Throughput Validation & Transportation Study

Key Points

- Validate JIT Process

- Analyze Truck Delivery System

- Plant to Plant Logistic Analysis

Client's Challenge

-Evaluate system capability to support Client's Broadcast and JIT consumption
-To Decide number of Trucks, Truck Density and Delivery time
-Tipping point of increasing number of Trucks vs. decreasing Truck Density in order to meet JIT consumption

PMI's Approach

-Analysis of Data and Verification of Baseline Model
-Sensitivity analysis on number of Trucks
-Quantify Impact of Broadcast Repair time on System
-Buffer recovery time analysis
-Lead times analysis

Findings & Recommendation

-AS-RS System is not required
-Identified circumstances that can cause the client's buffer go below minimum level
-Recommendation
    -Permissible maximum Down "Time" on production system without affecting the throughput
    -Number of truck drivers for various scenarios
    -Truck density to meet the expected Throughput

Client Side Bank

Overall LeadTime
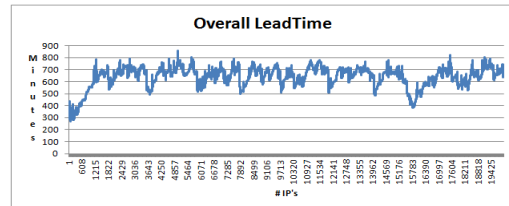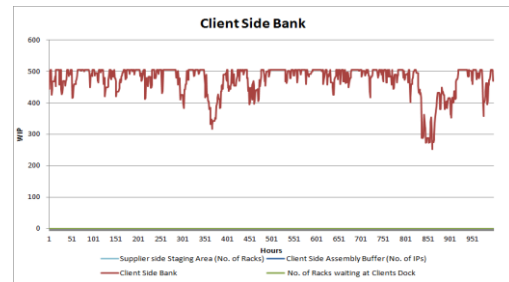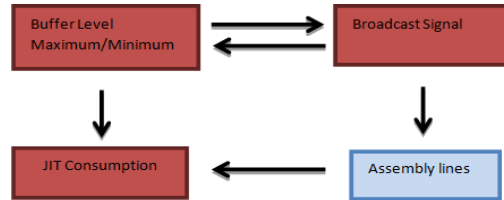
WIP Segment	Buffer Content			
	Minimum	Average	Maximum	Capacity
Supplier side Staging Area (No. of Racks)	6.00	17.01	42.50	225.00
Client Side Assembly Buffer (No. of IPs)	37.50	67.06	67.50	67.50
Client Side Bank	252.50	474.01	505.00	505.00
No. of Racks waiting at Clients Dock	0.00	63.28	105.00	200.00
Truck Density (No. of Racks)	10	35.00	37.5	37.5

Schematic Process Flow
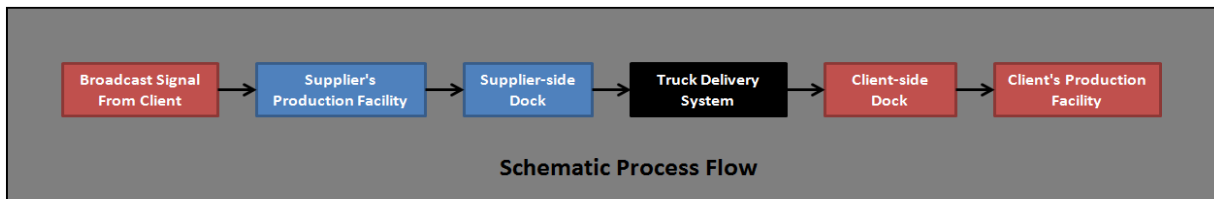
*Data shown here has been modified to protect client confidentiality