Supply Chain Management Vendor Performance Management

By: Ryan Fogliano

RTA Mission:

To Provide

Safe, Reliable, Clean, and Courteous Public Transportation





Purpose

o RTA prides itself on providing safe reliable public transportation. What if I said, we can help improve the safety and efficiency of our authority with a simple Vendor Management Tool. With the help of our IT department we can turn simple data into a meaningful report that can help eliminate faulty vendors and increase vendor performance. With this vendor management tool we will have the ability to promote quality products and on time deliveries while decreasing RMA's and financial waste due to lost time and service to our customers. Our main goal with this tool is to improve the RTAs ability to provide safe reliable transportation by creating a more efficient service strategy.





Vendor Performance Metric Tool

- Quality: Correct line item was delivered with correct specifications by correct date.
- Quantity: Correct quantity of line items were correctly shipped as ordered by correct date.
- On Time: Each line item received on or before the vendors promise to deliver date











Desired Project Outcomes

- Encourage vendors to meet performance expectations.
- Allow a vendor the opportunity to improve performance.
- Provide sufficient documentation to avoid repetitive, non-conforming vendors.

"Good suppliers are made, not born"

Juan Carlos Villa and Joseph Schofer





What's at stake for GCRTA?

- Increase revenue, decrease expenses
- Enhance customer experience
- Increase service efficiency and achieve good state of repair
- Achieve a safety culture











Phases

- o PHASE 1: Information Gathering
- PHASE 2: Observation and Learning
- PHASE 3: Designing and Implementation
- PHASE 4: Testing and Evaluation





Phase 1: Action Items

	What	Who	When	Status	Notes
	Develop PLAN	Sam Ryan Michelle	6/6	Complete	Identify Purpose, Leaders, Action Steps, and Needs
PHASE 1	Identify key stakeholders	Sam Ryan Michelle	6/12	Complete	Who is impacted by vendor performance? Procurement Accounting Quality assurance IT/Internal audit to create dashboards
	Clearly define and develop project deliverables	Sam Ryan Michelle	6/12	Complete	 Create Performance Metric Tool that Collects and analyzes data Can communicate and make recommendations to vendors. Measures (document error, quantity, quality, internal error (See KPI's)
	Define components and tools that will be needed in the process	Sam Ryan	6/12	Complete	 Ultramain Oracle Excel





Phase 1: Action Items

		What	Who	When	Status	Notes
	PHASE 1	Identify and define KPIs (metrics)	Sam Ryan Michelle	6/12	Complete	 Delivery issues On time performance Did vendor ship the correct items, in correct quantity Performance insights Reliability Does material meet our specifications, is it usable for what was ordered? Was material delivered when it was promised
		Define performance expectations for project and vendors, create a baseline	Sam Ryan Michelle	6/21		Areas of competency and performance standards vendors are expected to meet.
		Identify data collection instruments and tools	Sam Ryan	6/21	Complete	Will information come directly from suppliers? From internal systems? From internal users or stakeholders?
		Create PowerPoint for first presentation	Sam Ryan	6/14	Complete	Use deliverables





Progress

- o PLAN created
- Literature Review of VPM's
- Identification of key stakeholders, tools, and technology
- Created spreadsheet with quantity and quality data
- Identification of performance measures





Phase 3: Design and Implement

- Created a Vendor Scorecard
- Designed "Score" calculator
- Created interactive dashboard





What data to collect and how?

- UltraMain and Oracle reports
 - Line item by transaction number
 - Track quantity ordered and received
 - Promise date versus received date
 - Quality discrepancies





How is vendor performance calculated?

- Quality: number of line items with quality discrepancies over total amount of line items
- Quantity: number of line items with incorrect delivery amounts over total amount of line items
- On Time: Number of items delivered later than promise date over total items





Scorecard

Vendor	Quality	Quantity %	OTD %	Total Average	Score
CUMMINS BRIDGEWAY LLC	98.80%	85.00%	75.00%	86.27%	4.67
WABTEC CORPORATION	100.00%	97.50%	87.50%	95.00%	4.67
MOHAWK MFG & SUPPLY CP	100.00%	90.00%	67.50%	85.83%	4.33
W.W.Williams	100.00%	67.50%	37.50%	68.33%	2.67
BOSTWICK-BRAUN CO.	96.43%	77.50%	65.00%	79.64%	3.67
THE AFTERMARKET PARTS COMPANY LLC	99.00%	77.14%	65.71%	80.62%	3.67
H. LEFF ELECTRIC COMPANY	97.87%	80.00%	55.00%	77.62%	3.67
GILLIG LLC	99.00%	77.50%	40.00%	72.17%	3.00
SERVCO PRODUCTS INCORPORATED	100.00%	95.00%	12.50%	69.17%	3.33
MUNCIE RECLAMATION & SUPPLY	98.50%	95.00%	87.50%	93.67%	4.67





Score Calculator

Adjust "Average" to calculate score

Score Calculator									
Metric Average Value Score									
Quality	99.00%	4							
Quantity	88.00%	2							
On Time	75.00%	3							
Total 9 3.00									
Adust vendor Average per metric for score									





What is a "Good Performance"

- Average
 - Meeting expectations: 90.0 or More
 - Below Expectations: 80.0 89.9
 - Not Meeting Expectations: Less Than 80.0





How is Score Calculated?

Points
4pts
3pts

2pts

1pts

Opts

Quality

99-100%

97-98%

95-96%

93-94%

>92.9%

Quantity

95-100%

90-94%

85-89%

80-84%

>79.9%

On Time

80-100%

60-79%

40-59%

20-39%

>19.9%

Avg. Points •

Quality	Quantity	On Time
99.00%	77.50%	40.00%
4 pts	0 pts	2 pts

4 + 0 + 2 = 6 pts

6 pts / 3 Metrics 2.00 POINTS





What does the data tell us?

Overall

Quality	Quantity	OTD	Average	Score
98.61%	85.62%	50.69%	78.31%	3.65

On Time

Expected to be greater than 90%

Total Score

Expected to be greater than 4.00



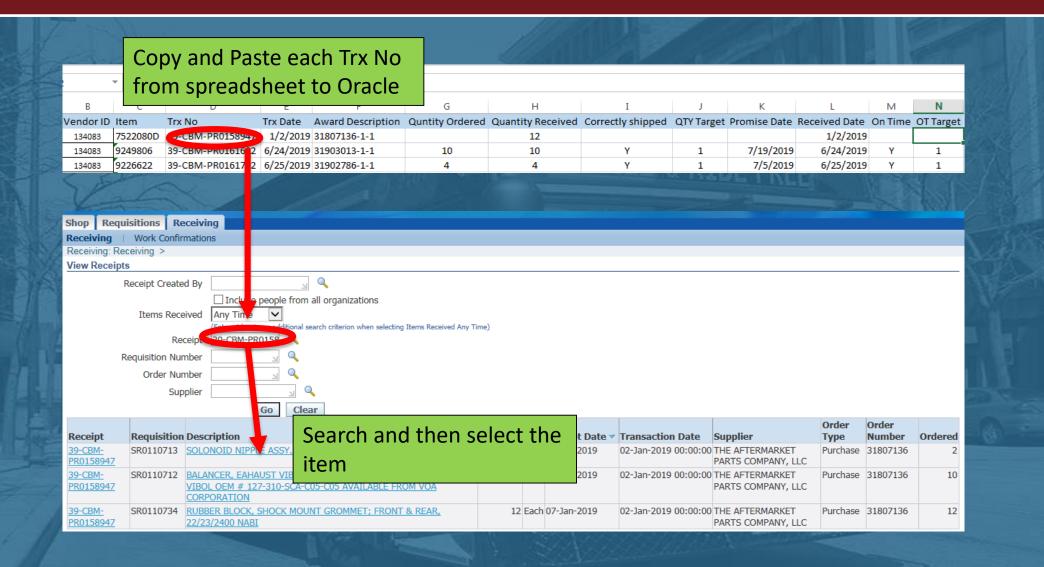


Next Steps

- Address challenges and Improve processes
 - Sustainability of project
 - Create Real Time Reporting
 - o Oracle to send Promise to Deliver date to UltraMain
 - Validity of data
 - o Ensure promise to deliver date is accurate in Oracle
 - Reliability
 - o Implement processes to ensure metrics are easily tracked

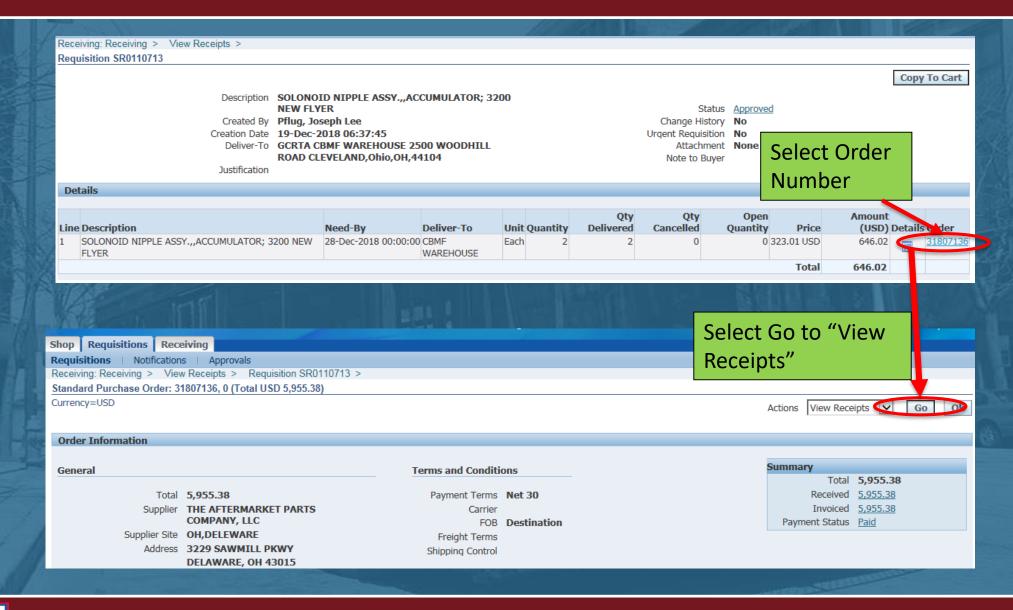






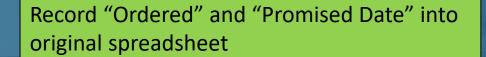












Requisitions | Notifications | Approvals

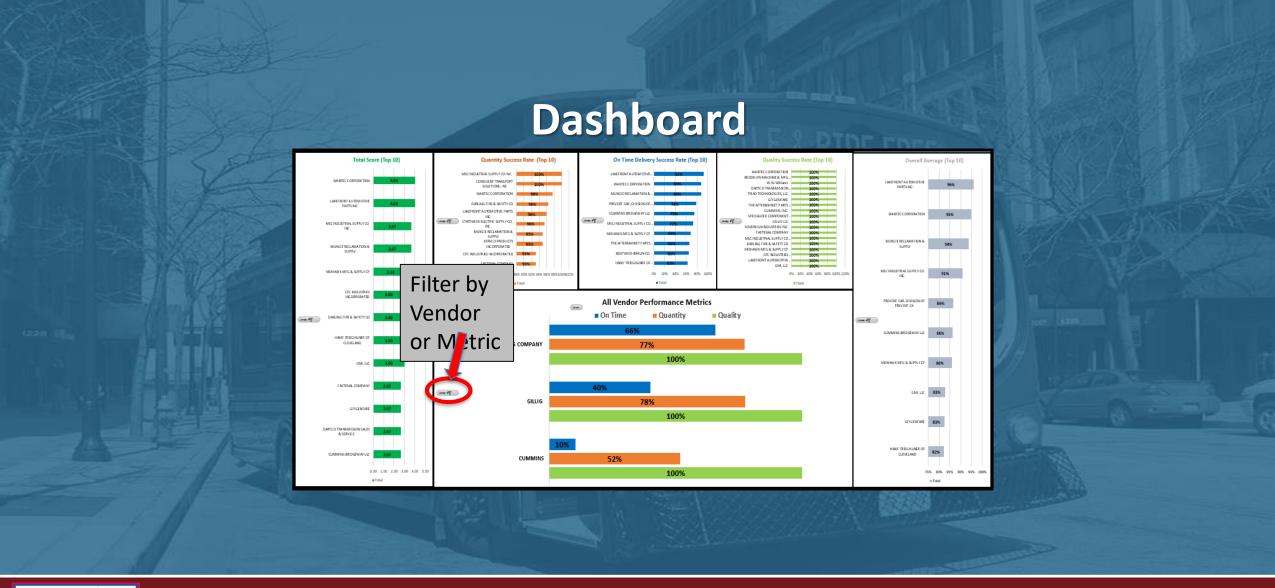
Receiving: Receiving > View Receipts > Requisition SR0110713 > View Order Details > Receipts for Standard Purchase Order: 31807136

Receipt	PO Number	Line	Shipment	Description	U JM	Ordered Returned	Ne Receiv		Location	Receipt Date		Ne. d-By Date	Performance
39-CBM- PR0158947	31807136	3		SOLONOID NIPPLE ASSY.,,ACCUMULATOR; 3200 NEV FLYER	Each	2		2	CBMF WAREHOUSE	02-Jan- 2019 00:00:00	27-Dec-2018 00:00:00	28-Fec- 2018 00:00:00	Late
39-CBM- PR0159543	31807136	4	1	MOTOR ASSY,BRIDGEPLATE;	Each	4		4	CBMF WAREHOUSE	08-Feb- 2019 00:00:00	00:00:00	28-Dec- 2018 00:00:00	Late
39-CBM- PR0158947	31807136	1		RUBBER BLOCK, SHOCK MOUNT GROMMET; FRONT & REAR, 22/23/2400 NABI	Each	12		2	CBMF WAREHOUSE	02-Jan- 2019 00:00:00		24-Dec- 2018 00:00:00	Late
39-CBM- PR0158947	31807136	2		BALANCER, EAHAUST VIBRATION; 212/23/24/2500 NABI, ALSO USE VIBOL OEM # 127-310-SCA-C05-C05 AVAILABLE FROM VOA CORPORATION	Each	10		9	CBMF WAREHOUSE	02-Jan- 2019 00:00:00	28-Feb-2019 00:00:00	05-Jan-2019 00:00:00	Early
39-CBM- PR0160045	31807136	2		BALANCER, EAHAUST VIBRATION; 212/23/24/2500 NABI, ALSO USE VIBOL OEM # 127-310-SCA-C05-C05 AVAILABLE FROM VOA CORPORATION	Each	10		1	CBMF WAREHOUSE	12-Mar- 2019 00:00:00	28-Feb-2019 00:00:00	05-Jan-2019 00:00:00	Late

"Defects" tab could help track "quality" metric.













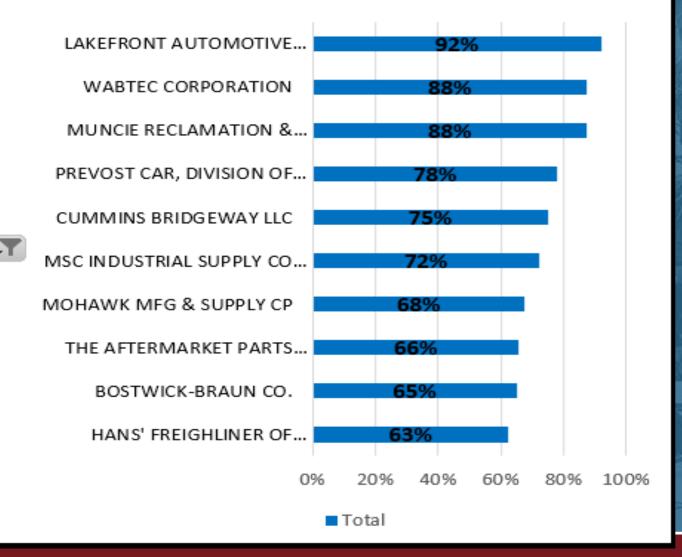






Vendor

On Time Delivery Success Rate (Top 10)



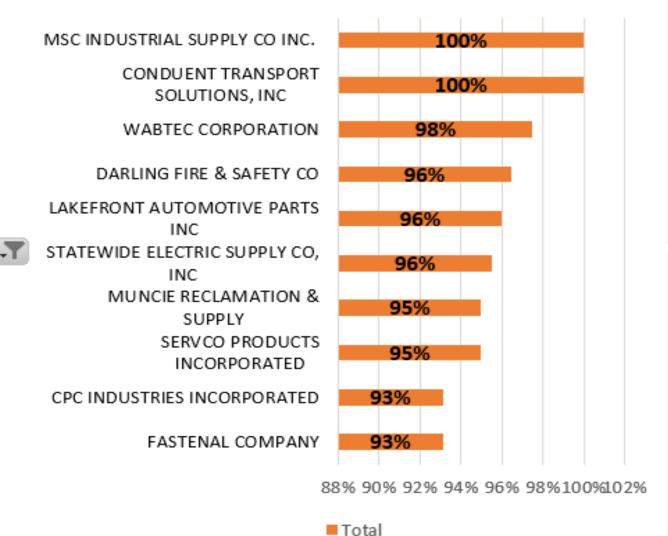






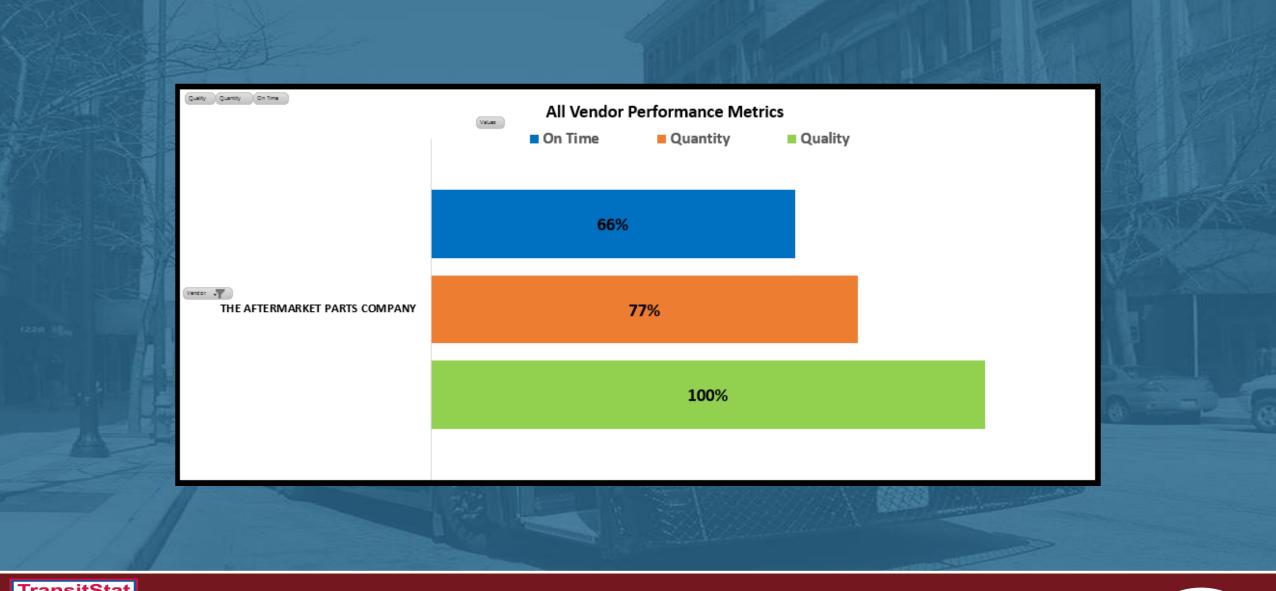
Vendor

Quantity Success Rate (Top 10)



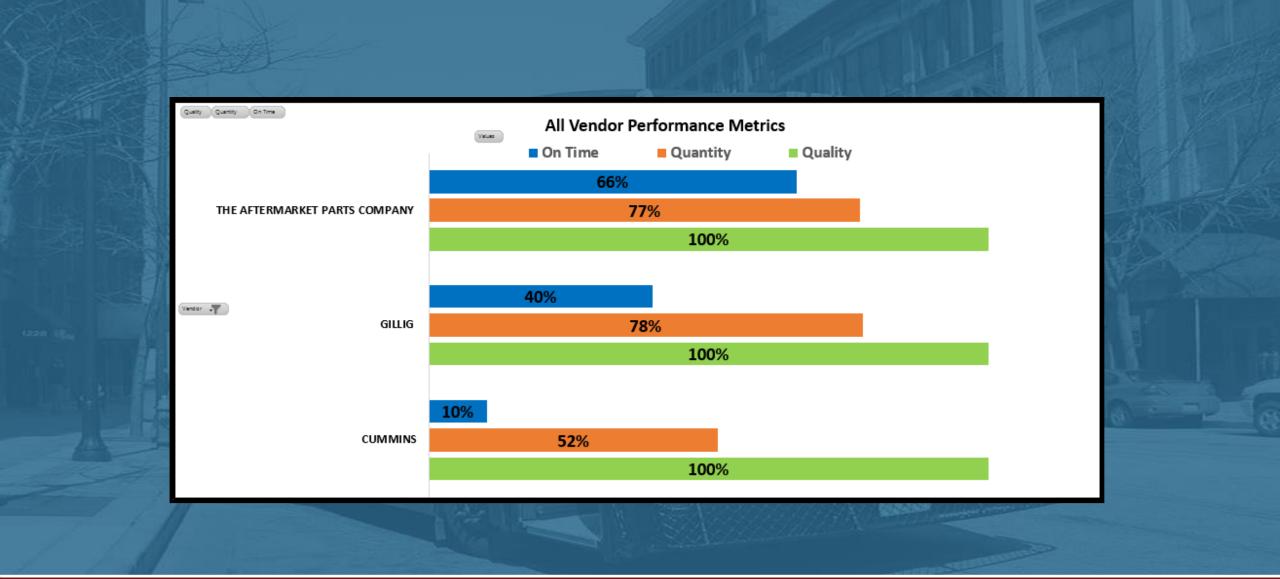






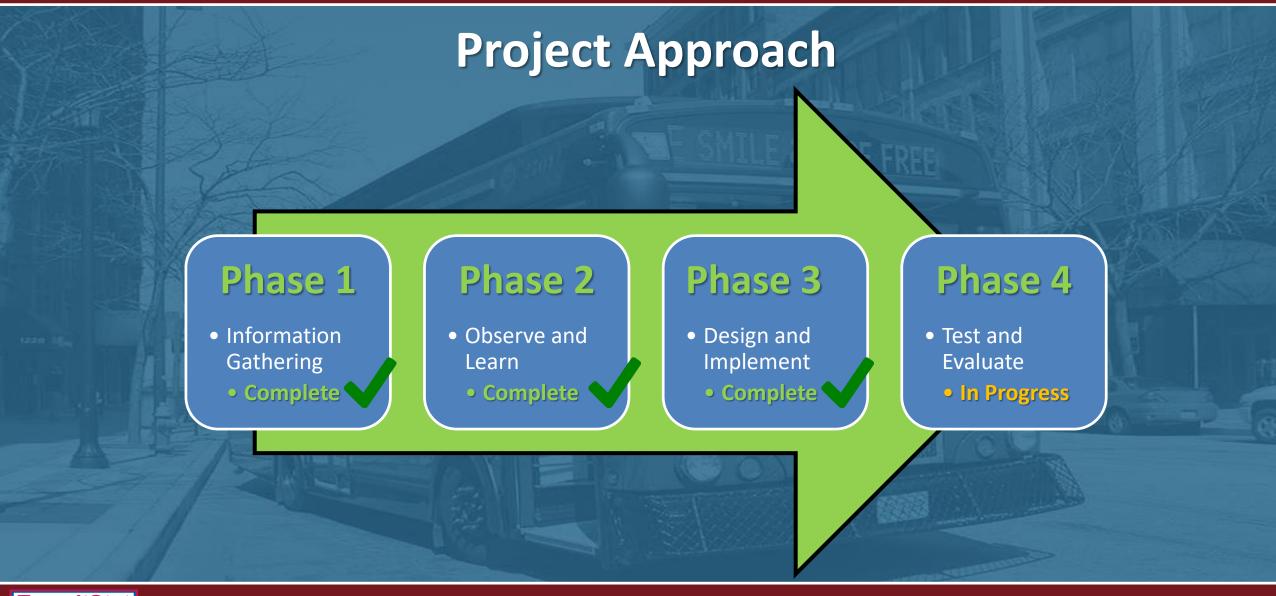
















Phase 4: Test and Evaluate

- Improve reliability
- o Improve validity of data
- Improve Sustainability
- o On-going





Challenges

- Technology
 - Oracle and UltraMain speak different languages
 - UltraMain doesn't track Promise Date
 - Unable to find a report that has all required fields

- Quality Metric
 - Lack of formalized processes to track.





Recommendations

Technology Improvements

- o Integrate a "Vendor Performance Management" report in UltraMain V9
- Send Promise Date to UltraMain with Purchase Order Number from Oracle.

Process Improvements

o Improve process to document quality discrepancies as they happen





Next Steps

- o Immediate
 - Work with UltraMain V9 team to include Vendor Performance report in update
 - Create a process to track quality discrepancies
 - Thoroughly examine how to improve validity of quality metric
- Long term
 - Create a reliable benchmark for acceptable vendor performance based on long term accurate data.









