reports.
- Remove reports from schedule.

Orenda Marine Engines - Reporting Dashboard

Dashboard > Report Scheduler

Back

▼ Report Name	▼ Repeat Frequency	▼ Schedule Dates	▼ Sent To
Driver Productivity - Monthly Detail	Monthly	1st of Month	j.perez
Trailer Movements - Overview	Weekly	Mon/Fri	j.perez

Add Report... Edit Details... Remove Selected

J	G
R	C

# Implementation Plan

Development and QA



Installation



Training



Deployment

# Development

- Agile development methodology
  - Daily morning scrums
- Progress updates every week at minimum
  - Deliver working sections and prototypes of the system
- 16 weeks – QA begins 2 weeks after development



# Quality Assurance

- QA team working closely with developers
- Identifying issues before they can become a problem
- User Acceptance Testing during training –  
1 week

# Networking, Hardware and Software Installation

- Overlaps the ending of the QA and development phase
  - Networking infrastructure – 2 weeks
  - Hardware – 1 week
- Software deployment can begin as soon as development is finished
  - Software – 1 week

# Training

- Dispatchers – 2 weeks of training each
- Dock foremen – 1 week each
- Executives – 1 week each
- Drivers – 2 weeks total 3 drivers / day

# Final Deployment and Activation

- One month of running systems together, during training, with mock data.
- Two weeks of live data, systems running together.

# Hardware and Equipment



# Hardware Overview

- Dispatchers will be receiving desktop workstations with dual monitors to allow for the Yard map to be displayed alongside the application
- Dock foreman's will be receiving a desktop workstation, one will be placed in each dock for each foreman to use.
- The executives will be given laptops to use for report generation as well as a printer for the ability to get the printed reports as they are needed
- An onsite server will be used to run the database. As well as a separate hard drive backup
- Drivers will be receiving Galaxy Tab II 7.0 with mounts for inside of the tractors.
- The yard is be blanketed by wireless connection using access points stationed around the facilities

# Cost/Benefits Analysis



# Costs

**Labour** \$161,360

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- Development
- Implementation
- Training

**Material** \$1,906.7

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- Tablet Cases
- Tablet Mounts
- RFID ID Cards

**Hardware** \$25,119.98

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- Dispatcher, Dock Foreman and Executive computers/work stations
- Networking Gear
- Fiber optics installation

**Total Cost** \$188,386.68

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# Benefits



## Labour

- Dispatcher entering bill of lading - \$22,300 per year
- Dispatcher entering making requests - \$13,400 per year
- Driver FTE – 2 per year



## Business

- Overdue Trailer Savings – \$43,200 per year
- Phone Plan - \$5,800 per year
- Reduced Work Stoppage – \$72,000 per year

# Return on Investment

Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
-187,606.68	250,421.74	217,758.03	189,354.81	164,656.36	143,179.44
-187,606.68	62,815.06	280,573.09	469,927.91	634,584.26	777,763.71



# Conclusion

- Break down in communication causing inefficiencies
  - Communication handled through requests
- Lack of reporting
  - Robust reporting system
- Lack of accountability
  - Reports provide trace to root cause
- Slow manual processes
  - Eliminated or automated

Questions?