Trial Analytics Documentation

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Overview

“Analytics” allow us to take advantage of all of the information associated with a production schedule.

These reports are interactive:

- They allow you to drill-down to the underlying data.
- They allow you to group and filter based on pre-defined categories.
- They allow you to add comments and email pages to the appropriate personnel.

These reports are future looking:

- A real advantage of using our scheduling information is that it is forward looking.
- We can use this information to better plan our operations based on real needs.

These reports can show current status:

- Based on the production schedule, we can see what work is currently being worked on.
- Based on the current work, we can see which orders will or will not meet the customer’s required date.

These reports can also show history:

- For customer service purposes, it is advantageous to know what has changed on a customer’s order.
- Changes to production orders that fulfill sales orders can help you manage late order surprises.
- Comparing “standards” with “actuals” will allow you to create better standards.

Roles

We have defined 5 roles and a group of analytics for each these roles.

Customer Service – Information that helps your customer service representative answer customer's questions.

Finance Manager – Information associated with costs and revenue that helps determine how a plant is performing.

Manufacturing Manager – Information associated with current activity and future capacity.

Operations Manager – Information associated with demands on the plant associated with the production schedule.

Planner – Information associated with planning and executing a production schedule.

Dashboards

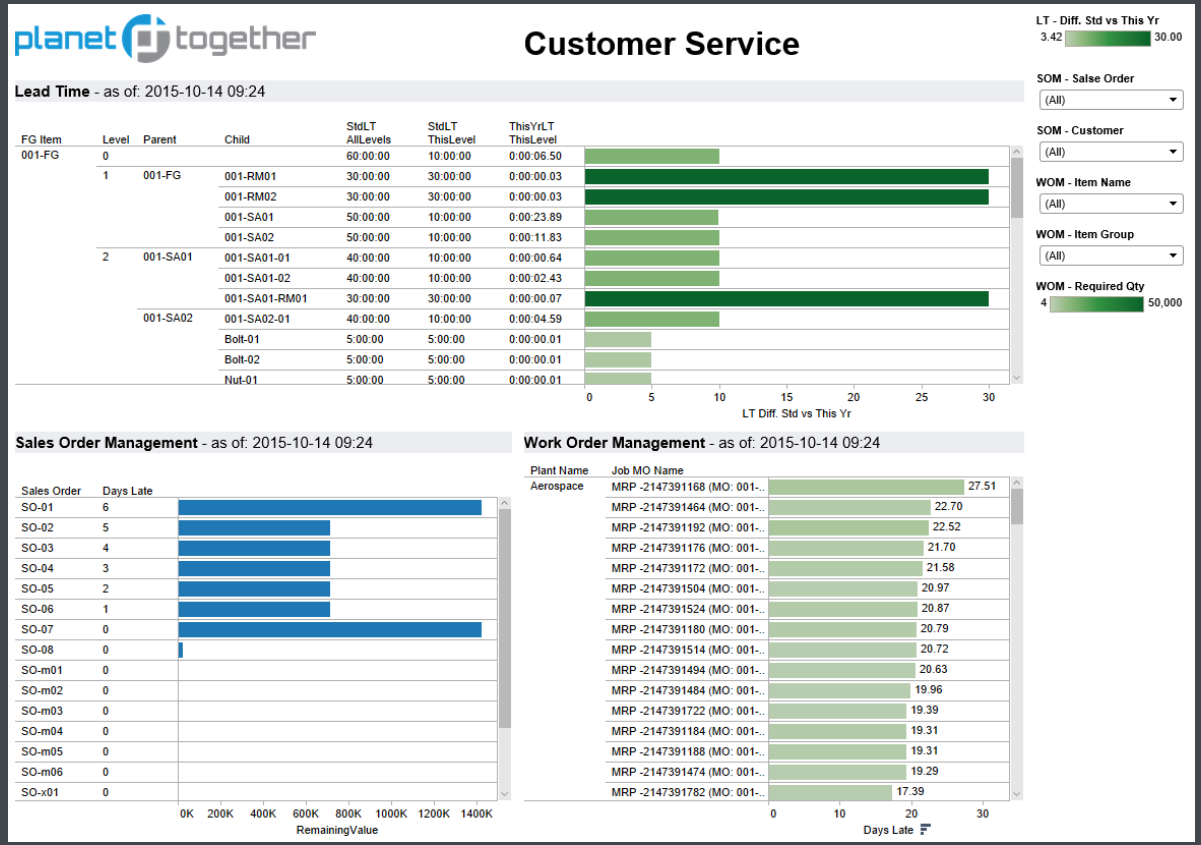
A “Dashboard” is a group of analytics.

The analytics displayed are a subset of the full analytic reports and are intended to give you a quick glimpse of desired categories of information.

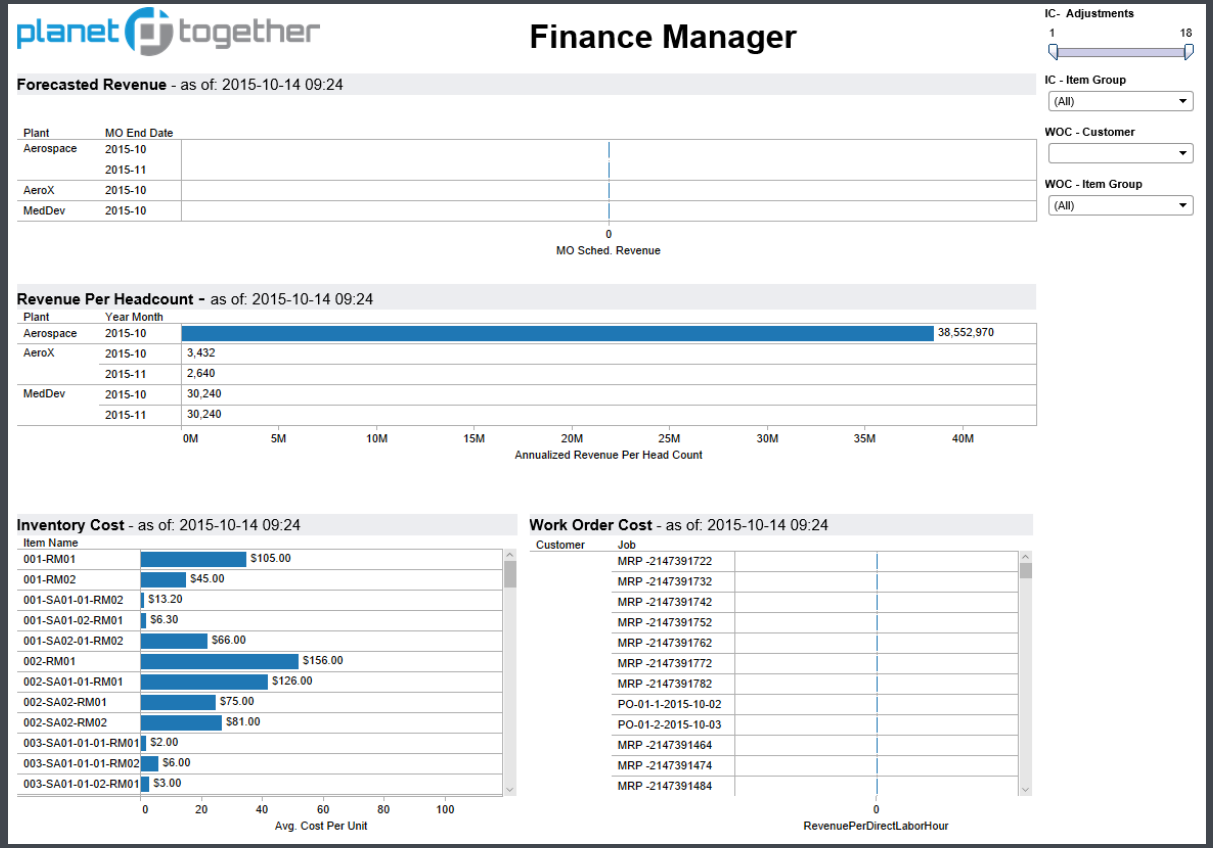
The following 5 slides will show you the individual dashboards.

The associated analytics will be described in more detail after the display of the dashboards.

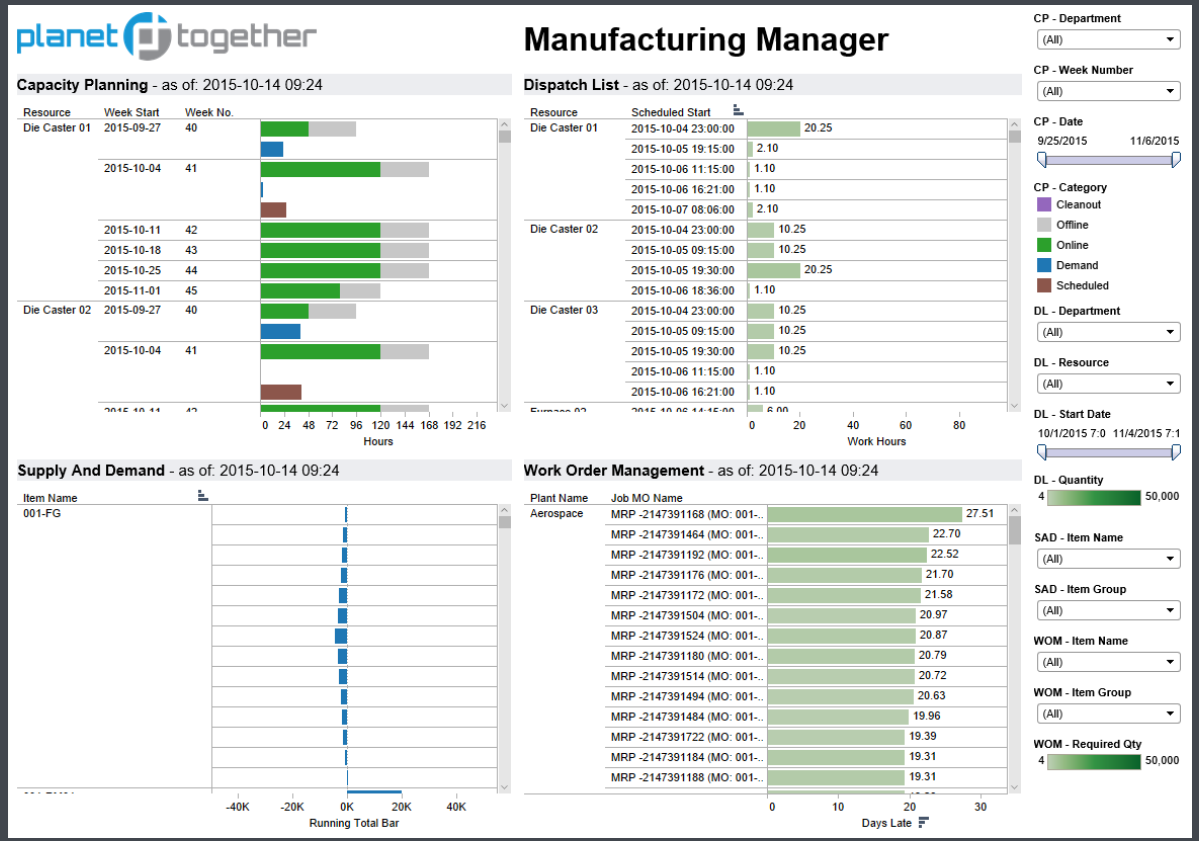
Customer Service



Finance Manager

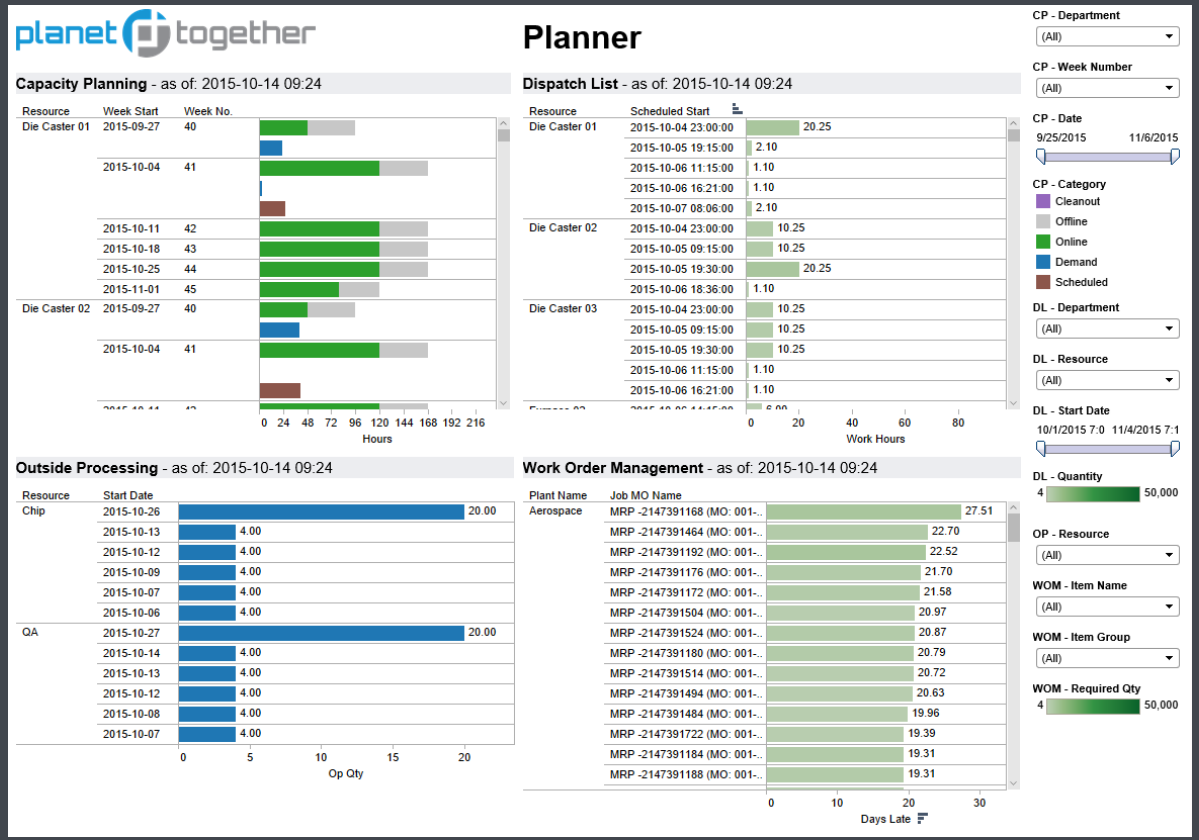


Manufacturing Manager



Operations Manager

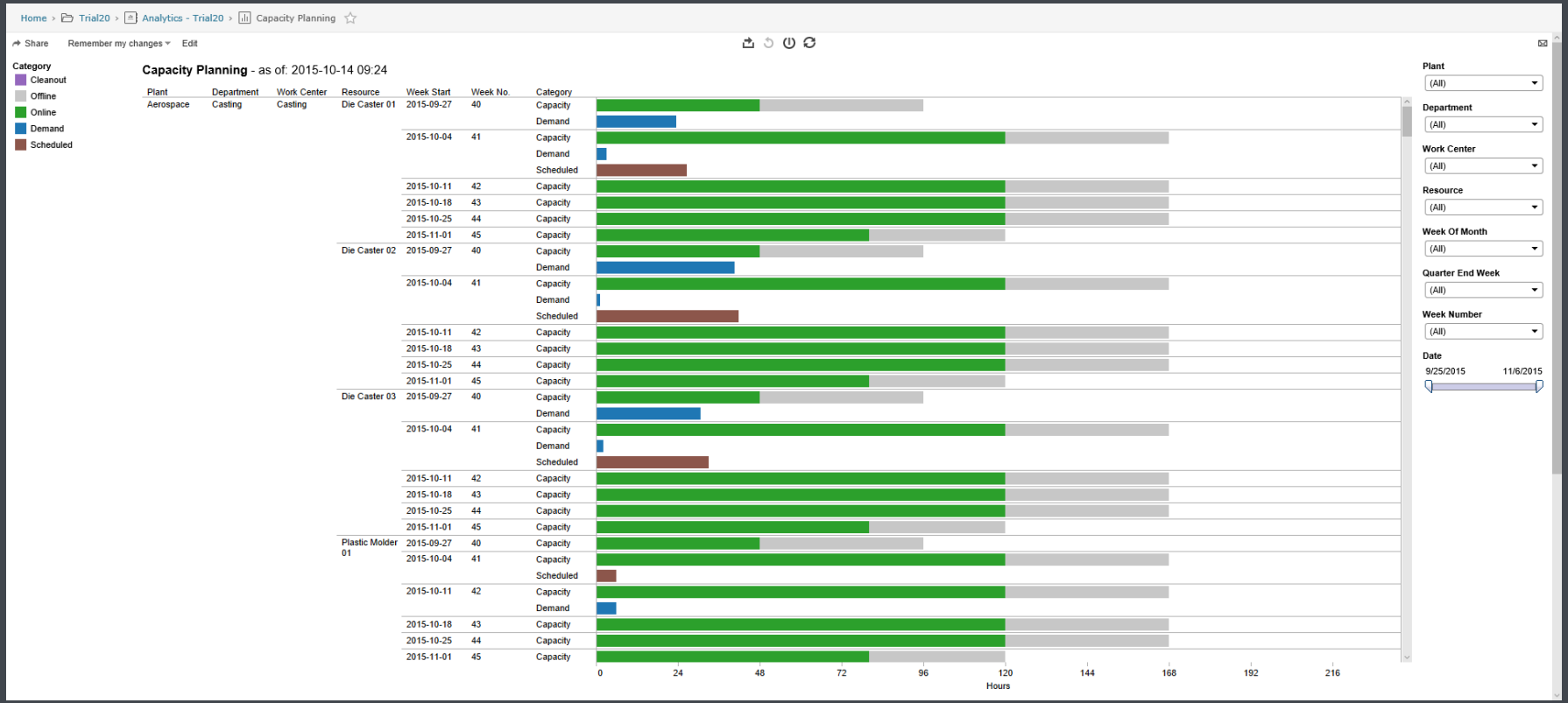
Planner


planet together
Planner
Capacity Planning - as of: 2015-10-14 09:24
Resource
Week Start
Week No.
Die Caster 01
2015-09-27
40
2015-10-04
41
2015-10-11
42
2015-10-18
43
2015-10-25
44
2015-11-01
45
Die Caster 02
2015-09-27
40
2015-10-04
41
0 24 48 72 96 120 144 168 192 216
Hours
Dispatch List - as of: 2015-10-14 09:24
Resource
Scheduled Start
Die Caster 01
2015-10-04 23:00:00
20.25
2015-10-05 19:15:00
2.10
2015-10-06 11:15:00
1.10
2015-10-06 16:21:00
1.10
2015-10-07 08:06:00
2.10
Die Caster 02
2015-10-04 23:00:00
10.25
2015-10-05 09:15:00
10.25
2015-10-05 19:30:00
20.25
2015-10-06 18:36:00
1.10
Die Caster 03
2015-10-04 23:00:00
10.25
2015-10-05 09:15:00
10.25
2015-10-05 19:30:00
10.25
2015-10-06 11:15:00
1.10
2015-10-06 16:21:00
1.10
0 20 40 60 80
Work Hours
Outside Processing - as of: 2015-10-14 09:24
Resource
Start Date
Chip
2015-10-26
20.00
2015-10-13
4.00
2015-10-12
4.00
2015-10-09
4.00
2015-10-07
4.00
2015-10-06
4.00
QA
2015-10-27
20.00
2015-10-14
4.00
2015-10-13
4.00
2015-10-12
4.00
2015-10-08
4.00
2015-10-07
4.00
0 5 10 15 20
Op Qty
Work Order Management - as of: 2015-10-14 09:24
Plant Name
Job MO Name
Aerospace
MRP -2147391168 (MO: 001-..
27.51
MRP -2147391464 (MO: 001-..
22.70
MRP -2147391192 (MO: 001-..
22.52
MRP -2147391176 (MO: 001-..
21.70
MRP -2147391172 (MO: 001-..
21.58
MRP -2147391504 (MO: 001-..
20.97
MRP -2147391524 (MO: 001-..
20.87
MRP -2147391180 (MO: 001-..
20.79
MRP -2147391514 (MO: 001-..
20.72
MRP -2147391494 (MO: 001-..
20.63
MRP -2147391484 (MO: 001-..
19.96
MRP -2147391722 (MO: 001-..
19.39
MRP -2147391184 (MO: 001-..
19.31
MRP -2147391188 (MO: 001-..
19.31
0 10 20 30
Days Late
CP - Department
(All)
CP - Week Number
(All)
CP - Date
9/25/2015
11/6/2015
CP - Category
Cleanout
Offline
Online
Demand
Scheduled
DL - Department
(All)
DL - Resource
(All)
DL - Start Date
10/1/2015 7:0
11/4/2015 7:1
DL - Quantity
4
50,000
OP - Resource
(All)
WOM - Item Name
(All)
WOM - Item Group
(All)
WOM - Required Qty
4
50,000

Analytics Library

Capacity Planning (by Plant, by Department)
Dispatch List
Forecasted Revenue
Inventory Cost
Lead Time
On-Time Performance (by Department, by Work Center)
Operator Qualification
Outside Processing
Revenue Per Headcount
Sales Order Change
Sales Order Management
Scrap After Operation
Shipping List
Supply And Demand
Work Order Cost
Work Order Management

Capacity Planning



Capacity Planning

Capacity Planning groups information by week into three main categories: Capacity, Demand, and Schedule.

Capacity is broken up into 4 categories: Online (green), Overtime (red), Offline (gray), Cleanout (purple).
These categories are representative of the Capacity Intervals in the PlanetTogether software.
The 4 categories total 168 hours, which is equivalent to 7 days a week, 24 hours a day.

Demand (blue) is calculated based on being able to run the current production orders based on need date and ignoring constraints.

Schedule (brown) represents the current production orders with capacity and constraints taken into consideration.

You can filter the data by: Date, Department, Work Center, and Resource.

Similar reports aggregate to show by Plant and Department.

Capacity Planning

Points of Analysis:

- If you see overtime capacity in red and not enough scheduled work for that week, you may want to reduce the overtime.

- If you see demand that is less than capacity and yet far greater than what is scheduled, then you may want to check to see if the resource is a bottleneck or is being bottlenecked. You can use the On-Time Performance analytics for this.

- If you see the capacity bar surpassing 168 hours in a week, then you may have overlapping capacity intervals defined in the APS system. This should not occur.

- In general, it would be nice to have your demand match your schedule, but in some cases you may see a slightly higher demand if you are pushing your machines a little faster than their standard rate.

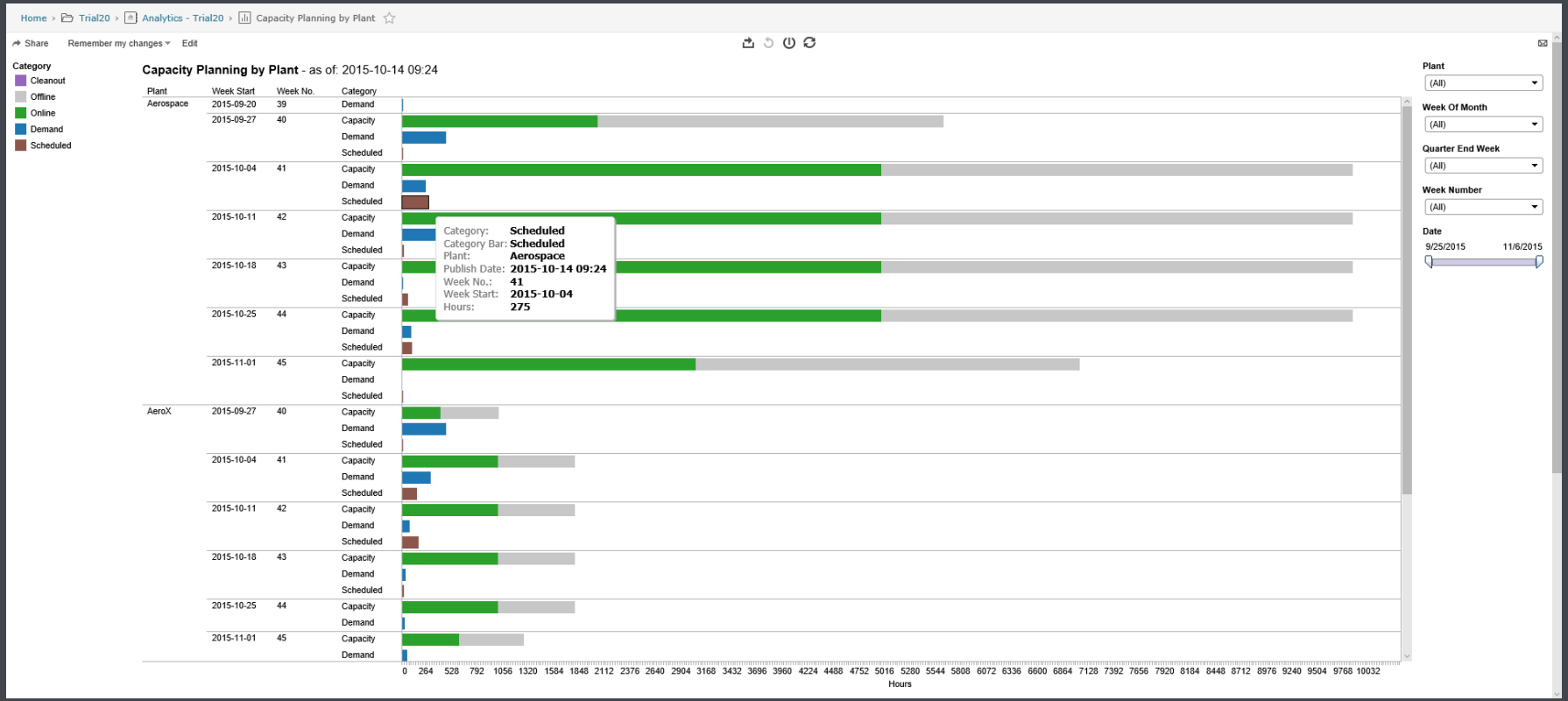
Capacity Planning

Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

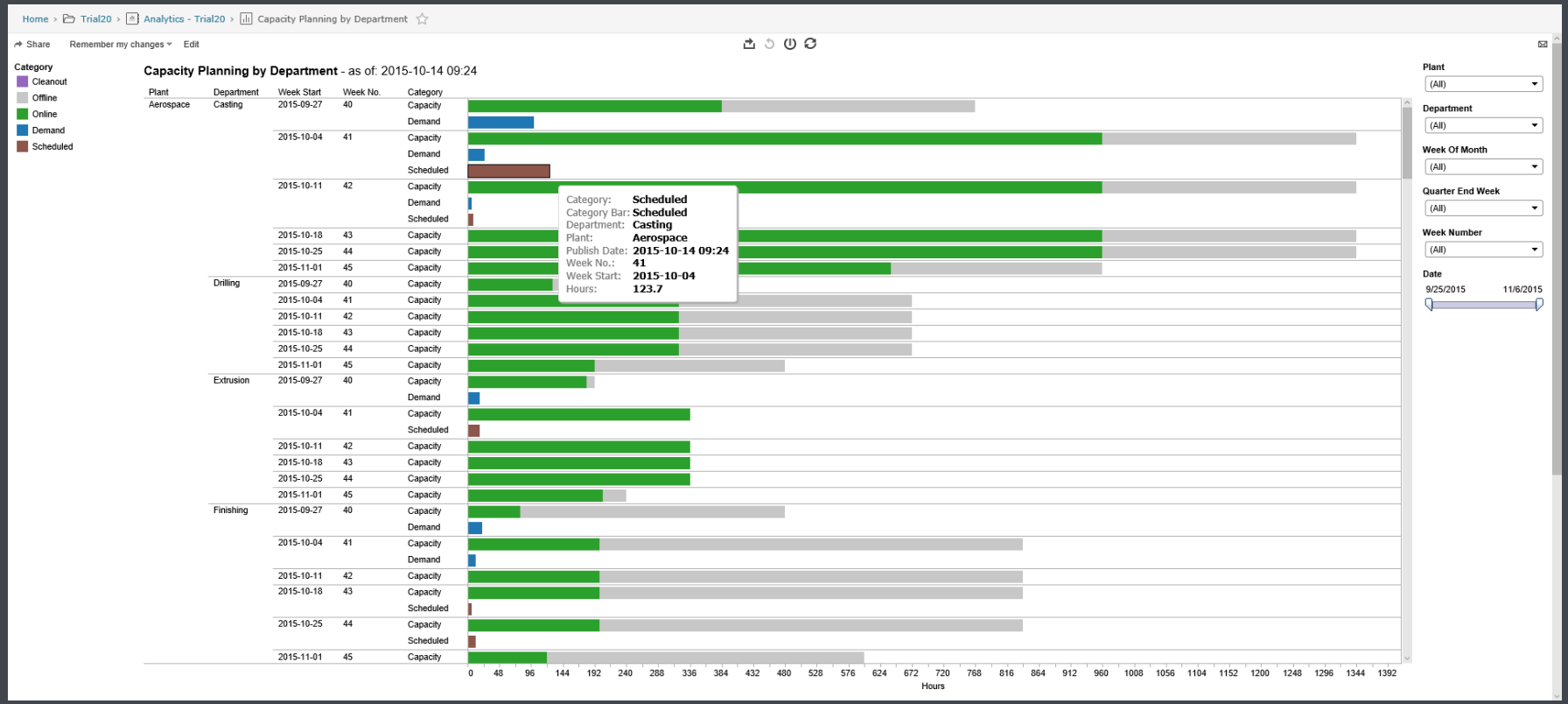
Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.

Category Bar	Date	Department	Hours	Job Name	Number of Records	Plant	Publish Date	Quarter End Week	Resource	Week No.	Week Of Month	Week Start	Work Center
Scheduled	10/5/2015	Casting	2.1	MRP -2147391524	1	Aerospace	2015-10-14 09:24		Die Caster 01	41	1st week	2015-10-04	Casting
Scheduled	10/6/2015	Casting	1.1	MRP -2147391514	1	Aerospace	2015-10-14 09:24		Die Caster 01	41	1st week	2015-10-04	Casting
Scheduled	10/6/2015	Casting	1.1	MRP -2147391494	1	Aerospace	2015-10-14 09:24		Die Caster 01	41	1st week	2015-10-04	Casting

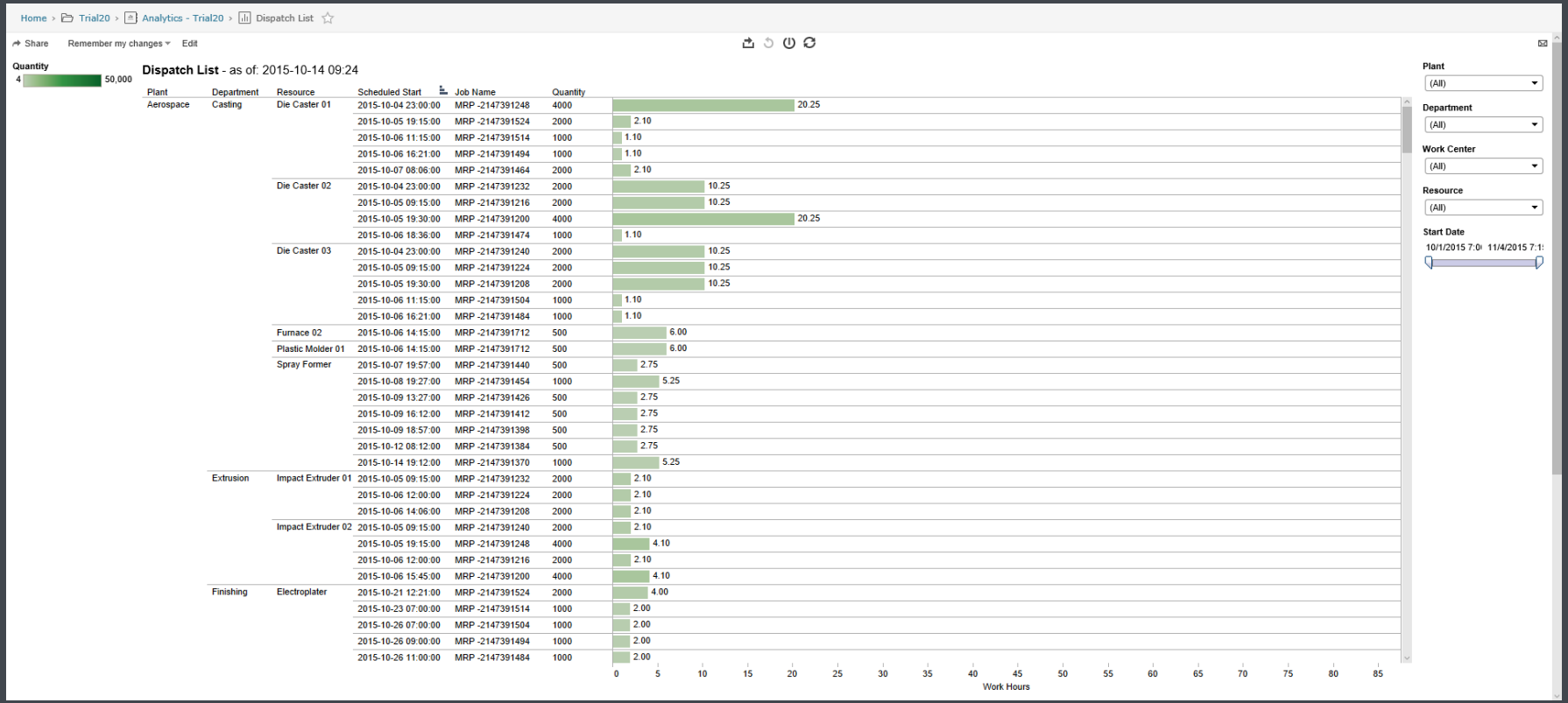
Capacity Planning by Plant



Capacity Planning by Department



Dispatch List



Dispatch List

The Dispatch List shows the current production schedule for each resource.

You can filter the data by Department, Work Center, Resource, Capability, and Date.

The color gradient represents the Quantity to be produced.

Dispatch List

Points of Analysis:

- This should be a straight-forward list of what is scheduled to run on each resource. One line per scheduled task.

- Long running activities may signify problems with the standard run-rates. You may want to review these. If you are using templates, you may want to also view the LeadTime analytics to compare your standards versus your actuals.

Dispatch List

Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

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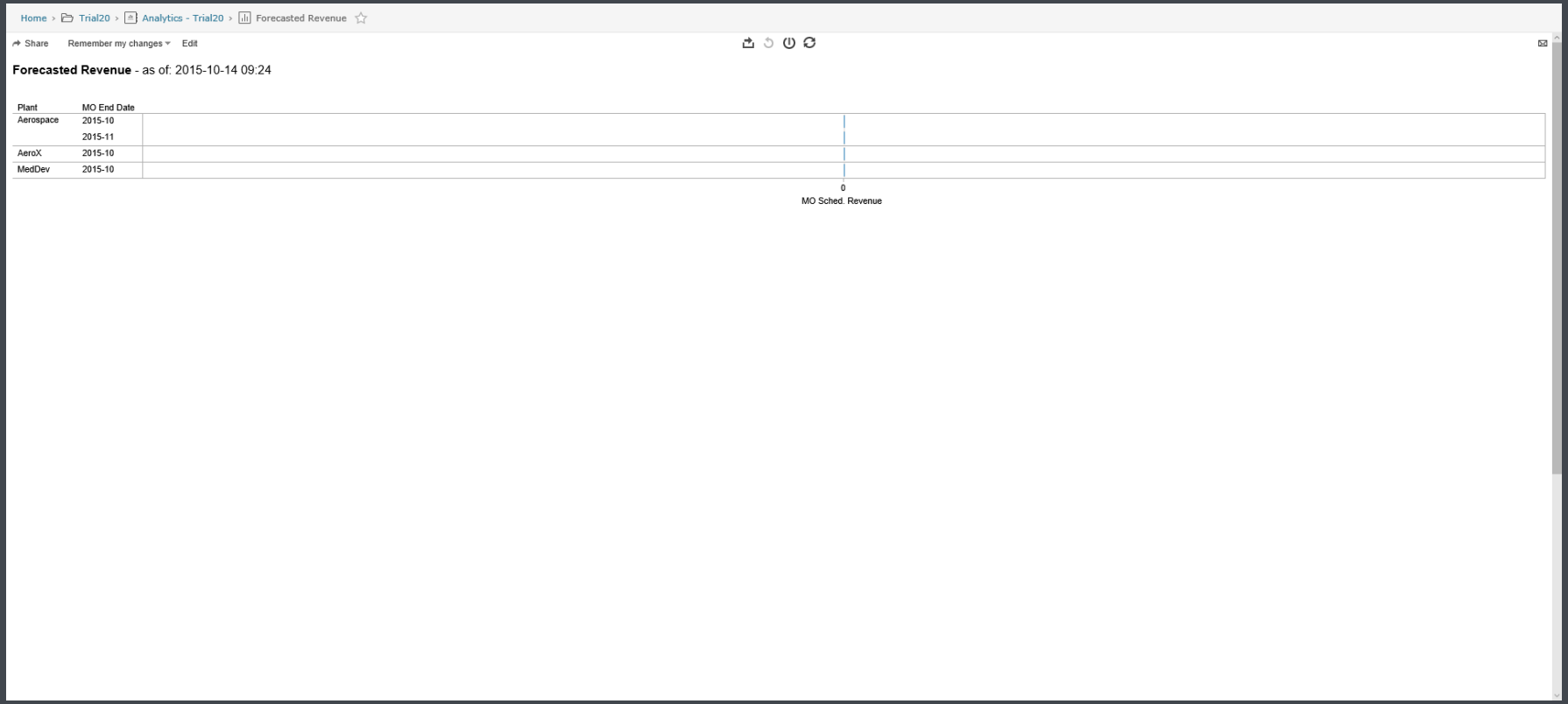
Department:	**Casting**
Quantity:	**4000**
Job Name:	**MRP -2147391248**
Plant:	**Aerospace**
Publish Date:	**2015-10-14 09:24**
Resource:	**Die Caster 01**
Scheduled Start:	**2015-10-04 23:00:00**
Work Center:	**Casting**
Year of ScheduledStartDate:	**2015**
Expected Finish Qty:	**4,000**
Work Hours:	**20.25**

Activity	Capability	Customer	Department	Quantity	Expected Finish Qty	Job Hold Date	Job Name	MO Name	Need Date	Number of Records	Op Name	Plant
10	Die Cast		Casting	4000	4,000		MRP -2147391248	001-SA01-01 \#-2147391247	2015-09-30 21:30:00	1	10	Aerospace

Priority	Item Desc	Item Name	Production Status	Publish Date	Resource	Scheduled End	Scheduled Hours	ScheduledStartDate	Scheduled Start	Slack Days	Work Hours	Work Center
0	Dynamo Hum	001-SA01-01	Waiting	2015-10-14 09:24	Die Caster 01	2015-10-05 19:15:00	20.25	10/4/2015 11:00:00 PM	2015-10-04 23:00:00	-5.23	20.25	Casting

Forecasted Revenue



Forecasted Revenue

Forecasted Revenue projects revenue based on the current production schedule.
The costs and profit is shown for individual jobs in the underlying data.
Your current month end data will only include the current production orders, so halfway through the month the total will be about half of what you might expect.
The future months can only project revenue based on the current schedule. It does not show forecasts.
If no production order has been created to fulfill a sales order, then that revenue will not be included in the total.

There are not filters or color gradients for the data.

Forecasted Revenue

Points of Analysis:

- This analytic is dependent on the importation of cost and revenue data into the APS system. If you see zeros, then you may need to address the importing of this data.

- If you are using Sales Orders and MRP, then you may also see zero revenue. Revenue is currently imported at the Job level and MRP generated Jobs don't include this value.

Forecasted Revenue

Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

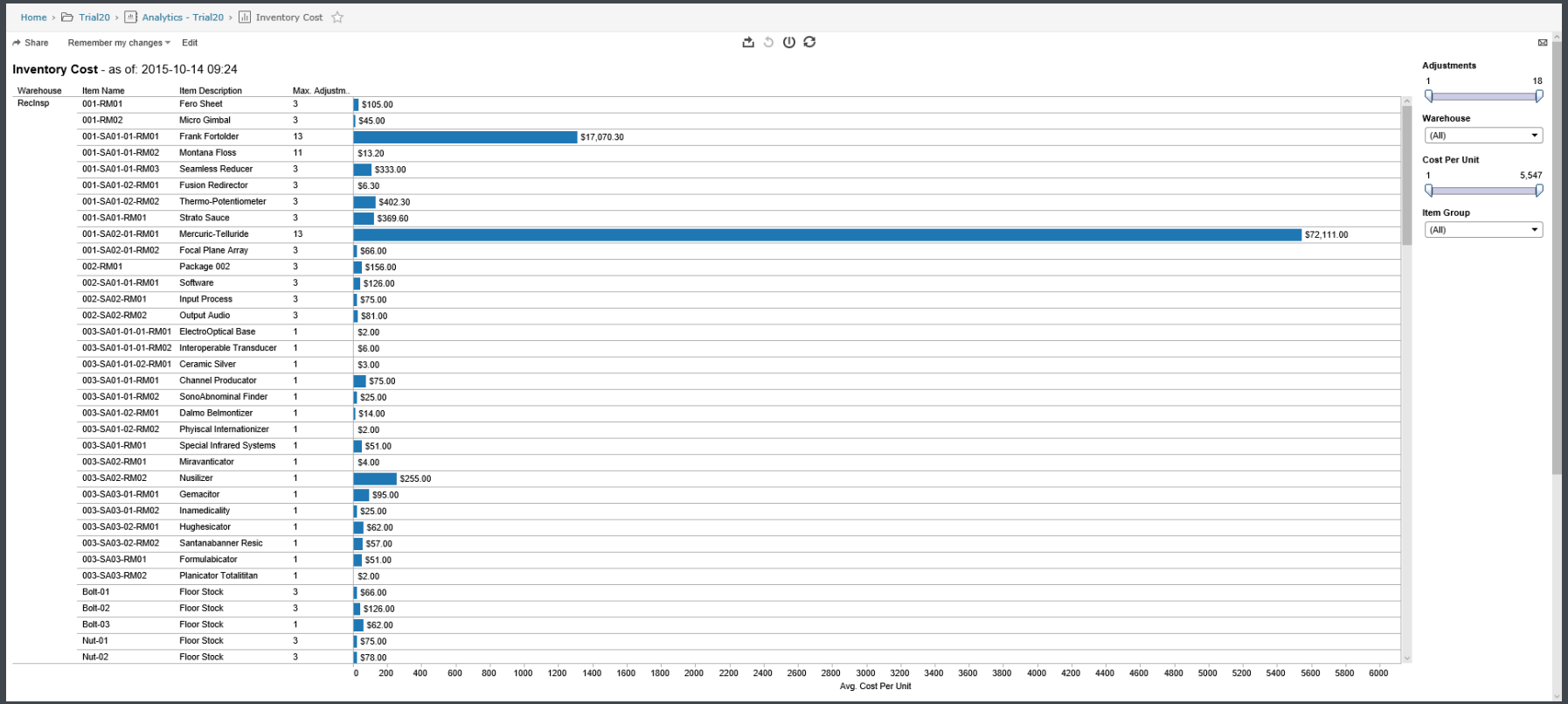
Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.

Plant:	**Aerospace**
Publish Date:	**2015-10-14 09:24**
MO End Date:	**2015-10**
MO Sched. Revenue:	**0**

Job Name	Job Profit	Job Revenue	Job Total Cost	MO Labor Cost	MO Machine Cost	MO Material Cost	MO Name
MRP -2147391168	-4,960	0	4,960	1,600	3,360	0	001-SA01-02\#-2147391167
MRP -2147391192	-4,960	0	4,960	1,600	3,360	0	001-SA01-02\#-2147391191
MRP -2147391104	-4,655	0	4,655	1,605	3,050	0	001-SA02-01\#-2147391103

Item Desc	Item Name	MO Qty	MO Sched. Revenue	Number of Records	Plant	Publish Date	MO End Date
Cold Cell Amplifier	001-SA01-02	4,000	0	1	Aerospace	2015-10-14 09:24	2015-10
Cold Cell Amplifier	001-SA01-02	4,000	0	1	Aerospace	2015-10-14 09:24	2015-10
Beam Sequencer	001-SA02-01	4,000	0	1	Aerospace	2015-10-14 09:24	2015-10

Inventory Cost



Inventory Cost

- Inventory Cost is designed to show an item's unit cost and to also supply all of the underlying data that represents the transactions associated with that item.
- The transactions start with the Initial QOH.
- Demand against the item is represented by Forecasts, Sales Orders, Job Material components, and Transfers out of inventory.
- Supply for the item is represented by Purchase Orders, Job Products produced, and Transfers in to inventory.
- The cost is an imported value in the Item Master.

- You can filter by the number of transactions that have occurred for an item. This allows you to remove items with little activity.

Inventory Cost

- Points of Analysis:
- This analytic is dependent on the importation of cost data into the APS system. If you see zeros, then you may need to address the importing of this data.
- The underlying data that is used to determine this cost can be viewed in grid form within this analytic. You can also use the SupplyAndDemand analytic to see the individual transactions and how the affect the rise and fall of inventory.
- The cost of an item is more important when that value is high. In a way, it is like the ABC Code, we are mainly interested in the A items. In order to focus on these high value items, use the “Cost Per Unit” slider bar to reduce the selection set to what you feel is important. Please note that if the data coming in to the APS system is incorrect, then the reduced selection set might miss items that have costs listed inappropriately low.

Inventory Cost

Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.

Item Description:	**Frank Fortolder**
Item Name:	**001-SA01-01-RM01**
Publish Date:	**2015-10-14 09:24**
Warehouse:	**RecInsp**
Avg. Cost Per Unit:	**1,313**
Max. Adjustments:	**13**
Cost Per Unit:	**$17,070.30**

Cost Per Unit	Item Description	Item Group	Item Name	Name	Number of Records
1,313.1	Frank Fortolder	001	001-SA01-01-RM01		1
1,313.1	Frank Fortolder	001	001-SA01-01-RM01	PO-01-3-2015-10-04	1
1,313.1	Frank Fortolder	001	001-SA01-01-RM01	PO-01-3-2015-10-04 mo: PO-01-3-2015-10-04 op: 10	1

Publish Date	Running Total	Total Cost	Adjustments	Tran Count	Tran Date	Tran Qty	Type	Warehouse
2015-10-14 09:24	0	0	1	1	1/1/1800 12:00:00 AM	0	Initial QOH	RecInsp
2015-10-14 09:24	20,000	26,262,000	2	2	10/3/2015 5:00:00 PM	20,000	Purchase Order	RecInsp
2015-10-14 09:24	0	0	3	3	10/4/2015 12:00:00 AM	-20,000	Job	RecInsp

Lead Time

FG Item	Level	Parent	Child	StdLT AllLevels	StdLT ThisLevel	IdealLT ThisLevel	CurLT ThisLevel	Last5LT ThisLevel	ThisYrLT ThisLevel	LastYrLT ThisLevel	Yr2AgoLT ThisLevel
001-FG	0			60:00:00	10:00:00	0:00:37.8	0:00:06.50	0:00:06.96	0:00:06.50		
	1	001-FG	001-RM01	30:00:00	30:00:00		0:00:00.03	0:00:00.03	0:00:00.03		
			001-RM02	30:00:00	30:00:00		0:00:00.03	0:00:00.03	0:00:00.03		
			001-SA01	50:00:00	10:00:00	0:00:27.6	0:00:23.89	0:00:24.40	0:00:23.89		
			001-SA02	50:00:00	10:00:00	0:01:16.2	0:00:11.83	0:00:12.03	0:00:11.83		
	2	001-SA01	001-SA01-01	40:00:00	10:00:00	0:00:36.6	0:00:00.64	0:00:00.65	0:00:00.64		
			001-SA01-02	40:00:00	10:00:00	0:00:01.2	0:00:02.43	0:00:02.52	0:00:02.43		
			001-SA01-RM01	30:00:00	30:00:00		0:00:00.07	0:00:00.07	0:00:00.07		
		001-SA02	001-SA02-01	40:00:00	10:00:00	0:00:31.2	0:00:04.59	0:00:04.42	0:00:04.59		
			Bolt-01	5:00:00	5:00:00		0:00:00.01	0:00:00.01	0:00:00.01		
			Bolt-02	5:00:00	5:00:00		0:00:00.01	0:00:00.01	0:00:00.01		
			Nut-01	5:00:00	5:00:00		0:00:00.01	0:00:00.01	0:00:00.01		
			Nut-02	5:00:00	5:00:00		0:00:00.01	0:00:00.01	0:00:00.01		
			Screw-01	5:00:00	5:00:00		0:00:00.03	0:00:00.03	0:00:00.03		
	3	001-SA01-01	001-SA01-01-RM01	30:00:00	30:00:00		0:00:00.28	0:00:00.19	0:00:00.28		
			001-SA01-01-RM02	30:00:00	30:00:00		0:00:00.29	0:00:00.29	0:00:00.29		
			001-SA01-01-RM03	30:00:00	30:00:00		0:00:00.03	0:00:00.03	0:00:00.03		
		001-SA01-02	001-SA01-02-RM01	30:00:00	30:00:00		0:00:00.01	0:00:00.01	0:00:00.01		
			001-SA01-02-RM02	30:00:00	30:00:00		0:00:00.01	0:00:00.01	0:00:00.01		
		001-SA02-01	001-SA02-01-RM01	30:00:00	30:00:00		0:00:00.60	0:00:00.58	0:00:00.60		
			001-SA02-01-RM02	30:00:00	30:00:00		0:00:00.03	0:00:00.03	0:00:00.03		
002-FG	0			60:00:00	10:00:00	0:01:01.2	0:00:02.55	0:00:02.55	0:00:02.55		
	1	002-FG	002-RM01	30:00:00	30:00:00		0:00:01.44	0:00:01.44	0:00:01.44		
			002-SA01	50:00:00	10:00:00	0:00:15.6	0:00:00.63	0:00:00.63	0:00:00.63		
			002-SA02	40:00:00	10:00:00	0:00:16.8	0:00:05.4	0:00:05.4	0:00:05.4		
	2	002-SA01	002-SA01-01	40:00:00	10:00:00	0:00:01.2	0:00:03.12	0:00:03.12	0:00:03.12		
		002-SA02	002-SA02-RM01	30:00:00	30:00:00		0:00:01.44	0:00:01.44	0:00:01.44		
			002-SA02-RM02	30:00:00	30:00:00		0:00:01.44	0:00:01.44	0:00:01.44		
	3	002-SA01-01	002-SA01-01-RM01	30:00:00	30:00:00		0:00:00.07	0:00:00.07	0:00:00.07		
004-FG	0			25:00:00	5:00:00	0:06:12	1:13:55.79	1:14:35.55	1:13:55.79		
	1	004-FG	004-RM01	10:00:00	10:00:00		0:00:04.8	0:00:04.8	0:00:04.8		
			004-RM02	10:00:00	10:00:00		0:00:00.04	0:00:00.04	0:00:00.04		
			004-RM03	10:00:00	10:00:00		0:00:00.04	0:00:00.04	0:00:00.04		
			004-SA01	15:00:00	5:00:00	0:01:18	0:04:38.64	0:04:33	0:04:38.64		

Lead Time

Lead Time allows you to view the total time required to build a finished good item and compares that to standard and historical data.

The BOM structure of the item needs to be imported using the existing Template functionality in PlanetTogether.

It is assumed that sub-assemblies can be run in parallel, so the lead time is calculated as the longest of the applicable sub-assemblies.

Raw material lead time is the purchased lead time.

Non raw material lead time is the manufacturing time.

Standard lead times are rolled up so that you can see the lead time at any given level and the total lead time for all subordinate levels.

Ideal lead time is calculated assuming infinite capacity on your resources.

Current lead time is based on the current production schedule with all of its capacities and constraints in place.

There are historical lead times based on the production schedule of the last 5 production orders, the production orders for the current calendar year, the production orders for last year, and the production orders from two years ago.

You can filter by the number of levels for a particular finished good item. This allows you to exclude simple items.

There is a graphic with a color gradient showing the difference between your standards and your actual production schedule for the current year.

Lead Time

Points of Analysis:

- This analytic uses imported Templates in order to define the BOM for a Finished Good. If that template is not imported, then nothing will display in this analytic.

- This analytic is used to show and compare standard lead time versus actual production time. It can be used to adjust your standards. Accurate standards are important for determining how much time it will take to fulfill a customer's request.

- When you see Green, then you are performing at or better than your standards. You may want to review these to shorten your standard lead time. Shorter lead times will allow you to be able to promise better available times to your customers.

- When you see Red, then you are performing worse than your standards. This should be addressed as soon as possible. If you are not meeting your standards you are probably not meeting your Need Dates. You may also have problems with your machinery. You may want to review the On-Time Performance analytics to see which machines are bottlenecks. Depending on the cause, you may want to increase your standard lead times.

Lead Time

Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.

Level:	**1**
Child:	**001-RM01**
CurLT ThisLevel:	**0:00:00.03**
FG Item:	**001-FG**
IdealLT ThisLevel:	
Last5LT ThisLevel:	**0:00:00.03**
LastYrLT ThisLevel:	
Parent:	**001-FG**
Publish Date:	**2015-10-14 09:24**
StdLT AllLevels:	**30:00:00**
StdLT ThisLevel:	**30:00:00**
ThisYrLT ThisLevel:	**0:00:00.03**
Yr2AgoLT ThisLevel:	
LT Diff. Std vs This Yr:	**30.00**

Level	BOM Level	Child Item Desc	Child	Child Qty Per FG	Child Qty Per Parent	CurLT AllLevels	CurLT ThisLevel	DaysStdLT_AllLevels	FG Item Desc	FG Item	Ideal LT All Levels	IdealLT ThisLevel	Last5LT AllLevels	Last5LT ThisLevel	LastYrLT AllLevels	LastYrLT ThisLevel	Max Levels
1	1	Fero Sheet	001-RM01	4	4	1:12:00	0:00:00.03	30	Flying Shirt	001-FG	2:12:00		3:12:00	0:00:00.03	5:12:00		3

Number of Records	Operation Steps	Parent Item Desc	Parent	Parent Warehouse	Publish Date	StdLTDeviation_ThisLevel (copy)	LT Diff. Std vs This Yr	StdLT AllLevels	StdLT ThisLevel	ThisYrLT AllLevels	ThisYrLT ThisLevel	Yr2AgoLT AllLevels
1	4	Flying Shirt	001-FG	Warehouse	2015-10-14 09:24	29.999975	29.999975	30:00:00	30:00:00	4:12:00	0:00:00.03	6:12:00

On-Time Performance

On-Time Performance

On-Time Performance shows which areas are causing orders to be late.

You can filter by Department, Work Center, and Resource.

The colors represent the performance:
green is on-time,
yellow is late but as a result of a prior operation,
red is late and it is due to this resource.

Similar reports aggregate the performance by Department and Work Center.

On-Time Performance

Points of Analysis:

- This analytic is used to identify your bottleneck resources. Any resource with Red can be considered a bottleneck. You will want to look deeper to see if this is a result of machine maintenance/repair or if it is a chronic problem which might signify that you need to add capacity on this machine or possibly buy another like machine.

- Yellow signifies that the resource is producing late, but not because of this resource itself. The cause is due to a prior operation. You may want to review the routing to see which prior steps are producing late. These prior resources are bottlenecks and should be addressed.

- If you have a bottleneck resource and a similar resource in the same Work Center/Department, then you may want to look into why the other resource isn't being scheduled. If at all possible, it might make sense to schedule work on the other available similar resources.

- If you do decide to make a capital investment, you can use the data from APS to help convince your banker that the demand for the new resource is such that a commercial loan is warranted.

On-Time Performance

Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.

Department: **Extrusion**
OTDPerformancer: **Late**
Year of NeedDate: **2015**

% Total: **75.00%**
Order Count: **3 Orders**
Revenu Total: **$0**
Total Hours: **60.8 Hours**

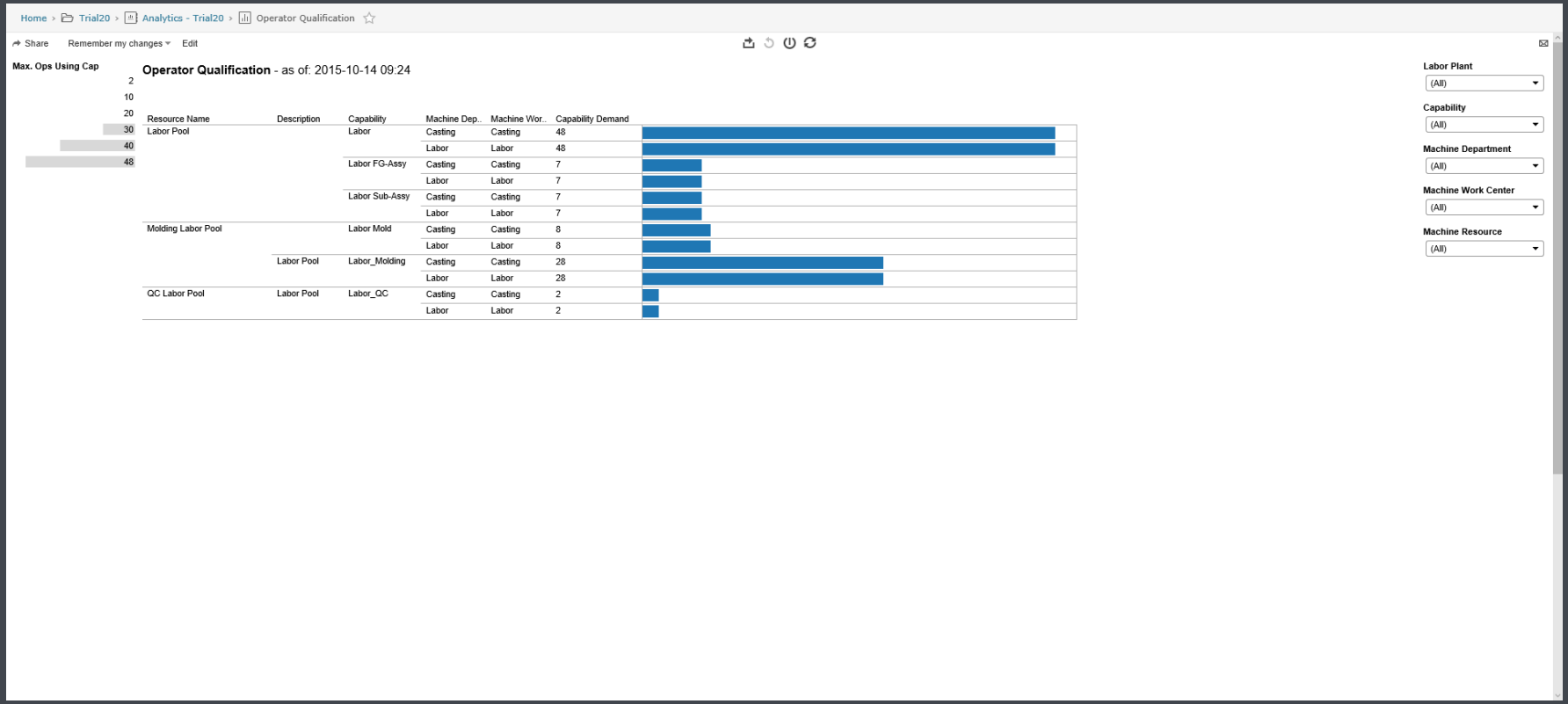
Bottleneck	Department	Description	DowntimeExists	JIT Start Date	Job Name	Late	Latest Constraint Date	Latest Constraint	Name	Need Date	Number of Records	OTD Performance
True	Extrusion		No	10/14/2015 7:15:00 PM	MRP -2147391062	True	10/1/2015 3:30:00 AM	Capacity	Extruder 02	10/15/2015 1:15:00 PM	1	Late
True	Extrusion		No	9/29/2015 9:30:00 PM	MRP -2147391082	True	10/1/2015 3:30:00 AM	Capacity	Extruder 02	10/1/2015 3:30:00 AM	1	Late

Op Name	Plant	Publish Date	Resource Description	Revenue	Scheduled End	Scheduled Start	Scheduling Hours	Standard Run Hrs	Standard Setup Hrs	Work Content Hours	Work Center
10	AeroX	2015-10-14 09:24		0	10/19/2015 11:00:00 AM	10/15/2015 8:45:00 AM	18.25	3	0.25	18.25	Extrusion
10	AeroX	2015-10-14 09:24		0	10/13/2015 12:30:00 PM	10/7/2015 2:15:00 PM	30.25	3	0.25	30.25	Extrusion

On-Time Performance by Department

On-Time Performance by Work Center

Operator Qualification



Operator Qualification

Operator Qualification shows the capabilities of each of your “Labor” resources. It will also display how many activities require that capability.

You can filter by Capability to show all of the operators with the desired capability.

Operator Qualification

Points of Analysis:

- This analytic requires that you have defined resources with a ResourceType of “Labor” in APS. These are considered “Operators.” The qualifications are defined by their assigned capabilities. If you have no “Labor” resources, then you will not see any information on this report.

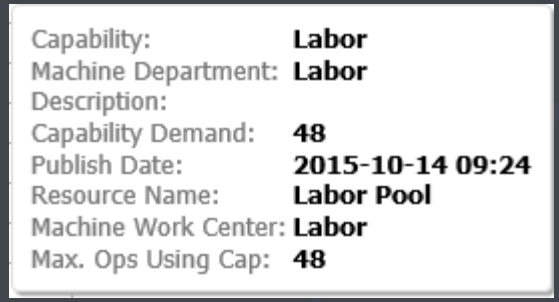
- The length of the bar is determined by how many activities currently scheduled are requiring this particular capability.

- For operators that have skills that currently have no demand, you may want to take this time to train them to be capable in areas with higher demand.

Operator Qualification

Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

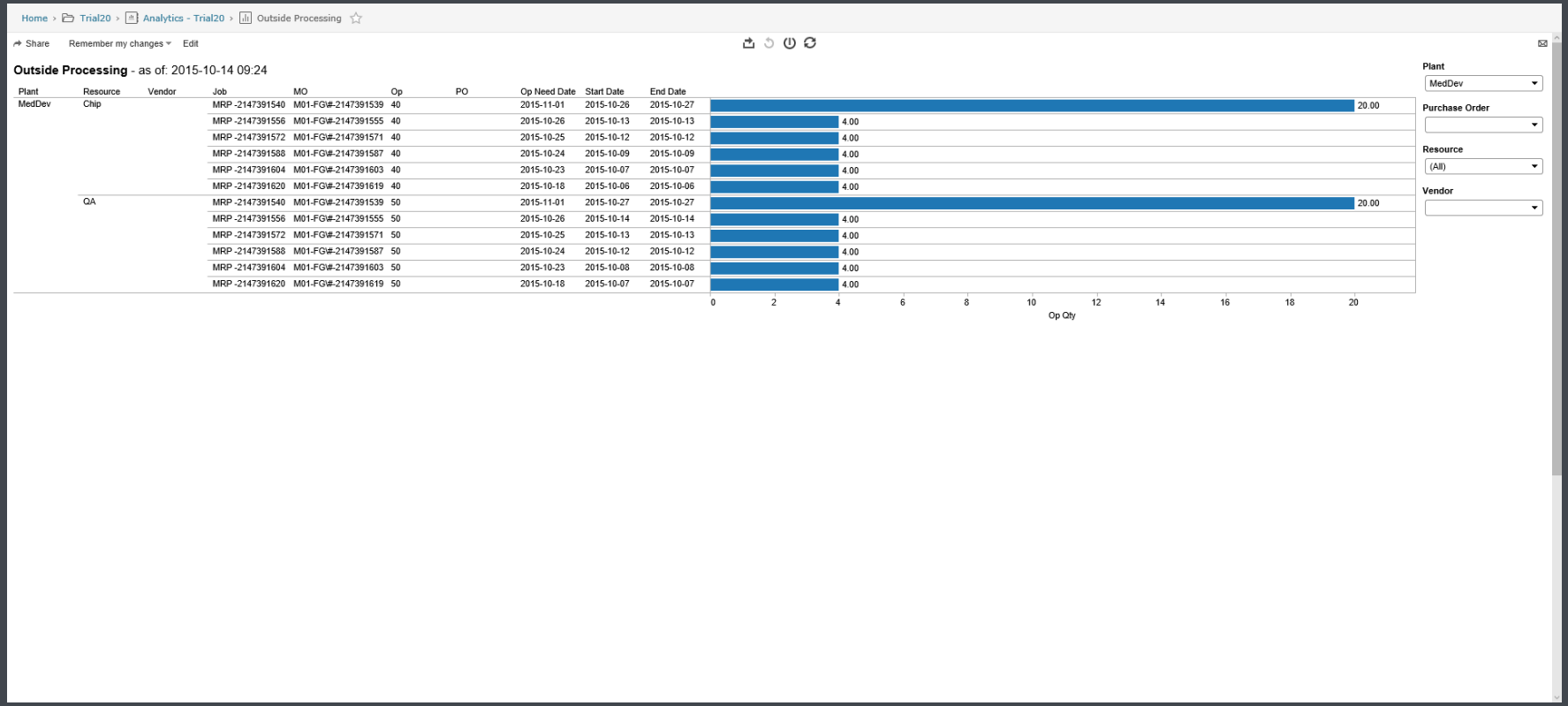
Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.



Capability	Machine Department	Description	Labor Plant	Machine Capability	Machine Resource	Number of Records
Labor	Labor		MedDev	Labo	Rover Labor Pool	1

Capability Demand	Ops Using Cap	Publish Date	Resource Name	Resource Type	Machine Work Center
48	48	2015-10-14 09:24	Labor Pool	Labor	Labor

Outside Processing



Plant	Resource	Vendor	Job	MO	Op	PO	Op Need Date	Start Date	End Date
MedDev	Chip		MRP -2147391540	M01-FG#-2147391539	40		2015-11-01	2015-10-26	2015-10-27
			MRP -2147391556	M01-FG#-2147391555	40		2015-10-26	2015-10-13	2015-10-13
			MRP -2147391572	M01-FG#-2147391571	40		2015-10-25	2015-10-12	2015-10-12
			MRP -2147391588	M01-FG#-2147391587	40		2015-10-24	2015-10-09	2015-10-09
			MRP -2147391604	M01-FG#-2147391603	40		2015-10-23	2015-10-07	2015-10-07
			MRP -2147391620	M01-FG#-2147391619	40		2015-10-18	2015-10-06	2015-10-06
	QA		MRP -2147391540	M01-FG#-2147391539	50		2015-11-01	2015-10-27	2015-10-27
			MRP -2147391556	M01-FG#-2147391555	50		2015-10-26	2015-10-14	2015-10-14
			MRP -2147391572	M01-FG#-2147391571	50		2015-10-25	2015-10-13	2015-10-13
			MRP -2147391588	M01-FG#-2147391587	50		2015-10-24	2015-10-12	2015-10-12
			MRP -2147391604	M01-FG#-2147391603	50		2015-10-23	2015-10-08	2015-10-08
			MRP -2147391620	M01-FG#-2147391619	50		2015-10-18	2015-10-07	2015-10-07

Outside Processing

Outside Processing shows work scheduled to any resource designated as “Subcontractor”.
It shows the related Job, MO, Operation, and Quantity.
If a Vendor or Purchase Order is associated with the Job, that data will be displayed.
The underlying data will show the dates of the work and the original need date.

You can filter by Purchase Order, Resource, or Vendor.

Outside Processing

Points of Analysis:

- This analytic requires that you have defined resources with a ResourceType of “Subcontractor” in APS. If you don’t have any of these defined, then you won’t see any information on this report.

- You can use this analytic to see what is scheduled for each of your subcontractors for processing that is done outside of the plant.

Outside Processing

Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

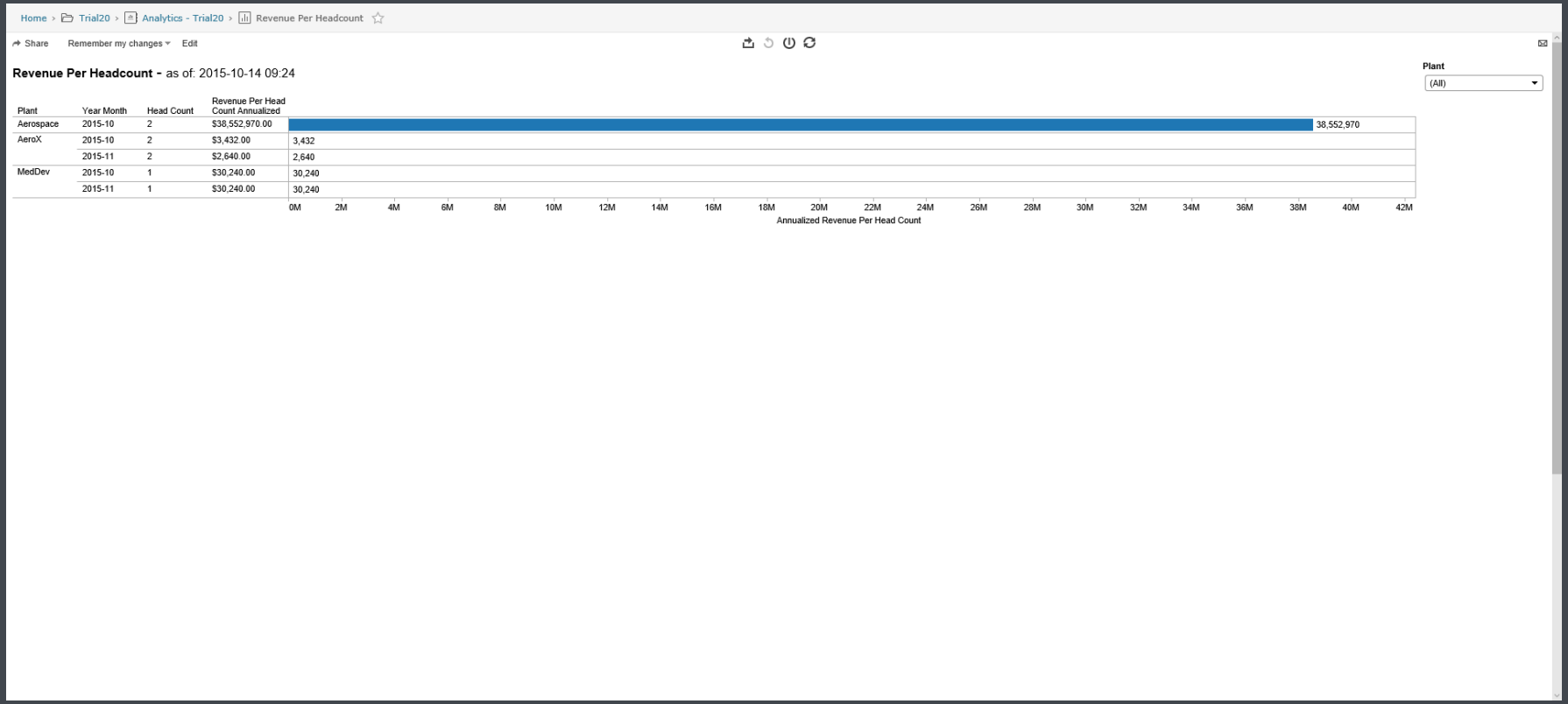
Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.

Job:	**MRP -2147391540**
MO:	**M01-FG\#-2147391539**
Op:	**40**
Op Need Date:	**2015-11-01**
Plant:	**MedDev**
PO:	
Publish Date:	**2015-10-14 09:24**
Resource:	**Chip**
End Date:	**2015-10-27**
Start Date:	**2015-10-26**
Vendor:	
Op Qty:	**20.00**

Available Date	Item Desc	Item Name	Job	MO	Number of Records	Quantity	Op	Op Need Date
			MRP -2147391540	M01-FG\#-2147391539	1	20	40	2015-11-01

Op Qty	PO Desc	PO	PO Qty	Plant	Publish Date	Resource	End Date	Start Date	Vendor
20			0	MedDev	2015-10-14 09:24	Chip	2015-10-27	2015-10-26	

Revenue Per Headcount



Revenue Per Headcount

Revenue Per Headcount annualizes the projected revenue over the head count.
The head count is determined as the number of labor resources.
This is based on the current sales orders in the system.
The past months show revenue that has not yet been achieved due to the lateness of the sales orders.
The current month will be a subset based on the orders that are still open.
The next month will be the most representative of the annualized revenue.
The future months will only be able to show future orders that are already entered into the system.

There are no filters or color gradients.

Revenue Per Headcount

Points of Analysis:

- This analytic requires that you have defined resources with a ResourceType of “Labor” in APS. It counts the number of these resources to determine the headcount. If you don’t have any of these defined, then you won’t see any information on this report.

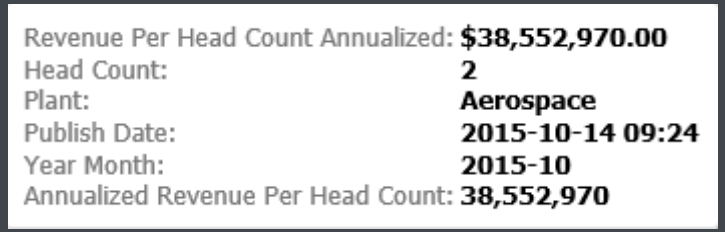
- You will also need to import revenue data in order for this report to be meaningful. Currently MRP generated jobs don’t include revenue, so be aware of this when using the figures.

- If your revenue per headcount seems low, then you might want to check to see that revenue is being imported correctly into APS and that you aren’t loosing detail when jobs are generated by MRP.

Revenue Per Headcount

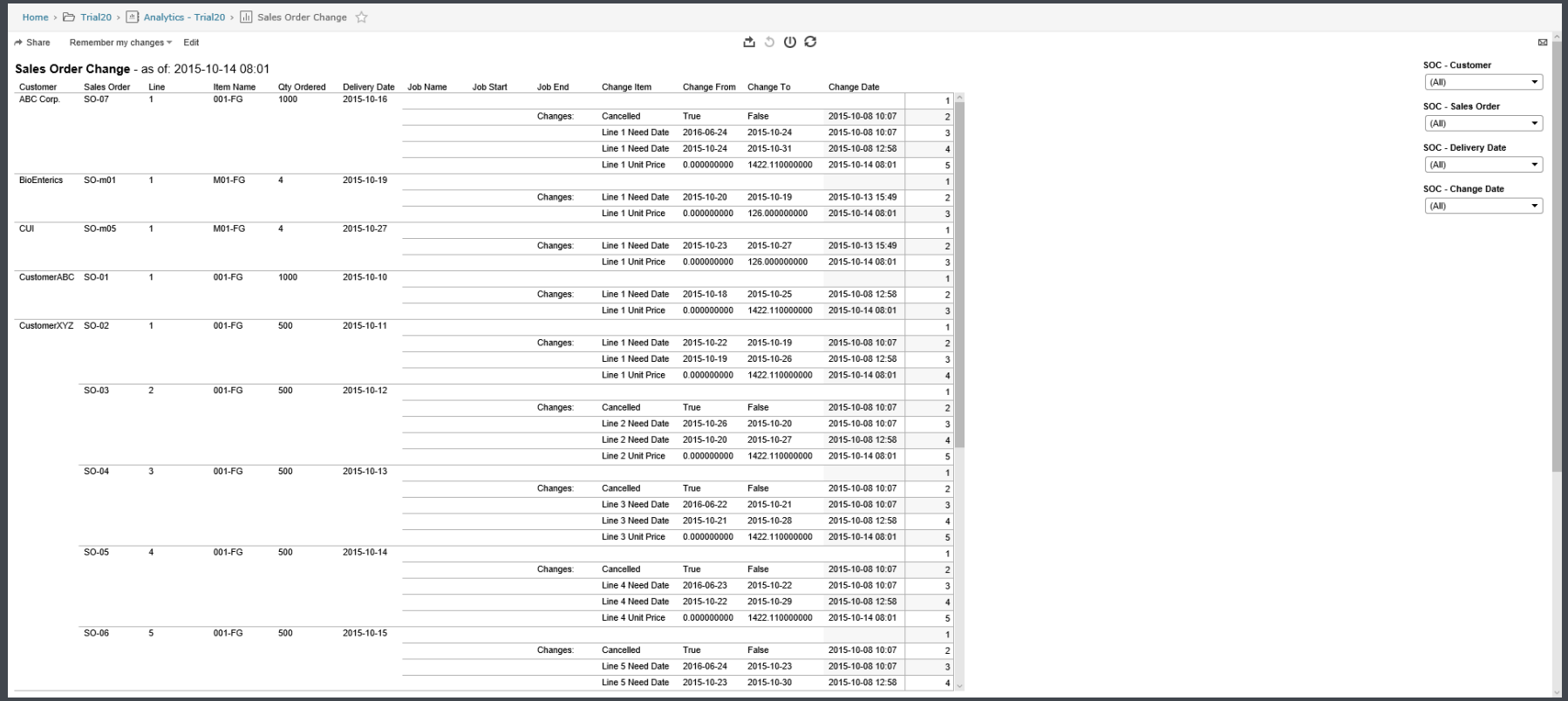
Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.



Revenue Per Head Count Annualized	Annualized Revenue Per Head Count	Head Count	Monthly Total	Number of Records	Plant	Publish Date	Year Month
38552970	38,552,970	2	6,425,495	1	Aerospace	2015-10-14 09:24	2015-10

Sales Order Change



Home › Trial20 › Analytics - Trial20 › Sales Order Change

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Sales Order Change - as of: 2015-10-14 08:01

Customer	Sales Order	Line	Item Name	Qty Ordered	Delivery Date	Job Name	Job Start	Job End	Change Item	Change From	Change To	Change Date	
ABC Corp.	SO-07	1	001-FG	1000	2015-10-16								1
								Changes:	Cancelled	True	False	2015-10-08 10:07	2
									Line 1 Need Date	2016-06-24	2015-10-24	2015-10-08 10:07	3
									Line 1 Need Date	2015-10-24	2015-10-31	2015-10-08 12:58	4
									Line 1 Unit Price	0.000000000	1422.110000000	2015-10-14 08:01	5
BioEnterics	SO-m01	1	M01-FG	4	2015-10-19								1
								Changes:	Line 1 Need Date	2015-10-20	2015-10-19	2015-10-13 15:49	2
									Line 1 Unit Price	0.000000000	126.000000000	2015-10-14 08:01	3
CUI	SO-m05	1	M01-FG	4	2015-10-27								1
								Changes:	Line 1 Need Date	2015-10-23	2015-10-27	2015-10-13 15:49	2
									Line 1 Unit Price	0.000000000	126.000000000	2015-10-14 08:01	3
CustomerABC	SO-01	1	001-FG	1000	2015-10-10								1
								Changes:	Line 1 Need Date	2015-10-18	2015-10-25	2015-10-08 12:58	2
									Line 1 Unit Price	0.000000000	1422.110000000	2015-10-14 08:01	3
CustomerXYZ	SO-02	1	001-FG	500	2015-10-11								1
								Changes:	Line 1 Need Date	2015-10-22	2015-10-19	2015-10-08 10:07	2
									Line 1 Need Date	2015-10-19	2015-10-26	2015-10-08 12:58	3
									Line 1 Unit Price	0.000000000	1422.110000000	2015-10-14 08:01	4
	SO-03	2	001-FG	500	2015-10-12								1
								Changes:	Cancelled	True	False	2015-10-08 10:07	2
									Line 2 Need Date	2015-10-26	2015-10-20	2015-10-08 10:07	3
									Line 2 Need Date	2015-10-20	2015-10-27	2015-10-08 12:58	4
									Line 2 Unit Price	0.000000000	1422.110000000	2015-10-14 08:01	5
	SO-04	3	001-FG	500	2015-10-13								1
								Changes:	Cancelled	True	False	2015-10-08 10:07	2
									Line 3 Need Date	2016-06-22	2015-10-21	2015-10-08 10:07	3
									Line 3 Need Date	2015-10-21	2015-10-28	2015-10-08 12:58	4
									Line 3 Unit Price	0.000000000	1422.110000000	2015-10-14 08:01	5
	SO-05	4	001-FG	500	2015-10-14								1
								Changes:	Cancelled	True	False	2015-10-08 10:07	2
									Line 4 Need Date	2016-06-23	2015-10-22	2015-10-08 10:07	3
									Line 4 Need Date	2015-10-22	2015-10-29	2015-10-08 12:58	4
									Line 4 Unit Price	0.000000000	1422.110000000	2015-10-14 08:01	5
	SO-06	5	001-FG	500	2015-10-15								1
								Changes:	Cancelled	True	False	2015-10-08 10:07	2
									Line 5 Need Date	2016-06-24	2015-10-23	2015-10-08 10:07	3
									Line 5 Need Date	2015-10-23	2015-10-30	2015-10-08 12:58	4

SOC - Customer: (All)

SOC - Sales Order: (All)

SOC - Delivery Date: (All)

SOC - Change Date: (All)

Sales Order Change

Sales Order Change will show sales order information, related production orders, and applicable changes associated with either the sales orders or production orders.

On the left hand side you will see the current sales order related information

The middle section shows related production orders with their start/stop dates.

The right hand side shows what was changed, the original and new values, and the date of the change.

The changes that have already taken place are stored in a history file.

When you first start using the analytic the history file will be empty.

We will not try to import history prior to when you start using this analytic.

You can filter by: Customer, Sales Order, Delivery Date, and Change Date.

Sales Order Change

Points of Analysis:

- This analytic shows the changes that have occurred to a sales order and related jobs. At first there will be no history. As time goes by and you continue to publish information to the analytics, you will see the history of changes appear.

- This information can be used to see changes that a customer has requested. This gives you a better understanding of the work required to facilitate each of your customers.

- This information can also be used to see the changes that have occurred on the production floor that may affect your ability to provide the desired service to your customers.

- Knowing the changes that have occurred will give you a better idea of both how you are treating your customers and how they are treating you.

Sales Order Change

Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

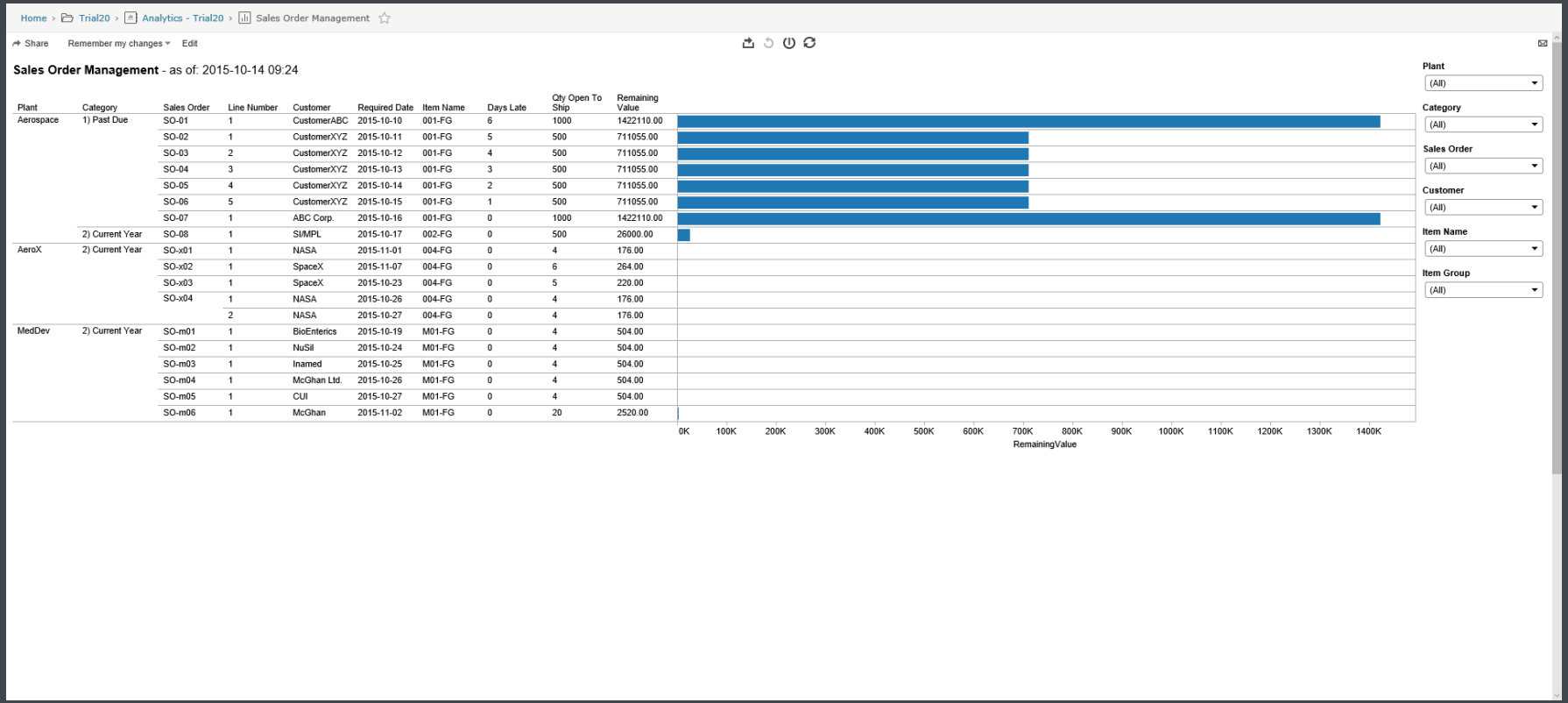
Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.

Change Date:	**2015-10-14 08:01**
Change From:	**0.000000000**
Change Item:	**Line 1 Unit Price**
Change To:	**1422.110000000**
Customer:	**ABC Corp.**
Delivery Date:	**2015-10-16**
Job End:	
Item Name:	**001-FG**
Job Name:	
LineCnt (copy):	**5**
Line:	**1**
Publish Date:	**2015-10-14 08:01**
Qty Ordered:	**1000**
Sales Order:	**SO-07**
Job Start:	
LineCnt:	**5**

Cancelled Flag	Change Date	Change From	Change Item	Change To	Customer	Delivery Date	Job End	Item Desc	Item Name	Job Name	LineCnt (copy)
False	2015-10-14 08:01	0.000000000	Line 1 Unit Price	1422.110000000	ABC Corp.	2015-10-16		Flying Shirt	001-FG		5

LineCnt	Line	Number of Records	Publish Date	Qty Ordered	QtyOrdered	SO Name	Sales Order	Job Start	Unit Price (copy)	Unit Price	Warehouse Name
5	1	1	2015-10-14 08:01	1000	1,000	SO-07	SO-07		1422.11	1,422.11	Warehouse

Sales Order Management



Plant	Category	Sales Order	Line Number	Customer	Required Date	Item Name	Days Late	Qty Open To Ship	Remaining Value
Aerospace	1) Past Due	SO-01	1	CustomerABC	2015-10-10	001-FG	6	1000	1422110.00
		SO-02	1	CustomerXYZ	2015-10-11	001-FG	5	500	711055.00
		SO-03	2	CustomerXYZ	2015-10-12	001-FG	4	500	711055.00
		SO-04	3	CustomerXYZ	2015-10-13	001-FG	3	500	711055.00
		SO-05	4	CustomerXYZ	2015-10-14	001-FG	2	500	711055.00
		SO-06	5	CustomerXYZ	2015-10-15	001-FG	1	500	711055.00
		SO-07	1	ABC Corp.	2015-10-16	001-FG	0	1000	1422110.00
	2) Current Year	SO-08	1	SIMPL	2015-10-17	002-FG	0	500	26000.00
AeroX	2) Current Year	SO-x01	1	NASA	2015-11-01	004-FG	0	4	176.00
		SO-x02	1	SpaceX	2015-11-07	004-FG	0	6	264.00
		SO-x03	1	SpaceX	2015-10-23	004-FG	0	5	220.00
		SO-x04	1	NASA	2015-10-26	004-FG	0	4	176.00
			2	NASA	2015-10-27	004-FG	0	4	176.00
MedDev	2) Current Year	SO-m01	1	BioEnterics	2015-10-19	M01-FG	0	4	504.00
		SO-m02	1	NuSil	2015-10-24	M01-FG	0	4	504.00
		SO-m03	1	Inamed	2015-10-25	M01-FG	0	4	504.00
		SO-m04	1	McGhan Ltd.	2015-10-26	M01-FG	0	4	504.00
		SO-m05	1	CUI	2015-10-27	M01-FG	0	4	504.00
		SO-m06	1	McGhan	2015-11-02	M01-FG	0	20	2520.00

Sales Order Management

Sales Order Management will show the current status of your sales orders.
They are grouped into categories for: Past Due, Current Year, Future, and On Hold (date of 10 years into the future.)

We display the open line items on the open orders.
We calculate the remaining value based on the items that haven't yet shipped.
The Days Late is determined by the Required Date and not the customer's original Request Date.

You can filter by: Category, Sales Order, Customer, and Item Name

Sales Order Management

Points of Analysis:

- This analytic shows your existing sales orders and the quantities due. The bar represents the remaining value and requires that costs are being imported into APS. Without this cost data, the value will be zero.

- You can use this analytic to identify work that is overdue.

- You can prioritize any overdue work based on multiple criteria including the customer associated with the order, the remaining value of the order, and the lateness of the order.

Sales Order Management

Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

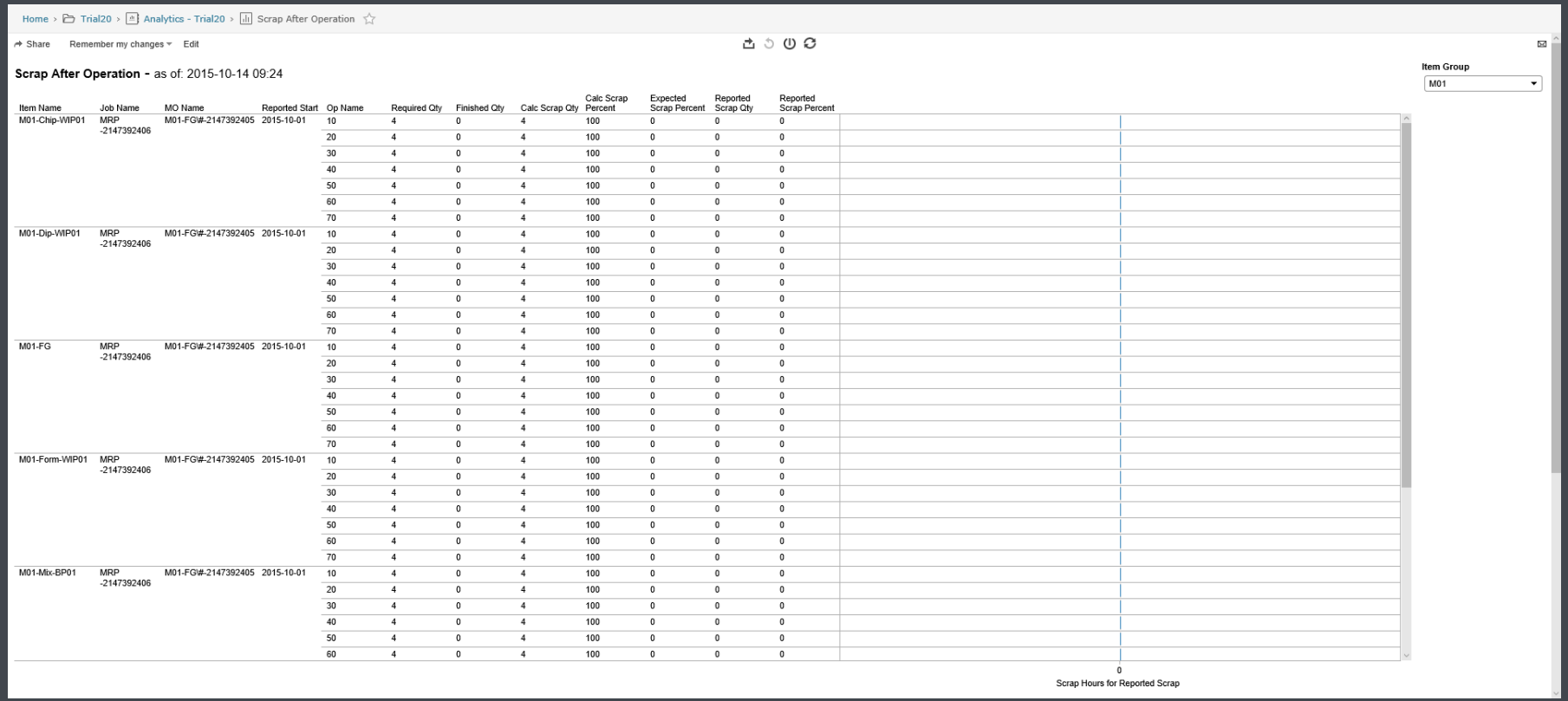
Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.

Category:	**1) Past Due**
Customer:	**CustomerABC**
Days Late:	**6**
Item Name:	**001-FG**
Line Number:	**1**
Plant:	**Aerospace**
Publish Date:	**2015-10-14 09:24**
Qty Open To Ship:	**1000**
Remaining Value:	**1422110.00**
Required Date:	**2015-10-10**
Sales Order:	**SO-01**
RemainingValue:	**1,422,110**

Category	Customer	Days Late	DaysLate	Expiration Date	Item Desc	Item Group	Item Name	Line Desc	Line Number	Number of Records	Plant	Publish Date
1) Past Due	CustomerABC	6	6	12/31/9999 4:00:00 PM	Flying Shirt	001	001-FG		1	1	Aerospace	2015-10-14 09:24

Qty Open To Ship	Qty Ordered	Remaining Value	RemainingValue	Required Available Date	Required Date	SO Desc	Sales Amount	Sales Order	Unit Price
1000	1,000	1422110.00	1,422,110	10/10/2015 12:00:00 AM	2015-10-10		111,000	SO-01	1,422.11

Scrap After Operation



Item Name	Job Name	MO Name	Reported Start	Op Name	Required Qty	Finished Qty	Calc Scrap Qty	Calc Scrap Percent	Expected Scrap Percent	Reported Scrap Qty	Reported Scrap Percent
M01-Chip-WIP01	MRP -2147392406	M01-FG\#-2147392405	2015-10-01	10	4	0	4	100	0	0	0
				20	4	0	4	100	0	0	0
				30	4	0	4	100	0	0	0
				40	4	0	4	100	0	0	0
				50	4	0	4	100	0	0	0
				60	4	0	4	100	0	0	0
				70	4	0	4	100	0	0	0
M01-Dip-WIP01	MRP -2147392406	M01-FG\#-2147392405	2015-10-01	10	4	0	4	100	0	0	0
				20	4	0	4	100	0	0	0
				30	4	0	4	100	0	0	0
				40	4	0	4	100	0	0	0
				50	4	0	4	100	0	0	0
				60	4	0	4	100	0	0	0
				70	4	0	4	100	0	0	0
M01-FG	MRP -2147392406	M01-FG\#-2147392405	2015-10-01	10	4	0	4	100	0	0	0
				20	4	0	4	100	0	0	0
				30	4	0	4	100	0	0	0
				40	4	0	4	100	0	0	0
				50	4	0	4	100	0	0	0
				60	4	0	4	100	0	0	0
				70	4	0	4	100	0	0	0
M01-Form-WIP01	MRP -2147392406	M01-FG\#-2147392405	2015-10-01	10	4	0	4	100	0	0	0
				20	4	0	4	100	0	0	0
				30	4	0	4	100	0	0	0
				40	4	0	4	100	0	0	0
				50	4	0	4	100	0	0	0
				60	4	0	4	100	0	0	0
				70	4	0	4	100	0	0	0
M01-Mix-BP01	MRP -2147392406	M01-FG\#-2147392405	2015-10-01	10	4	0	4	100	0	0	0
				20	4	0	4	100	0	0	0
				30	4	0	4	100	0	0	0
				40	4	0	4	100	0	0	0
				50	4	0	4	100	0	0	0
				60	4	0	4	100	0	0	0

Scrap After Operation

Scrap After Operation lays out production orders by operation and shows the required quantity and the scrap quantity and from the calculates the scrap percent at each operation.

It will also show the expected scrap percent so that you can compare your standards to your actuals.

The total scrap hours is calculated to show how much time it would take to make up for the scrap at an operation.

The Reported Start date is an imported value that is displayed so that you can track down anomalies.

There are not filters or color gradients.

Scrap After Operation

Points of Analysis:

- This analytic allows you to compare your expected scrap with your actual scrap at each operation. In order to make the comparison you will have to import the expected and actual scrap values. If you import either, but not both, you will still be able to see some of the information.

- The bar shows how many hours are associated with making up for the scrapped items. This gives you a way to determine which resources are producing scrap at a rate that may need to be addressed.

- Scrap percent is calculated to show how well a machine is producing, but it may be more important to you to address areas where scrap percents may be low, but the time required to make up for the scrap is great.

Scrap After Operation

Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

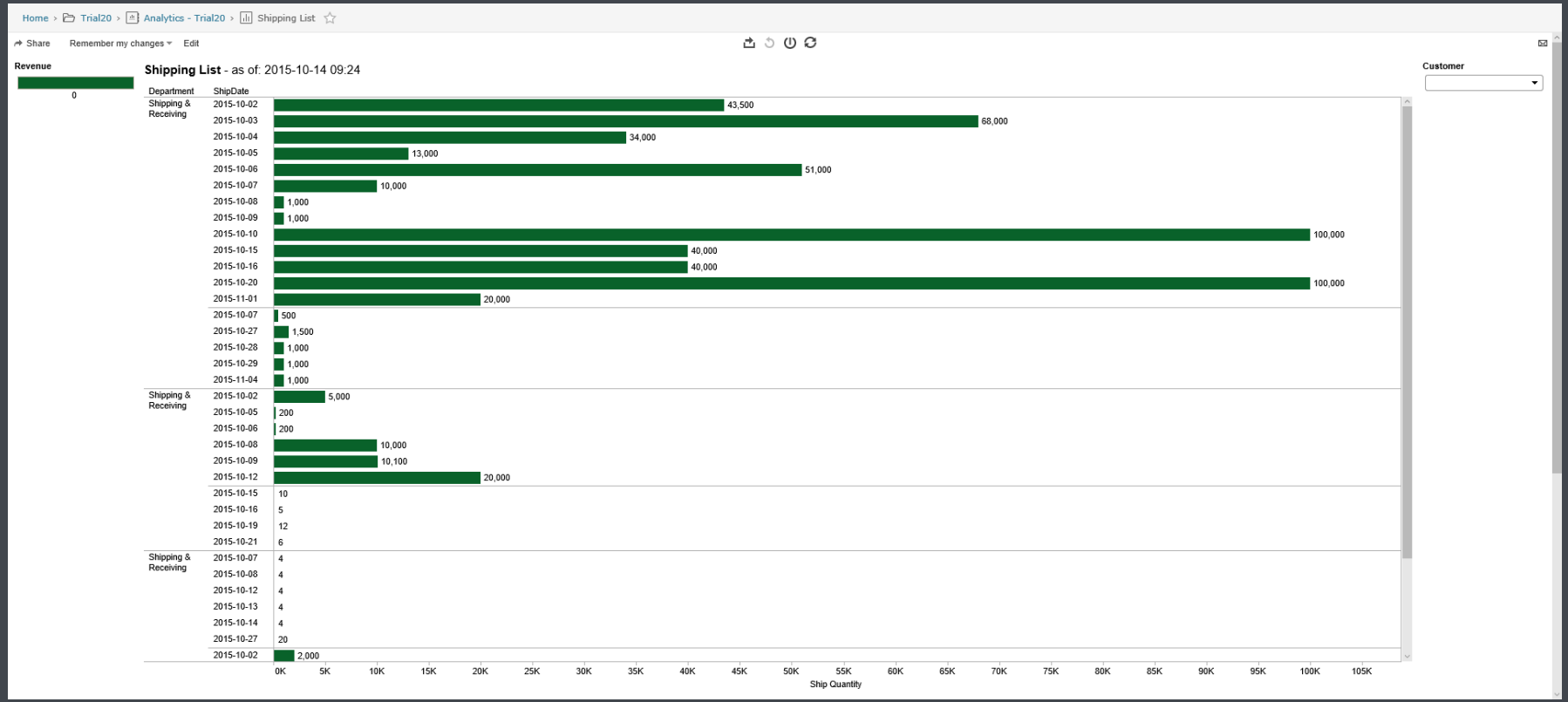
Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.

Reported Scrap Percent:	**0**
Calc Scrap Percent:	**100**
Calc Scrap Qty:	**4**
Expected Scrap Percent:	**0**
Item Name:	**M01-Chip-WIP01**
Job Name:	**MRP -2147392406**
MO Name:	**M01-FG\#-2147392405**
Op Name:	**10**
Publish Date:	**2015-10-14 09:24**
Finished Qty:	**0**
Reported Scrap Qty:	**0**
Reported Start:	**2015-10-01**
Required Qty:	**4**
Scrap Hours for Reported Scrap:	**0**

Scrap Hours for Reported Scrap	Reported Scrap Percent	Calc Scrap Percent	Calc Scrap Qty	Calculated Scrap Percent	Calculated Scrap Qty	Expected Scrap Percent	ExpectedScrapPercent	Item Description	Item Group	Item Name	Job Name
0	0	100	4	100	4	0	0	Expander Pre-Test	M01	M01-Chip-WIP01	MRP -2147392406

MO Name	Number of Records	Op Name	Publish Date	Finished Qty	Reported Good Qty	Reported Scrap Qty	Reported Start	Required Qty	Required Finish Qty	Total Scrap Hours	Scrap Hours
M01-FG\#-2147392405	1	10	2015-10-14 09:24	0	0	0	2015-10-01	4	4	4	4

Shipping List



Shipping List

The Shipping List shows activities that are scheduled to ship on each day.
In order to specify a “Shipping” resource, we require that the resource exist in a department with “ship” in its name.

You can filter by Customer.

The color gradient shows the revenue associated with the items being shipped.

Shipping List

Points of Analysis:

- This analytic requires that you have a department with the word “ship” somewhere in its name. Any resource in this category is considered a shipping resource.

- Each day, you can see the number of units that are expected to be shipped. This will help you determine the load on your shipping department.

- The color of the bar varies based on the revenue represented by the shipping. This can help you make decisions on when to ship high revenue shipments. You may want to move these forward in time to make your quarterly goals. You may want to move these items to a day that has a higher expectation of things going as planned. The day before a holiday or the day of the big game may not be ideal days for shipping high dollar items.

Shipping List

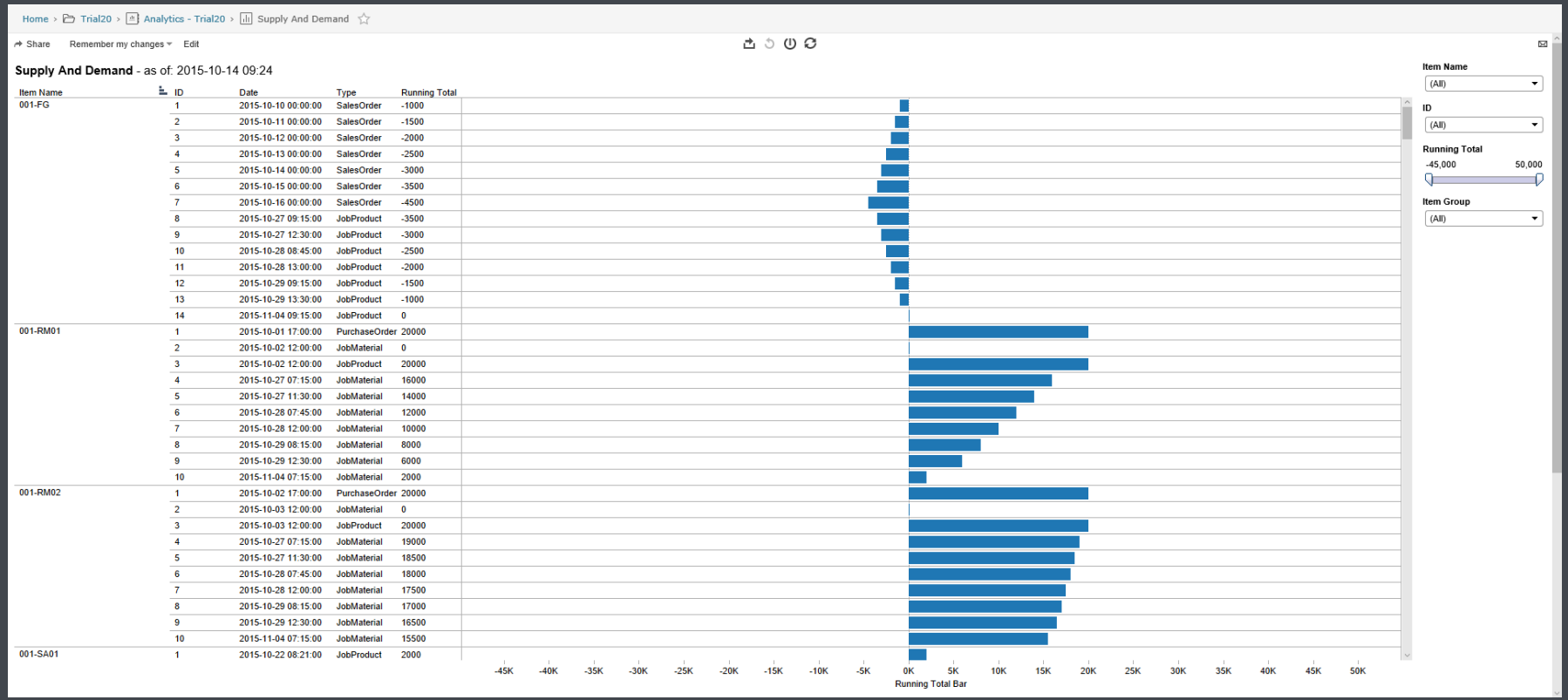
Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.

Customer	Department	Job Name	LatenessDays	MO Name	NeedDate	Number of Records	Op Name	Plant Name	Item Desc
	Shipping & Receiving	PO-01-2-2015-10-03	0	PO-01-2-2015-10-03	10/3/2015 12:00:00 PM	1	10	Aerospace	Micro Gimbal
	Shipping & Receiving	PO-03-2-2015-10-03	0	PO-03-2-2015-10-03	10/3/2015 12:00:00 PM	1	10	Aerospace	Montana Floss
	Shipping & Receiving	PO-05-1-2015-10-03	0	PO-05-1-2015-10-03	10/3/2015 12:00:00 PM	1	10	Aerospace	Mercuric-Telluride

Item Name	Profit	Publish Date	Ship Quantity	Resource	Revenue	Scheduled Start	ShipDate	Workcenter
001-RM02	-240	2015-10-14 09:24	20,000	Receiving / Inpsection	0	10/3/2015 12:00:00 AM	2015-10-03	Shipping & Receiving
001-SA01-01-RM02	-240	2015-10-14 09:24	2,000	Receiving / Inpsection	0	10/3/2015 12:00:00 AM	2015-10-03	Shipping & Receiving
001-SA02-01-RM01	-240	2015-10-14 09:24	1,000	Receiving / Inpsection	0	10/3/2015 12:00:00 AM	2015-10-03	Shipping & Receiving

Supply And Demand



Item Name	ID	Date	Type	Running Total
001-FG	1	2015-10-10 00:00:00	SalesOrder	-1000
	2	2015-10-11 00:00:00	SalesOrder	-1500
	3	2015-10-12 00:00:00	SalesOrder	-2000
	4	2015-10-13 00:00:00	SalesOrder	-2500
	5	2015-10-14 00:00:00	SalesOrder	-3000
	6	2015-10-15 00:00:00	SalesOrder	-3500
	7	2015-10-16 00:00:00	SalesOrder	-4500
	8	2015-10-27 09:15:00	JobProduct	-3500
	9	2015-10-27 12:30:00	JobProduct	-3000
	10	2015-10-28 08:45:00	JobProduct	-2500
	11	2015-10-28 13:00:00	JobProduct	-2000
	12	2015-10-29 09:15:00	JobProduct	-1500
	13	2015-10-29 13:30:00	JobProduct	-1000
	14	2015-11-04 09:15:00	JobProduct	0
001-RM01	1	2015-10-01 17:00:00	PurchaseOrder	20000
	2	2015-10-02 12:00:00	JobMaterial	0
	3	2015-10-02 12:00:00	JobProduct	20000
	4	2015-10-27 07:15:00	JobMaterial	16000
	5	2015-10-27 11:30:00	JobMaterial	14000
	6	2015-10-28 07:45:00	JobMaterial	12000
	7	2015-10-28 12:00:00	JobMaterial	10000
	8	2015-10-29 08:15:00	JobMaterial	8000
	9	2015-10-29 12:30:00	JobMaterial	6000
	10	2015-11-04 07:15:00	JobMaterial	2000
001-RM02	1	2015-10-02 17:00:00	PurchaseOrder	20000
	2	2015-10-03 12:00:00	JobMaterial	0
	3	2015-10-03 12:00:00	JobProduct	20000
	4	2015-10-27 07:15:00	JobMaterial	19000
	5	2015-10-27 11:30:00	JobMaterial	18500
	6	2015-10-28 07:45:00	JobMaterial	18000
	7	2015-10-28 12:00:00	JobMaterial	17500
	8	2015-10-29 08:15:00	JobMaterial	17000
	9	2015-10-29 12:30:00	JobMaterial	16500
	10	2015-11-04 07:15:00	JobMaterial	15500
001-SA01	1	2015-10-22 08:21:00	JobProduct	2000

Supply And Demand

Supply And Demand shows how inventory for an item is affected by supply and demand.
Supply is based on: Inventory (original QOH), Job Products, Purchase Orders, and Transfer Orders In.
Demand is based on: Job Materials, Transfer Orders Out, Sales Orders, and Forecasts.

You can filter by Item ID, Transaction ID, Running Total.

There is no color gradient.

Supply And Demand

Points of Analysis:

- This analytic shows the rise and fall of inventory. It is forward looking so you may see inventory quantities go negative. This represents when demand is greater that supply. The bars should go non-negative in the future to represent that you are supplying your demand.

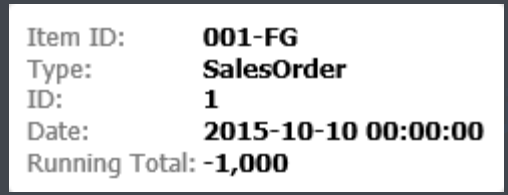
- Where component materials are staying negative, you will want to look into why the demand is not being fulfilled. It may be that a purchase order for raw material needs to be entered or it may be that a sub-assembly job needs to be entered into the production plan.

- There may be may items that are rarely used and these can be excluded by excluding the first ID of each item. Any part/item with only 1 entry will be excluded.

Supply And Demand

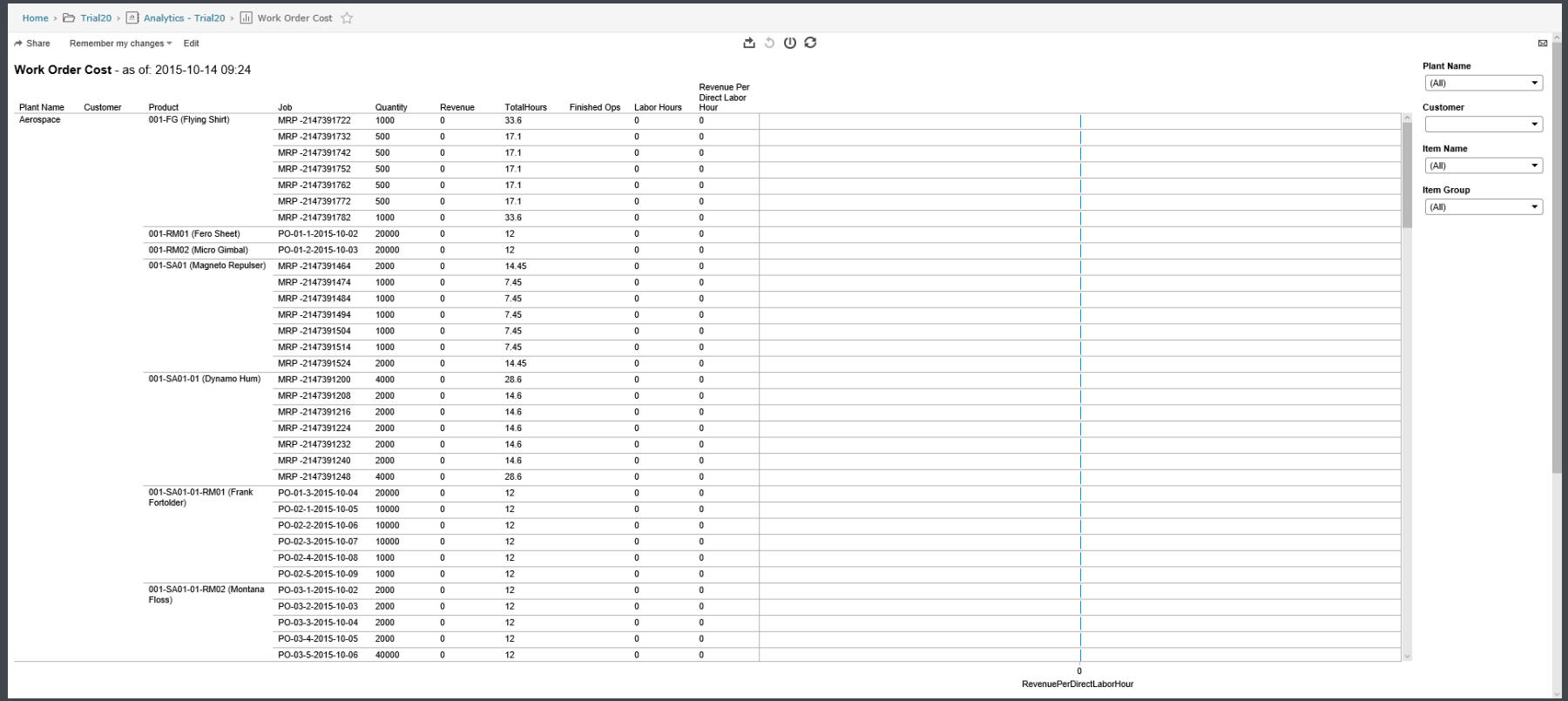
Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.



Item Group	Item Name	Object ID	Type	Publish Date	Qty	Quantity	ID	Rec Cnt	Running Total	Running Total Bar	Supply Demand	Date	Warehouse ID
001	001-FG	SO-01 - 1	SalesOrder	2015-10-14 09:24	-1000	1,000	1	1	-1000	-1,000	Demand	2015-10-10 00:00:00	Warehouse

Work Order Cost



Plant Name	Customer	Product	Job	Quantity	Revenue	TotalHours	Finished Ops	Labor Hours	Revenue Per Direct Labor Hour
Aerospace		001-FG (Flying Shirt)	MRP -2147391722	1000	0	33.6		0	0
			MRP -2147391732	500	0	17.1		0	0
			MRP -2147391742	500	0	17.1		0	0
			MRP -2147391752	500	0	17.1		0	0
			MRP -2147391762	500	0	17.1		0	0
			MRP -2147391772	500	0	17.1		0	0
			MRP -2147391782	1000	0	33.6		0	0
		001-RM01 (Fero Sheet)	PO-01-1-2015-10-02	20000	0	12		0	0
		001-RM02 (Micro Gimbal)	PO-01-2-2015-10-03	20000	0	12		0	0
		001-SA01 (Magneto Repulser)	MRP -2147391464	2000	0	14.45		0	0
			MRP -2147391474	1000	0	7.45		0	0
			MRP -2147391484	1000	0	7.45		0	0
			MRP -2147391494	1000	0	7.45		0	0
			MRP -2147391504	1000	0	7.45		0	0
			MRP -2147391514	1000	0	7.45		0	0
			MRP -2147391524	2000	0	14.45		0	0
		001-SA01-01 (Dynamo Hum)	MRP -2147391200	4000	0	28.6		0	0
			MRP -2147391208	2000	0	14.6		0	0
			MRP -2147391216	2000	0	14.6		0	0
			MRP -2147391224	2000	0	14.6		0	0
			MRP -2147391232	2000	0	14.6		0	0
			MRP -2147391240	2000	0	14.6		0	0
			MRP -2147391248	4000	0	28.6		0	0
		001-SA01-01-RM01 (Frank Fortolder)	PO-01-3-2015-10-04	20000	0	12		0	0
			PO-02-1-2015-10-05	10000	0	12		0	0
			PO-02-2-2015-10-06	10000	0	12		0	0
			PO-02-3-2015-10-07	10000	0	12		0	0
			PO-02-4-2015-10-08	1000	0	12		0	0
			PO-02-5-2015-10-09	1000	0	12		0	0
		001-SA01-01-RM02 (Montana Floss)	PO-03-1-2015-10-02	2000	0	12		0	0
			PO-03-2-2015-10-03	2000	0	12		0	0
			PO-03-3-2015-10-04	2000	0	12		0	0
			PO-03-4-2015-10-05	2000	0	12		0	0
			PO-03-5-2015-10-06	40000	0	12		0	0

Work Order Cost

Work Order Cost shows costs and revenue associated with production orders.
The values for cost and revenue must be imported into PlanetTogether in order for them to appear on the analytics.
Labor costs are associated with resources of type: Labor, Operator, Supervisor, Engineer, Inspector, Team, Technician, or Employee.

You can filter by Customer or Part Number.

There is no color gradient.

Work Order Cost

Points of Analysis:

- This analytic has a calculation for “Revenue Per Direct Labor Hour”. In order to calculate this, you will need resources of any of these types: Labor, Operator, Supervisor, Engineer, Inspector, Team, Technician, or Employee. For most implementations, Labor will suffice. If you don’t have any of these types of resources, then the “revenue per” calculation will be zero.

- Any jobs with a high value for Revenue Per Direct Labor Hour are jobs that you’d like to have more of. This can help you determine the products that you may want to have your marketing department focus on.

Work Order Cost

Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

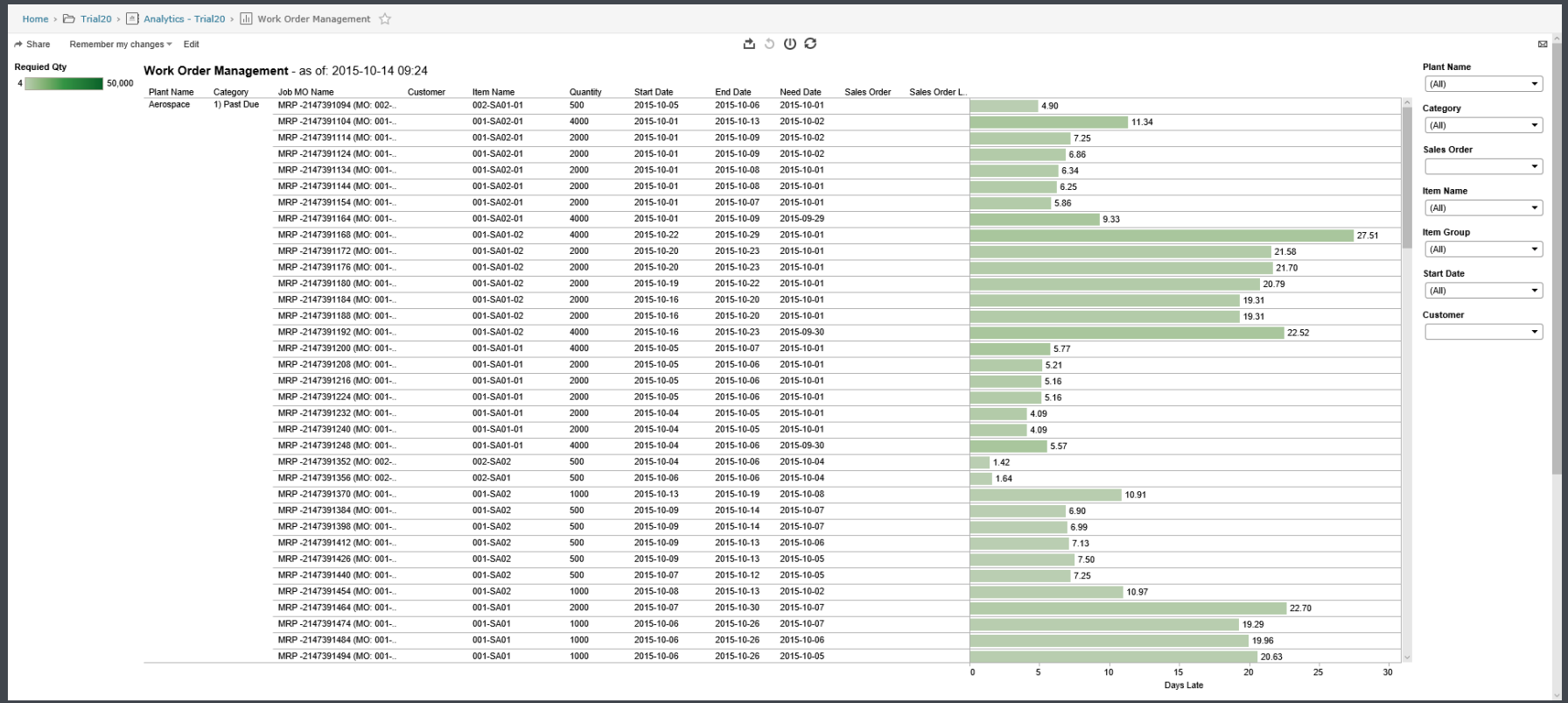
Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.

Customer:	
Finished Ops:	
Job:	**MRP -2147391722**
Labor Hours:	**0**
Plant Name:	**Aerospace**
Product:	**001-FG (Flying Shirt)**
Publish Date:	**2015-10-14 09:24**
Quantity:	**1000**
Revenue:	**0**
Revenue Per Direct Labor Hour:	**0**
TotalHours:	**33.6**
RevenuePerDirectLaborHour:	**0**

Cost	Customer	Finished Ops	Item Group	Job Desc	JobMOName	Job Qty	Job	Labor Cost Per Unit	Labor Hours	MOName	Machine Cost Per Unit	Material Cost Per Unit	Number of Records	Outside Processing Cost Per Unit	Item Description
1,422.11			001	Flying Shirt	MRP -2147391722 (MO: 001-FG\#-2147391721)	1,000	MRP -2147391722	0	0	001-FG\#-2147391721	0.672	0	1	0	Flying Shirt

Item Name	Plant Name	Product	Publish Date	Quantity	Revenue Per Direct Labor Hour	RevenuePerDirectLaborHour	Revenue	Standard Hours Per Unit	StandardHours	Total Hours Per Unit	TotalHours
001-FG	Aerospace	001-FG (Flying Shirt)	2015-10-14 09:24	1000	0	0	0	0.00063	0.63	0.0336	33.6

Work Order Management



Work Order Management

Work Order Management allows you to view information associated with the current production orders.
They are grouped into categories: Past Due, Current Year, and Future.
If you add two UDFs to the Job and call them “SalesOrder” and “SalesOrderLine”, then that information will be displayed on the report.

You can filter by Category, Sales Order, Product Name, Start Date, and Customer.

There is no color gradient.

Work Order Management

Points of Analysis:

- This analytic allows you to see which orders are running late and how late they are.

- You can view orders by customer so that you can see how well you are providing service to them.

- You can also see the number of orders requested by your customer. This will allow you to make decisions on combining orders, if that makes sense.

- In the future we will add revenue associated with an order. This will allow you to determine which orders to expedite in the case of the late orders. It will also allow you to determine which orders you may want to expedite in order to make quarterly goals.

- The length of the bar represents the number of days late and the color of the bar is based on the quantity required. In the future we will add the quantity complete, so that you can see the percent finished value for each order.

Work Order Management

Hovering over an area of the graphics will pop-up a tool-tip giving a subset of the data.

Clicking on an area of the graphics will pop-up the tool-tip with a “view data” option to view the underlying data.

Category:	**1) Past Due**
Customer:	
Job MO Name:	**MRP -2147391094 (MO: 002-SA01-01\#-2147391093)**
Need Date:	**2015-10-01**
Plant Name:	**Aerospace**
Item Name:	**002-SA01-01**
Publish Date:	**2015-10-14 09:24**
Quantity:	**500**
Sales Order:	
Sales Order Line:	
End Date:	**2015-10-06**
Start Date:	**2015-10-05**
Days Late:	**4.90**
Required Qty:	**500**

Category	Customer	Days Late	Item Group	Job MO Name	Job Name	MO Name	Need Date	Need Date Ori	Number of Records
1) Past Due		4.9	002	MRP -2147391094 (MO: 002-SA01-01 \#-2147391093)	MRP -2147391094	002-SA01-01 \#-2147391093	2015-10-01	10/1/2015 11:30:00 AM	1

Plant Name	Item Name	Publish Date	Quantity	Required Qty	Sales Order Line	Sales Order	End Date	ScheduledEnd	Start Date	Scheduled Start	Scheduled
Aerospace	002-SA01-01	2015-10-14 09:24	500	500			2015-10-06	10/6/2015 9:00:00 AM	2015-10-05	10/5/2015	True

Technical Details

The following is technical detail associated with each of the analytics reports.

There will be one slide to show the data source for each item in the report.

There will be another slide to show which SQL tables, views, and stored procedures are needed in order to produce the report.

Capacity Planning

Report Item	Publish Database Tables.Elements
Category	calc: Cleanout, Offline, Overtime, Online, Demand, Scheduled
Date:	Broken into daily intervals
- Capacity Date	RecurringCapacityIntervalRecurrences.StartDateTime & CapacityIntervals.StartDateTime
- Schedule Date	Max(JobResourceBlocks.ScheduledStart, JobResourceBlockIntervals.ScheduledStart)
- Demand Date	JobOperations.JITScheduledStart
Department Name	Departments.Name
Hours	calc: hours within a category
Job Name	Jobs.Name
Plant Name	Departments.PlantName
Publish Date	Schedules.PublishDate
Resource Name	Resources.Name
Schedule Category:	Broken into 3 categoires
- Capacity	RecurringCapacityIntervalRecurrences.StartDateTime & EndDateTime CapacityIntervals.StartDateTime & EndDateTime
- Schedule	Max(JobResourceBlocks.ScheduledStart, JobResourceBlockIntervals.ScheduledStart) & Min(JobResourceBlocks.ScheduledEnd, JobResourceBlockIntervals.ScheduledEnd)
- Demand	JobOperations.JITScheduledStart & duration of scheduled operation
Work Center	Resources.Workcenter

Capacity Planning

Data Source

Publish Database Tables:
- CapacityIntervalResourceAssignments
- CapacityIntervals
- Departments
- JobOperations
- JobResourceBlockIntervals
- JobResourceBlocks
- JobResources
- Jobs
- ManufacturingOrders
- RecurringCapacityIntervalRecurrences
- RecurringCapacityIntervalResourceAssignments
- RecurringCapacityIntervals
- Resources
- Schedules

SQL Stored Procedures:
- DASH_PostPublishProcessing
- DASH_Build_CapacityPlanning_v2a

SQL Functions:
- DDHHMM

SQL Tables:
- DASHt_CapacityPlanning_ResourceActual
- DASHt_CapacityPlanning_ResourceCapacity
- DASHt_CapacityPlanning_ResourceCapacity_Union
- DASHt_CapacityPlanning_ResourceDemand
- DASHt_CapacityPlanning_ShiftsCombined
- DASHt_Report_CapacityPlanning_v2

Dispatch List

Report Item	Publish Database Tables.Elements
Activity	JobActivities.Name
Capability	JobResourceCapabilities.CapabilityExternalId
Customer	Jobs.CustomerExternalId
Department	Departments.Name
Expected Finish Qty	JobActivities.ExpectedFinishQty
Job Hold Date	ManufacturingOrders.HoldUntil
Job Name	Jobs.Name
MO Name	ManufacturingOrders.Name
Need Date	Jobs.NeedDateTime or ManufacturingOrders.NeedDate
Op Name	JobOperations.Name
Priority	Jobs.Priority
Product	ManufacturingOrders.ProductName
Product Description	ManufacturingOrders.ProductDescription
Production Status	JobActivities.ProductionStatus
Publish Date	Schedules.PublishDate
Quantity	JobActivities.ExpectedFinishQty
Resource	Resources.Name
Scheduled End	JobActivities.ScheduledEndDate
Scheduled Start	JobActivities.ScheduledStartDate
Slack Days	JobActivities.SlackDays
Work Content Hours	JobActivities.WorkContentHours
Work Center	Resources.Workcenter

Dispatch List

Data Source

Publish Database Tables:
- Departments
- JobActivities
- JobOperations
- JobResourceBlocks
- JobResourceCapabilities
- Jobs
- ManufacturingOrders
- Resources
- Schedules

SQL Stored Procedures:
- DASH_PublishPostProcessing
- DASH_Build_DispatchList_v2

SQL Tables:
- DASHt_Report_DispatchList_v2

Forecasted Revenue

Report Item	Publish Database Tables.Elements
Job Name	Jobs.Name
MO End Date	ManufacturingOrders.ScheduledEnd
MO Name	ManufacturingOrders.Name
MO Product Desc	ManufacturingOrders.ProductDescription
MO Product Name	ManufacturingOrders.ProductName
Plant	Plants.Name
Publish Date	Schedules.PublishDate
Job Profit	Jobs.Profit
Job Revenue	Jobs.Revenue
Job Total Cost	Jobs.TotalCost
MO Scheduled Revenue	calc: Jobs.Revenue * ManufacturingOrders.RequiredQty / Jobs.Qty
MO Labor Cost	ManufacturingOrders.LaborCost
MO Machine Cost	ManufacturingOrders.MachineCost
MO Material Cost	ManufacturingOrders.MaterialCost
MO Qty	ManufacturingOrders.RequiredQty

Forecasted Revenue

Data Source

Publish Database Tables:
- JobPathNodes
- JobResourceBlocks
- Jobs
- ManufacturingOrders
- Plants
- Resources
- Schedules

SQL Views:
- DASHv_Report_ForecastedRevenue

Inventory Cost

Report Item	Publish Database Tables.Elements
Cost Per Unit	Items.Cost
Item Description	Items.Description
Item Number	Items.Name
Name	calc: name of the source of the inventory transaction
Publish Date	Schedules.PublishDate
Running Total	calc: sum of quantity adjustments
Total Cost	calc: Cost Per Unit x Running Total
Tran Count	calc: numeric counter sorted by date
Tran Date	(various).AdjustmentDate
Tran Qty	(various).AdjustmentQty
Type	calc: transaction type
Warehouse	Warehouses.Name

Inventory Cost

Data Source

Publish Database Tables:
- Forecasts
- ForecastShipmentInventoryAdjustments
- ForecastShipments
- Inventories
- Items
- JobActivities
- JobActivityInventoryAdjustments
- JobOperations
- Jobs
- ManufacturingOrders
- PurchaseToStock
- PurchaseToStockInventoryAdjustments
- SalesOrderDistributionInventoryAdjustments
- SalesOrderLineDistributions
- SalesOrderLInes
- SalesOrders

Publish Database Tabhles (continued):
- Schedules
- TransferOrderDistributionInventoryAdjustments
- TransferOrderDistributions
- TransferOrders
- Warehouses

SQL Stored Procedures:
- DASH_PublishPostProcessing
- DASH_Build_InventoryCost

SQL Tables:
- DASHt_InventoryCost_Helper
- DASHt_Report_InventoryCost

Lead Time

Report Item	Publish Database Tables.Elements
BOM Level	calculated starting at 0 and based on the BOM
Child Item / Desc	Items.Name / Items.Description
Child Qty Per FG	calculated – roll-up through the BOM
Child Qty Per Parent	JobMaterials.TotalRequiredQty
Current LeadTime	calculated – average currently scheduled jobs
Days Standard LT All Levels	calculated – roll-up through the BOM using max lead time at each sub-component level.
FG Item / Desc	Items.Name / Items.Description
Ideal Lead Time	calculated – assume infinite capacity
Last 5 Lead Time	calculated – average of last 5 jobs scheduled
Last Year Lead Time	calculated – average of jobs scheduled last year
Max Levels	calculated – calculated based on the BOM
Operation Steps	calculated – number of operations on a given job
Parent Item / Desc	Items.Name / Items.Description
Parent Warehouse	Warehouse.Name
Publish Date	Schedules.PublishDate
Standard Lead Time	Inventories.LeadTimeDays
Standard Lead Time Deviation	calculated – difference between standard lead time and the average for this year
This Year Lead Time	calculated – average of jobs scheduled during the current calendar year.
Warehouse	Warehouses.Name
Year 2 Ago Lead Time	calculated – average of jobs scheduled during the calendar year of two years ago.

Lead Time

Data Source

Publish Database Tables:
- Inventories
- Items
- JobMaterials
- JobOperations
- JobProducts
- Jobs
- ManufacturingOrders
- Schedules
- Warehouses

SQL Stored Procedures:
- DASH_Build_LeadTime_v2
- DASH_PostPublishProcessing

SQL Functions:
- DDHHMM

SQL Tables:
- DASHt_LeadTime_BOM
- DASHt_LeadTime_FGs
- DASHt_LeadTime_History_LastYear
- DASHt_LeadTime_History_PriorYear
- DASHt_LeadTime_History_ThisYear
- DASHt_LeadTime_ParentChild
- DASHt_LeadTime_ParentChild_Helper
- DASHt_Report_LeadTime_v2

On-Time Performance

Report Item	DBTables.Elements
Job Name	Jobs.Name
Revenue	“ .Revenue
Need Date Time	“ .NeedDateTime
Op Name	JobOperations.Name
Late	“ .Late
Description	“ .Description
Bottleneck	“ .Bottleneck
Standard Run Hours	“ .StandardRunHrs
Standard Setup Hours	“ .StandardSetupHrs
Scheduling Hours	“ .SchedulingHours
JIT Start Date	“ .JITStartDate
Scheduled Start	“ .ScheduledStart
Scheduled End	“ .ScheduledEnd
Need Date	“ .NeedDate
Latest Constraint	“ .LatestConstraint
Latest Constraint Date	“ .LatestConstraintDate

Item	Element
Name	Resources.Name
Work Center	“ .WorkCenter
Resource Description	“ .Description
Department	Departments.Name
Work Content Hours	JobActivities.WorkContentHours
OTD Performancer	(calculated)
Publish Date	Schedules.PublishDate

On-Time Performance

Data Source

Publish Database Tables:
- Departments
- JobActivities
- JobOperations
- JobResourceBlocks
- Jobs
- Resources
- Schedules

SQL Stored Procedures:
- DASH_PublishPostProcessing
- DASH_Build_OnTimePerformance_v1a

SQL Tables:
- DASHt_OnTimePerformance_DowntimeResources
- DASHt_OnTimePerformance_DowntimeResources_Helper
- DASHt_Report_OnTimePerformance

Operator Qualification

Report Item	Publish Database Tables.Elements
Capability	Capability.Name
Capability Demand	calculated using JobResourceCapabilities.OperationID
Description	Resources.Description
Ops Using Cap	calculated using JobResourceCapabilities.OperationID
PublishDate	Schedules.PublishDate
Resource Name	Resources.Name
Resource Type	Resources.ResourceType

Operator Qualification

Data Source

Publish Database Tables:
- Capabilities
- JobResourceCapabilities
- ResourceCapabilities
- Resources
- Schedules

SQL Stored Procedures:
- DASH_PublishPostProcessing
- DASH_Build_OperatorQualification_v1a

SQL Tables:
- DASHt_OperatorQualification_Helper
- DASHt_Report_OperatorQualification

Outside Processing

Report Item	Publish Database Tables.Elements
Available Date	PurchasesToStock.AvailableDate
Item Description	Items.Description
Item Name	Items.Name
Job	Jobs.Name
MO (Manufacturing Order)	ManufacturingOrders.Name
Op (Operation)	JobOperations.Name
Op Need Date	JobOperations.NeedDate
Op Quantity	JobActivities.RequiredFinishQty
PO (Purchase Order)	PurchasesToStock.Name
PO Description	PurchasesToStock.Description
PO Quantity	PurchasesToStock.QtyOrdered
Publish Date	Schedules.PublishDate
Resource	Resources.Name
Scheduled Start	JobResourceBlocks.ScheduledStart
Scheduled End	JobResourceBlocks.ScheduledEnd
Vendor	PurchasesToStock.VendorExternalId

Outside Processing

Data Source

Publish Database Tables:
- Items
- JobActivities
- JobOperationAttributes
- JobOperations
- JobResourceBlocks
- Jobs
- ManufacturingOrders
- PurchasesToStock
- Resources
- Schedules
- Warehouses

SQL Stored Procedures:
- DASH_PublishPostProcessing
- DASH_Build_OutsideProcessing

SQL Tables:
- DASHt_OutsideProcessing_Jobs
- DASHt_OutsideProcessing_POs
- DASHt_Report_OutsideProcessing

Revenue Per Headcount

Report Item	Publish Database Tables.Elements
Annualized Revenue Per Head Count	calc: (12 * monthly Qty Ord * Unit Price / headcount)
Head Count	Resources.Count(ResourceType = ‘Labor’)
Publish Date	Schedules.PublishDate
Year Month	SalesOrderLineDistributions.RequiredAvailableDate

Revenue Per Headcount

Data Source

Publish Database Tables:
- Items
- Resources
- SalesOrderLineDistributions
- SalesOrderLines
- SalesOrders
- Schedules

SQL Stored Procedures:
- DASH_PublishPostProcessing
- DASH_Build_RevenuePerHeadcount

SQL Tables:
- DASHt_Report_RevenuePerHeadCount
- DASHt_SalesOrder_MonthlyTotal
- DASHt_SalesOrderValue

Sales Order Change

Report Item	Publish Database Tables.Elements
Cancelled	SalesOrders.Cancelled
Change Date	calc: PublishDate when change occurred
Change From	various : original value that was changed
Change Item	various: item that was changed
Change To	various : new value that it was changed to
Customer	SalesOrders.Customer
Delivery Date	SalesOrderLineDistributions.RequiredAvailableDate
Item name	Items.Name
Job End	Jobs.ScheduledEndDateTime
Job Name	Jobs.Name
Job Start	Jobs.ScheduledStartDateTime
Line	SalesOrderLines.LineNumber
Publish Date	Schedules.PublishDate
Qty Ordered	SalesOrderLineDistributions.QtyOrdered
Sales Order	SalesOrders.ExternalId
Warehouse	Warehouses.Name

Sales Order Change

Data Source

Publish Database Tables:
- Items
- Jobs
- Schedules
- SalesOrderLineDistributions
- SalesOrderLines
- SalesOrders
- Warehouses

SQL Stored Procedures:
- DASH_PublishPostProcessing
- DASH_Build_SalesOrderChange_v1a

SQL Tables:
- DASHt_Report_SalesOrderChange
- DASHt_SalesOrderChange_ChangeLog
- DASHt_SalesOrderChange_SalesOrders_Current
- DASHt_SalesOrderChange_SalesOrders_Deliveries_Current
- DASHt_SalesOrderChange_SalesOrders_Deliveries_History
- DASHt_SalesOrderChange_SalesOrders_History
- DASHt_SalesOrderChange_SalesOrders_Jobs_Current
- DASHt_SalesOrderChange_SalesOrders_Jobs_History
- DASHt_SalesOrderChange_SalesOrders_Lines_Current
- DASHt_SalesOrderChange_SalesOrders_Lines_History

Sales Order Management

Report Item	Publish Database Tables.Elements
Category	calc: 1) Past Due, 2) Current Year, 3) Future, 4) On Hold
Customer	SalesOrders.Customer
Days Late	calc: SalesOrderLineDistributions.RequiredAvailableDate - today
Expiration Date	SalesOrders.ExpirationDate
Item	Items.Name
Item Description	Items.Description
Publish Date	Schedules.PublishDate
Remaining Value	calc: SalesOrderLines.UnitPrice * sold.QtyOpenToShip
Required Date	SalesOrderLineDistributions.RequiredAvailableDate
Sales Order	SalesOrders.ExternalId
Sales Order Description	SalesOrders.Description
Sales Order Line	SalesOrderLines.LineNumber
Quantity Open to Ship	SalesOrderLineDistributions. QtyOpenToShip
Quantity Ordered	SalesOrderLineDistributions. QtyOrdered
Unit Price	SalesOrderLines.UnitPrice

Sales Order Management

Data Source

Publish Database Tables:
- Items
- Schedules
- SalesOrderLineDistributions
- SalesOrderLines
- SalesOrders

SQL Stored Procedures:
- DASH_PublishPostProcessing
- DASH_Build_SalesOrderManagement

SQL Tables:
- DASHt_Report_SalesOrderManagement

Scrap After Operation

Report Item	Publish Database Tables.Elements
Expected Scrap Percent	calc: (JobActivities) ExpectedScrapQty / RequiredFinishQty
Finished Quantity	JobActivities.RequiredFinishQty
Item Description	Items.Description
Item Name	Items.Name
Job Name	Jobs.Name
MO Name	ManufacturingOrders.Name
Operation Name	JobOperations.Name
Publish Date	Schedules.PublishDate
Reported Good Quantity	JobActivities.ReportedGoodQty
Reported Start Date	JobActivities.ReportedStartDate
Required Quantity	JobActivities.RequiredFinishQty
Scrap Percent	calc: [Scrap Quantity] / JobActivities.RequiredFinishQty
Scrap Quantity	calc: (JobActivities) RequiredFinishQty - ReportedGoodQty
Total Scrap Hours	calc: [Scrap Quantity] * JobOperations.MinutesPerCycle / (60.0 * JobOperations.QtyPerCycle)

Scrap After Operation

Data Source

Publish Database Tables:
- Items
- JobActivities
- JobProducts
- JobOperations
- Jobs
- ManufacturingOrders
- Schedules

SQL Stored Procedures:
- DASH_PublishPostProcessing
- DASH_Build_ScrapAfterOperation

SQL Tables:
- DASHt_Report_SalesOrderManagement
- DASHt_ScrapAfterOperation_Helper

Shipping List

Report Item	Publish Database Tables.Elements
Customer	Jobs.CustomerExternalId
Department	Departments.Name
Job Name	Jobs.Name
Lateness Days	ManufacturingOrders.LatenessDays
MO Name	ManufacturnigOrders.Name
Need Date	ManufacturingOrders.NeedDate
Op Name	JobOperations.Name
Plant Name	Departments.PlantName
Product	ManufacturingOrders.ProductName
Product Description	ManufacturingOrders.ProductDescription
Profit	Jobs.Profit
Publish Date	Schedules.PublishDate
Resource	Resources.Name
Revenue	Jobs.Revenue
Scheduled Start	JobResourceBlocks.ScheduledStart
Ship Date	JobResourceBlocks.ScheduledStart (formatted)
Ship Quantity	JobActivities.RequiredFinishQty
Work Center	Resources.Workcenter

Shipping List

Data Source

Publish Database Tables:
- Departments
- JobActivities
- JobOperations
- JobResourceBlocks
- Jobs
- ManufacturingOrders
- Resources
- Schedules

SQL Views:
- DASHv_Report_ShippingList

Supply And Demand

Report Item	Publish Database Tables.Elements
Inventory:	
- ItemID	Inventories.ItemID
- WarehouseID	Inventories.WarehouseID
- Date	“1800-01-01”
- Quantity	Inventories.OnHandQty
- Reference	“Initial Inventory”
- Supply/Demand	“Supply”
- Type	“Inventory”
- Running Total	(calculated)
- ID	(calculated)
Job Product:	
- ItemID	JobProducts.ItemID
- WarehouseID	JobProducts.WarehouseID
- Date	JobOperations.ScheduledEnd
- Quantity	JobProducts.TotalOutputQty
- Reference	Jobs.Name – JobOperations.Name
- Supply/Demand	“Supply”
- Type	“JobProduct”
- Running Total	(calculated)
- ID	(calculated)
Transfer In:	
- ItemID	TransferOrderDistributions.ItemID
- WarehouseID	TransferOrderDistributions.ToWarehouseID
- Date	TransferOrderDistributions.ScheduledReceiveDate
- Quantity	TransferOrderDistributions.QtyOrdered
- Reference	TransferOrders.Name
- Supply/Demand	“Supply”
- Type	“TransferIn”
- Running Total	(calculated)
- ID	(calculated)
Purchase Order:	
- ItemID	PurchasesToStock.ItemID
- WarehouseID	PurchasesToStock.WarehouseID
- Date	PurchasesToStock.AvailableDate
- Quantity	PurchasesToStock.QtyOrdered
- Reference	PurchasesToStock.Name
- Supply/Demand	“Supply”
- Type	“PurchaseOrder”
- Running Total	(calculated)
- ID	(calculated)

Supply And Demand

Report Item	Publish Database Tables.Elements
Job Material:	
- ItemID	JobMaterials.ItemExternalID
- WarehouseID	JobMaterials.WarehouseExternalID
- Date	JobOperations.ScheduledEnd
- Quantity	JobMaterials.TotalRequiredQty
- Reference	Jobs.Name – JobOperations.Name
- Supply/Demand	“Demand”
- Type	“JobMaterial”
- Running Total	(calculated)
- ID	(calculated)
Transfer Out:	
- ItemID	TransferOrderDistributions.ItemID
- WarehouseID	TransferOrderDistributions.FromWarehouseID
- Date	TransferOrderDistributions.ScheduledReceiveDate
- Quantity	TransferOrderDistributions.QtyOrdered
- Reference	TransferOrders.Name
- Supply/Demand	“Demand”
- Type	“TransferOut”
- Running Total	(calculated)
- ID	(calculated)
Sales Order:	
- ItemID	SalesOrderLines.ItemID
- WarehouseID	SalesOrderLineDistributions.MustSupplyFromWarehouseID
- Date	SalesOrderLineDistributions.RequiredAvailableDate
- Quantity	SalesOrderLineDistributions.QtyOrdered
- Reference	SalesOrders.Name – SalesOrderLines.LineNumber
- Supply/Demand	“Demand”
- Type	“SalesOrder”
- Running Total	(calculated)
- ID	(calculated)
Forecast:	
- ItemID	Forecasts.InventoryID>>Inventories.ItemID
- WarehouseID	Forecasts.InventoryID>>Inventories.WarehouseID
- Date	ForecastShipments.RequiredDate
- Quantity	ForecastShipments.RequiredQty
- Reference	Forecasts.Name
- Supply/Demand	“Demand”
- Type	“Forecast”
- Running Total	(calculated)
- ID	(calculated)

Supply And Demand

Data Source

Publish Database Tables:
- Forecasts
- ForecastShipments
- Inventories
- Items
- JobMaterials
- JobOperations
- JobProducts
- Jobs
- ManufacturingOrders
- PurchasesToStock
- SalesOrderLineDistributions
- SalesOrderLines
- SalesOrders
- Schedules
- TransferOrderDistributions
- TransferOrders
- Warehouses

SQL Stored Procedures:
- DASH_PostPublishProcessing
- DASH_Build_SupplyAndDemand_v2

SQL Tables:
- DASHt_Item_SupplyAndDemand
- DASHt_Report_SupplyAndDemand
- DASHt_SupplyAndDemand_Forecast_Helper
- DASHt_SupplyAndDemand_Inventory_Helper
- DASHt_SupplyAndDemand_SalesOrder_Helper

Work Order Cost

Report Item	Publish Database Tables.Elements
Cost	Items.Cost
Customer	Jobs.CustomerExternalId
Finished Ops	count(JobOperations where Finished = 'True')
Job	Jobs.Name
Job Desc	Jobs.Description
Job MO Name	Jobs.Name + (MO: + ManufacturingOrders.Name +)
Job Qty	Jobs.Qty
Labor Cost Per Unit	calc: (mo.LaborCost / jp.TotalOutputQty)
Labor Hours	calc: (sum[ja.NbrOfPeople * ja.WorkContentHours * jr.AttentionPercent / 100.0, where r.ResourceType = Labor, Operator, Supervisor, Engineer, Inspector, Team, Technician, Employee])
Machine Cost Per Unit	calc: (mo.MachineCost / jp.TotalOutputQty)
Material Cost Per Unit	calc: (mo.MaterialCost / jp.TotalOutputQty)
MO Name	ManufacturingOrder.Name
Outside Processing Cost Per Unit	calc: (j.SubcontractCost / j.Qty)
Part Number	Items.Name
Product	Items.Name + (+ Items.Description +)
Publish Date	Schedules.PublishDate
Quantity	JobProducts.TotalOutputQty
Revenue	calc: (j.Revenue * jp.TotalOutputQty / j.Qty)
Revenue Per Direct Labor Hour	calc: (Revenue / Labor Hours)
Standard Hours	mo.StandardHours
Standard Hours Per Unit	calc: (mo.StandardHours / jp.TotalOutputQty)
Total Hours	calc: sum(ja.NbrOfPeople * ja.WorkContentHours * jr.AttentionPercent / 100.0)
Total Hours Per Unit	calc: (Total Hours / jp.TotalOutputQty)

Work Order Cost

Data Source

Publish Database Tables:
- Items
- JobActivities
- JobOperations
- JobProducts
- JobResourceBlocks
- JobResources
- Jobs
- ManufacturingOrders
- Resources
- Schedules

SQL Stored Procedures:
- DASH_PublishPostProcessing
- DASH_Build_WorkOrderCost_v2

SQL Tables:
- DASHt_Report_WorkOrderCost
- DASHt_WorkOrderCost_FinishedOps
- DASHt_WorkOrderCost_Helper
- DASHt_WorkOrderCost_Helper_Helper
- DASHt_WorkOrderCost_Labor

Work Order Management

Report Item	Publish Database Tables.Elements
Category	calc: 1) Past Due, 2) Current Year, 3) Future, 4) On Hold
Customer	Jobs.CustomerExternalId
Days Late	ManufacturingOrders.LatenessDays
End Date	ManufacturingOrders.ScheduledEnd (formatted)
Job MO Name	Jobs.Name + (MO: + ManufacturingOrders.Name +)
Need Date	Either Jobs.NeedDateTime or ManufacturingOrders.NeedDate
Product Name	ManufacturingOrders.ProductName
Publish Date	Schedules.PublishDate
Quantity	ManufacturingOrders.RequiredQty
Sales Order	Jobs.[SalesOrder UDF]
Sales Order Line	Jobs.[SalesOrderLine UDF]
Scheduled	ManufacturingOrders.Scheduled
Scheduled End	ManufacturingOrders.ScheduledEnd
Scheduled Start	ManufacturingOrders.ScheduledStart
Start Date	ManufacturingOrders.ScheduledStart (formatted)

Work Order Management

Data Source

Publish Database Tables:
- Jobs
- ManufacturingOrders
- Schedules

SQL Stored Procedures:
- DASH_PublishPostProcessing
- DASH_Build_WorkOrderManagement_v1a

SQL Tables:
- DASHt_Report_WorkOrderManagement
- DASHt_WorkOrderManagement_Helper