



Reporting Infrastructure Set-up (BI Reporting)

(Apparel Rental Brand)

Created standard data definitions across departments such as, laundry, packing, shipping, etc., streamlined the existing reporting structure for the warehouse & labor performance, and migrated reports to Tableau

SETUP OF REPORTING INFRASTRUCTURE



ABOUT THE CLIENT

The client is a major **U.S. based apparel rental brand**





- The client lacked a streamlined BI reporting infrastructure and consistent KPI definition across the departments such as, laundry, packing, shipping, etc., that led to issues in tracking labor reporting performance
- Merilytics partnered with the client to streamline existing Excel and Google based reporting sheets, standardized data definitions and migrated the reporting structure to Tableau

VALUE ADDITION





- Developed automated reports to track live performance of the warehouse, i.e., volume processed (shipments sent out, dresses cleaned, etc.) per hour, to be used by the floor managers and the overall historical performance reports for the Executive Team
- Updated the existing Labor model, to include new factors such as seasonal ramp in incoming orders, to help make hiring decisions based on workflow forecasts for the future weeks
- Partnered with the client in vetting the data from a new vendor and helped in finding and fixing issues such as missing hours, wages, etc.
- Transitioned the existing Excel and Google sheets-based reports to Tableau which enabled the creation of Live performance trackers to monitor performance

IMPACT



- Harmonization of the data definitions improved the consistency and reliability of the reports
- Implementation of Tableau streamlined the overall reporting infrastructure and enabled easy distribution of reports to the respective owners with appropriate encapsulation(e.g., floor managers having access only to performance data and not wage related data)
- Thorough vetting of the data received from the new vendors, helped in reducing the effort needed in transition and ensured that the updated reports were accurate and reliable for decision making by the Executive Team





Tracked four key metrics, Volume (incoming and outgoing shipments), headcount, labor hours and wage rates

These KPIs are summarized at MTD, QTD and YTD levels and compared against last year and budget values

	N	MTD as of Week ending 05/25/19				QTD as of Week ending 05/25/19				YTD as of Week ending 05/25/19					
Metrics	2019	2018	YoY %	Budget	% var	2019	2018	YoY %	Budget	% var	2019	2018	YoY %	Budget	% var
Shipments	306,007	202,520	51%	320,888	-5%	306,007	202,520	51%	320,888	-5%	1,416,678	920,263	54%	1,428,033	-1%
Inbound Units	646,797	439,961	47%	699,850	-8%	646,797	439,961	47%	699,850	-8%	3,000,256	1,603,399	87%	3,177,306	-6%
ICQA Units	40,016	27,820	44%	49,142	-19%	40,016	27,820	44%	49,142	-19%	312,019	178,965	74%	333,529	-6%
Total Headcount	1,456	1,053	38%	1,365	7%	1,456	1,053	38%	1,365	7%	2,281	1,417	61%	1,113	105%
FT headcount	629	395	59%	841	-25%	629	395	59%	841	-25%	670	424	58%	802	-16%
Temp Headcount	890	659	35%	524	70%	890	659	35%	524	70%	1,808	1,040	74%	312	480%
Total Hours	137,999	103,051	34%	162,235	-15%	137,999	103,051	34%	162,235	-15%	645,283	467,750	38%	708,899	-9%
FT Hours	74,908	47,576	57%	101,545	-26%	74,908	47,576	57%	101,545	-26%	325,374	237,769	37%	516,252	-37%
Temp Hours	63,092	55,475	14%	60,690	4%	63,092	55,475	14%	60,690	4%	319,909	229,981	39%	192,647	66%
Direct Hours	103,132	78,867	31%	130,190	-21%	103,132	78,867	31%	130,190	-21%	484,399	357,584	35%	567,363	-15%
Support Hours	26,225	19,974	31%	23,312	12%	26,225	19,974	31%	23,312	12%	117,820	90,380	30%	100,891	17%
Training hours	5,805	2,506	132%	4,636	25%	5,805	2,506	132%	4,636	25%	26,011	9,246	181%	19,873	31%
Holiday & Vacation hours	2,837	1,704	66%	4,097	-31%	2,837	1,704	66%	4,097	-31%	17,053	10,540	62%	20,771	-18%
Overtime – Hours	9,299	6,512	43%	4,606	102%	9,299	6,512	43%	4,606	102%	33,928	25,102	35%	20,043	69%
Total Dollars	\$2,246,875	\$1,706,996	32%	\$2,492,940	-10%	\$2,246,875	\$1,706,996	32%	\$2,492,940	-10%	\$10,511,632	\$7,707,879	36%	\$10,841,582	-3%
FT Dollars	\$1,255,943	\$830,733	51%	\$1,525,547	-18%	\$1,255,943	\$830,733	51%	\$1,525,547	-18%	\$5,466,547	\$4,003,294	37%	\$7,775,923	-30%
Temp Dollars	\$990,932	\$876,263	13%	\$967,393	2%	\$990,932	\$876,263	13%	\$967,393	2%	\$5,045,085	\$3,704,585	36%	\$3,065,658	65%
Overtime Dollars	\$222,330	\$165,863	34%	\$104,738	112%	\$222,330	\$165,863	34%	\$104,738	112%	\$825,918	\$621,345	33%	\$453,582	82%
Wage Rate	\$16.28	\$16.56	-2%	\$15.37	6%	\$16.28	\$16.56	-2%	\$15.37	6%	\$16.29	\$16.48	-1%	\$15.29	7%
Wage Rate – FT	\$16.77	\$17.46	-4%	\$15.02	12%	\$16.77	\$17.46	-4%	\$15.02	12%	\$16.80	\$16.84	0%	\$15.06	12%
Wage Rate - Temp	\$15.71	\$15.80	-1%	\$15.94	-1%	\$15.71	\$15.80	-1%	\$15.94	-1%	\$15.77	\$16.11	-2%	\$15.91	-1%
Wage Rate - Overtime	\$23.91	\$25.47	-6%	\$22.74	5%	\$23.91	\$25.47	-6%	\$22.74	5%	\$24.34	\$24.75	-2%	\$22.63	8%



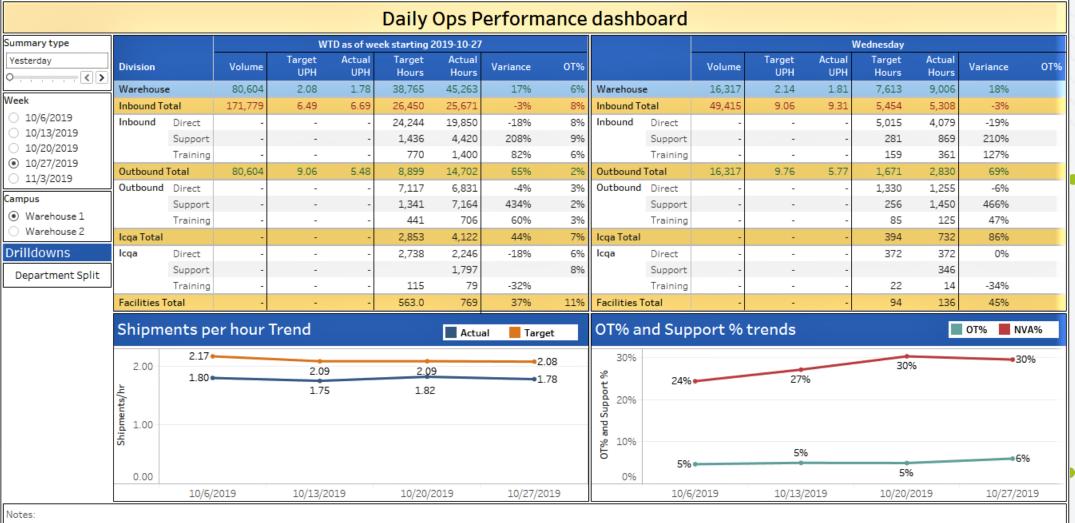


Executive level summary of KPIs with sparklines showing the recent trend and the comparison to budget for two different warehouses at different locations

	Ware house 1						Warehouse 2					
		Last	Actuals FY19	Variances			Last			Varia	nces	
Key Metrics	Budget FY19	4weeks Trend Avg		Vs Budget	Vs 4Wk AVg	Budget FY19	4weeks Avg	Trend	Actuals FY19	vs Budget	Vs 4Wk Avg	
Volume												
Outbound Shipments	104,018	86,364	92,871	-11%	8%	30,519	29,699		29, 144	-5%	-2%	
Inbound Units	235,050	160,363	181,939	-23%	13%	59,725	70,650		69,940	17%	-1%	
Labor												
Variable Labor Cost	\$7.92	\$9.18	\$9.02	(▲14%)	(▼2%)	\$8.00	\$9.48	~	\$9.75	(▲22%)	(▲3%)	
Direct Regular Dollars	\$4.90	\$4.45	\$4.10	(▼16%)	(▼8%)	\$4.53	\$5.79	^	\$5.28	(▲17%)	(▼9%)	
Temp fee	\$0.87	\$0.89	\$0.80	(▼9%)	(▼10%)	\$0.97	\$1.89	/	\$1.93	(▲99%)	(▲2%)	
Support	\$0.82	\$1.76	\$1.72	(▲ 111%)	(▼2%)	\$1.19	\$1.04		\$1.43	(▲20%)	(▲38%)	
FT Taxes and Benefits	\$0.75	\$0.93	\$0.97	(▲29%)	(▲4%)	\$0.73	\$0.32	///	\$0.33	(▼56%)	(▲3%)	
OT	\$0.27	\$0.56	\$0.89	(▲234%)	(▲58%)	\$0.27	\$0.30 -		\$0.49	(▲198%)	(▲64%)	
Training	\$0.18	\$0.27	\$0.26	(▲49%)	(▼2%)	\$0.18	\$0.15		\$0.22	(▲24%)	(▲51%)	
Holiday and Vacation	\$0.14	\$0.32	\$0.28	(▲103%)	(▼12%)	\$0.13	\$0.01		\$0.06	(▼55%)	(▲720%)	
Shipments Per Hour (excl. hol & vac)	2.13	1.92	2.00	(▼6%)	(▲4%)	1.97	1.76		1.74	(▼12%)	(▼1%)	
Shipments Per Hour (incl. hol and vac)	2.09	1.84	1.92	(▼8%)	(▲4%)	1.93	1.75	\	1.73	(▼11%)	(▼1%)	
Outbound Shipments Per Outbound Hours	8.78	5.65	6.34	(▼28%)	(▲12%)	6.51	6.37	<u></u>	6.72	(▲3%)	(▲5%)	
Inbound Units Per Inbound Hour	7.65	6.59	6.78	(▼11%)	(▲3%)	8.50	6.19 -		6.12	(▼28%)	(▼1%)	
Hours												
OT%	3%	5%	9%	(▲184%)	(▲65%)	3%	3% >		4%	(▲46%)	(▲62%)	
Temp%	46%	42%	38%	(▼18%)	(▼10%)	58%	81%		81%	(▲40%)	(▲1%)	
Transportation (as of Week Ending 10/12)												
Ooutbound cost per Outbound shipment	\$6.80	\$8.76	\$7.86	' '	(▼10%)	\$8.65	\$8.66		\$8.81	(▲2%)	(▲2%)	
Inbound Cost per Inbound Shipment	\$3.95	\$4.94	\$4.15	(▲5%)	(▼16%)	\$6.43	\$8.09		\$8.40	(▲31%)	(▲4%)	
Other Metrics												

DAILY OPERATIONS PERFORMANCE TABLEAU DASHBOARD





Division level summary of KPIs at a WTD (Week to date) and day level

Last 4-week
trends of
important metrics
such as Shipments
per
hour(productivity
of the
warehouse),
overtime and
share of support
departments.

- 1. Please use the Summary type slider to change the day for which the summary is displyed
- 2. Use the week and campus selections to choose the desired week and warehouse
- 3. Use the Department split drilldown to drilldown to a Department level summary

LIVE UPH1 TRACKER TABLEAU DASHBORD



Productivity or UPH (Units Per Hour) summarized by Department and Employee

Live UPH Tracker Dashboard **Division Name** Department Name Date Worked Filter Start Time **End Time** Multiple values Multiple values Today 12:00 AM 11:45 PM **Employees Distribution by** Department wise UPH Summary Calculated UPH/Goal UPH Missed / Gained **Goal Scans** Calculated UPH **Barcode Count Hours Worked** Throughpu Cycle Count 149 10,658 71.8 35,875 (25,217.00) Calculated UPH/ Goal UPH Employee 17 21,150 (19,151.00) **Palletizing** 1,999 117.5 Calculated UPH/Goal UPH % % Bucket Count **PutAway Sortation** 125 2,469 19.8 10,863 (8,393.50) >=100% >=100% 122 10,588 87 8,396 96.3 (2,191.50)99-90% 99-90% Shipping 17 1,999 117.5 3,525 (1,526.00)89-75% 58 89-75% 57 515 9.0 1,350 (835.00) Assembly <75% 183 8,010 81 7,219 89.0 (791.00) Returns Reusable Spotting 55 41 0.8 53 (11.50)Reusable Repair 4 0.3 2 (1.20)90 158 1.8 32 126.50 **New Receipts** 40 1,034 806 228.00 Pressing 26.0 227 4.8 808 271.50 **Reusable Sortation** 1,079 Put Away 258 23,241 90.0 22,500 741.00 45 1,352 30.0 300 1,052.00 Restoration

Employees are categorized and color-coded based on their performance relative to the goal

Department Name	Avg. Uph Goal	Barcode Count	Hours Worked	Calculated UPH	Calculated UPH/ Goal UPH %	Goal Scans	Missed / Gained Throughput
ew Receipts	18.0	57	0.3	228	1266.67%	5	53
	18.0	82	0.5	164	911.11%	9	73
	18.0	18	0.8	24	133.33%	14	5
	18.0	1	0.3	4	22.22%	5	(4)
storation	10.0	89	1.0	89	890.00%	10	79
	10.0	64	1.0	64	640.00%	10	54
	10.0	63	1.0	63	630.00%	10	5
	10.0	31	0.5	62	620.00%	5	2
	10.0	77	1.3	62	616.00%	13	6
	10.0	60	1.0	60	600.00%	10	5
	10.0	69	1.3	55	552.00%	13	5
	10.0	67	1.3	54	536.00%	13	5
	10.0	67	1.3	54	536.00%	13	5
	10.0	53	1.0	53	530.00%	10	4
	10.0	51	1.0	51	510.00%	10	4
	10.0	63	1.3	50	504.00%	13	5:
dizaguirre	10.0	50	1.0	50	500.00%	10	4
mdelgado	10.0	76	1.8	43	434.29%	18	59