

ISSUE

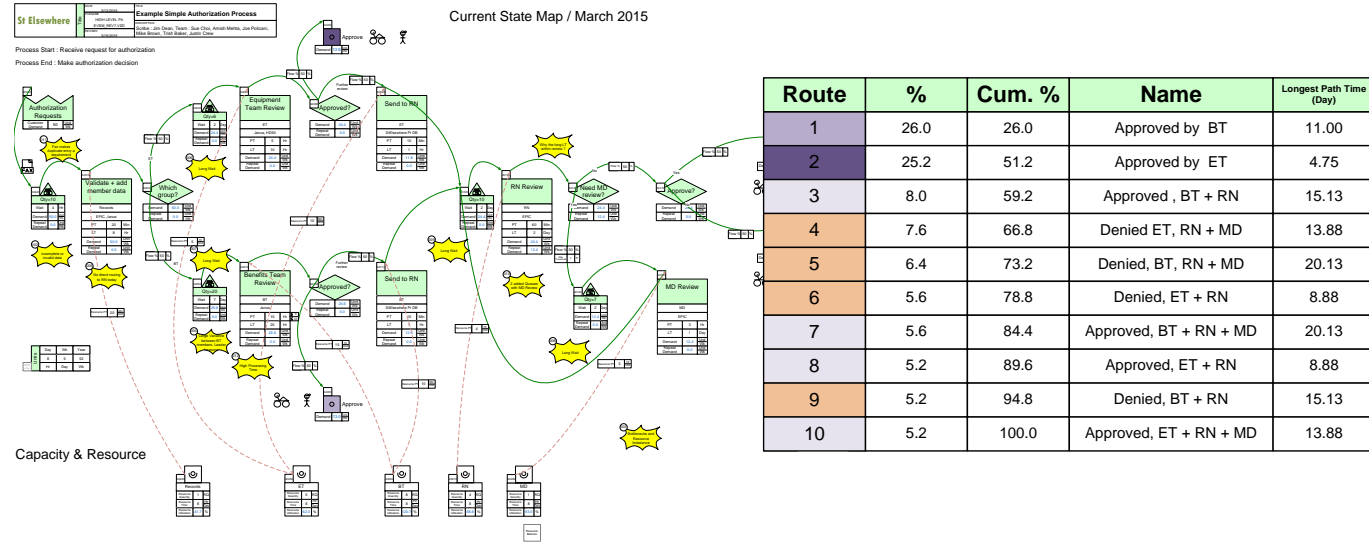
Need to reduce turnaround times for authorization process from 16 days to 2 days by end of year.

BACKGROUND

High turnaround times for authorization cause significant patient dissatisfaction as measured on patient surveys for 2014

CURRENT CONDITION

Average turnaround time is approx 16 days. Supported by Current state map

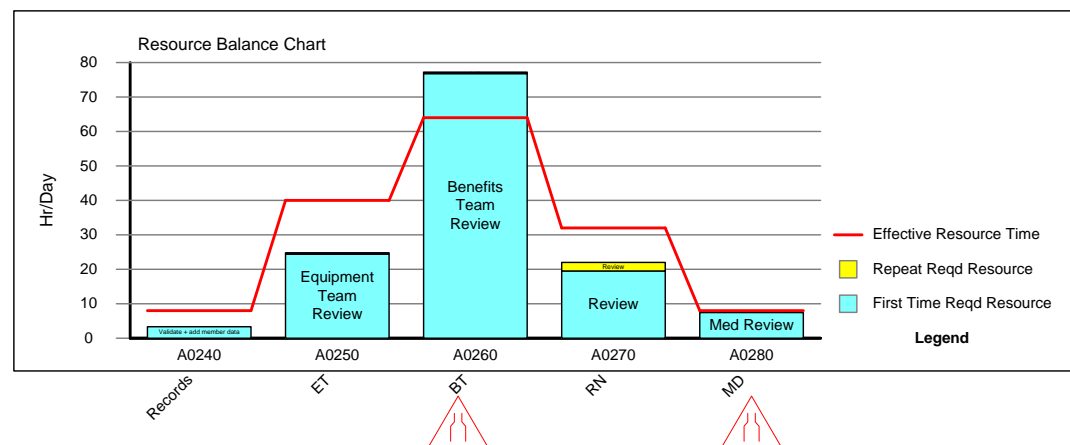


PROBLEM ANALYSIS

See current state map. Problems include:

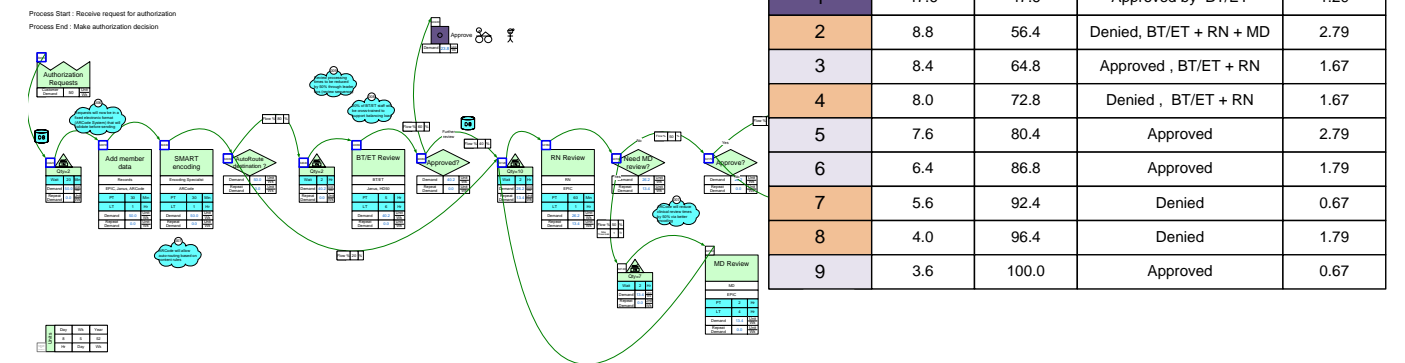
1. Invalid incoming data
2. Unbalanced resources / bottlenecks (chart below)
3. Large variances between staff in throughput (best practice opportunity)
4. Large processing times from extracting/analyzing data (upfront classification opportunity)
5. Skills issues (Cross-training opportunity)

A 2 day lead time solution will require us to remove bottlenecks, eliminate queues and reduce cycle times



TARGET CONDITION

See future state map.



Expected Outcomes

- Average lead times < 2 days (from approx 16 days in current state)
- Max lead times < 3 days
- Resource savings

IMPLEMENTATION PLAN

What	Who	When	Outcome
Implement ARCode to bring in validated data	IT	July 2015	
Train and add encoder upfront for autorouting and streamlined review	John Baker	August 2015	
X-Train percent of BT/ET staff to balance loading	Trish Goodman	August 2015	
Learn from BT Leader practices to reduce review cycle times	Trish Goodman	Sept 2015	

FOLLOW UP

- Track lead times for 6 months after Sept 2015
- Report at monthly management meeting

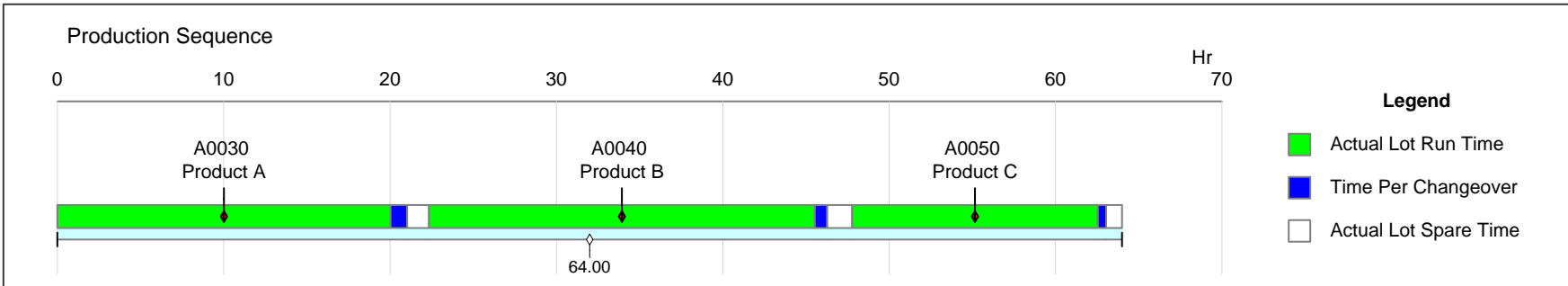
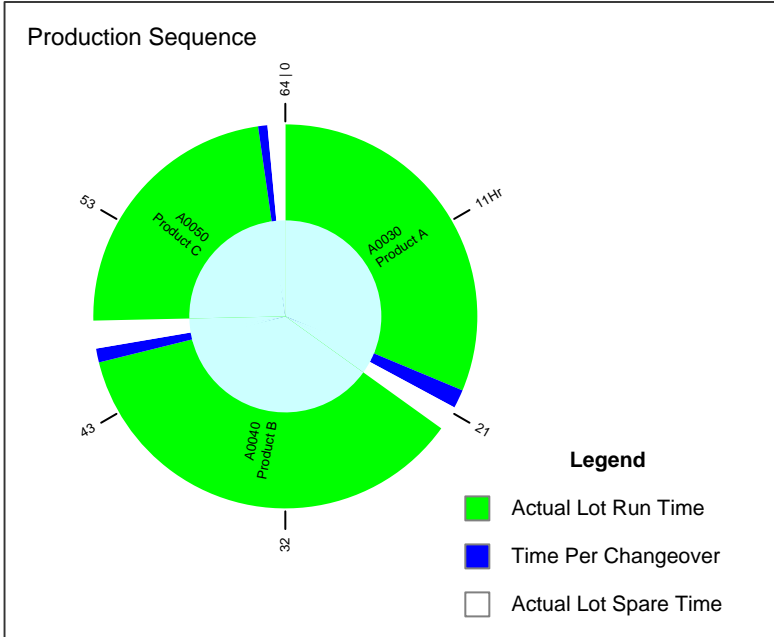
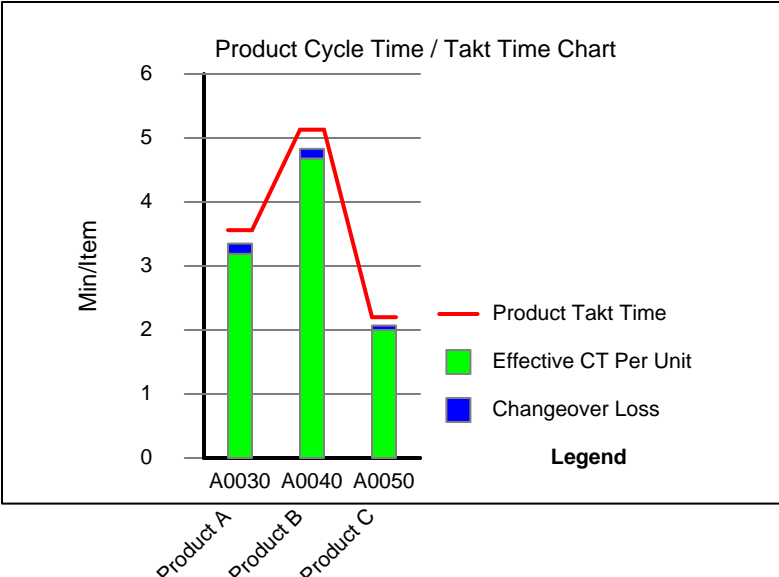
EPEI Wizard

A0030	1	
Product A		
Cycle Time	3	Min
Qty Per Cycle	1	Item
Uptime Percent	95	%
Performance	99	%
Product Demand	85	Item Day
Activity Scrap	5	%
Downstream Scrap	5	%
Time Per Changeover	60	Min
Actual Lot Size	376.73	Item
Actual Lot Spare Time	78.70	Min

A0040	1	
Product B		
Cycle Time	4	Min
Qty Per Cycle	1	Item
Uptime Percent	90	%
Performance	95	%
Product Demand	65	Item Day
Activity Scrap	6	%
Downstream Scrap	7	%
Time Per Changeover	45	Min
Actual Lot Size	297.41	Item
Actual Lot Spare Time	89.60	Min

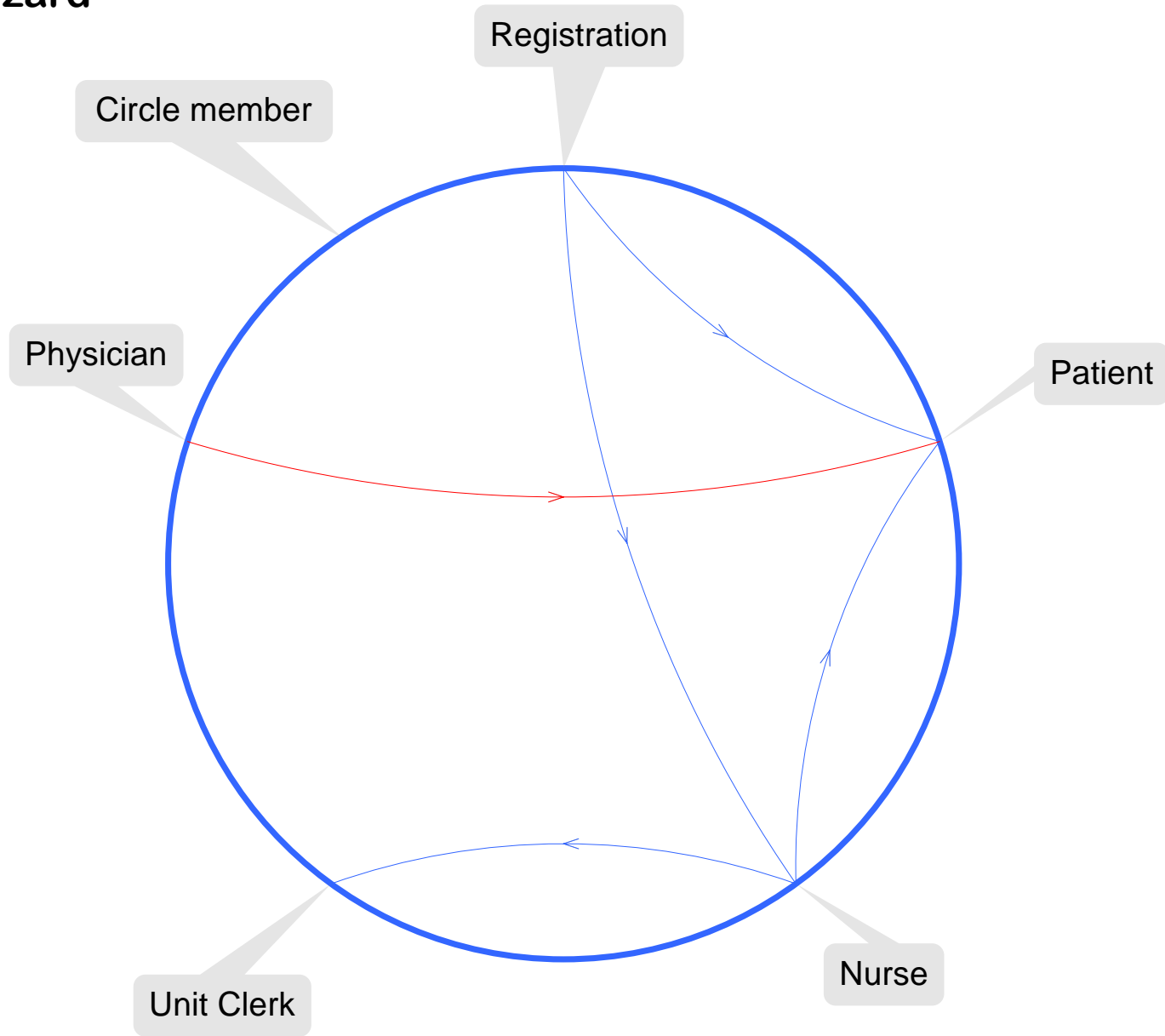
A0050	1	
Product C		
Cycle Time	2	Min
Qty Per Cycle	1	Item
Uptime Percent	100	%
Performance	100	%
Product Demand	100	Item Day
Activity Scrap	5	%
Downstream Scrap	5	%
Time Per Changeover	30	Min
Actual Lot Size	443.21	Item
Actual Lot Spare Time	57.16	Min

A0020	1	
Production Activity		
Activity Time	16	Hr Day
EPEI Min	1.50	Day
EPEI Actual	4	Day
WACT	2.87	Min
Weighted Qty Per Cycle	1.00	Item
Weighted OEE	83.94	%
Weighted Scrap	5.27	%



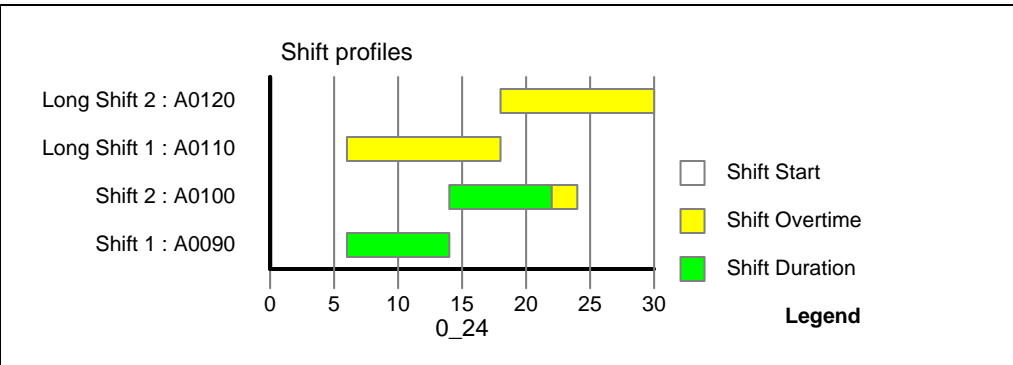
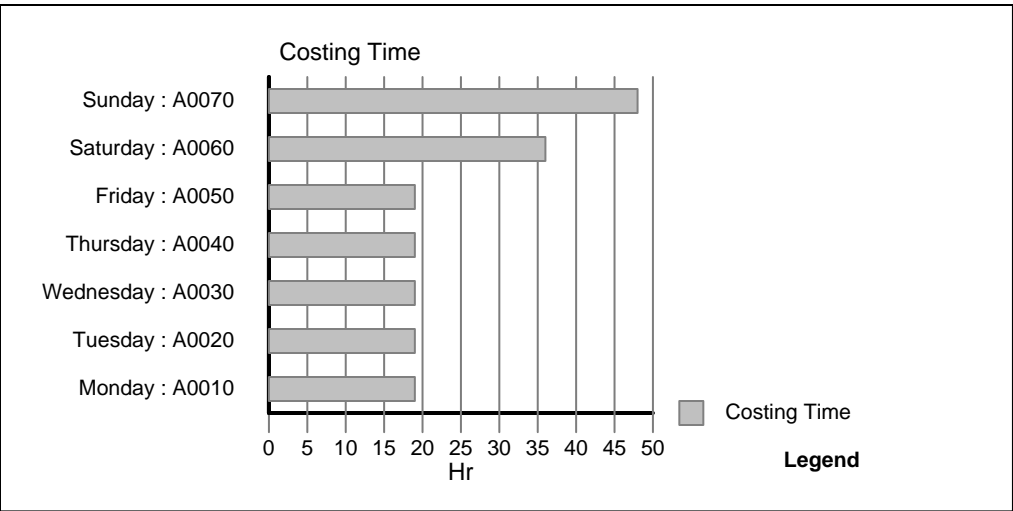
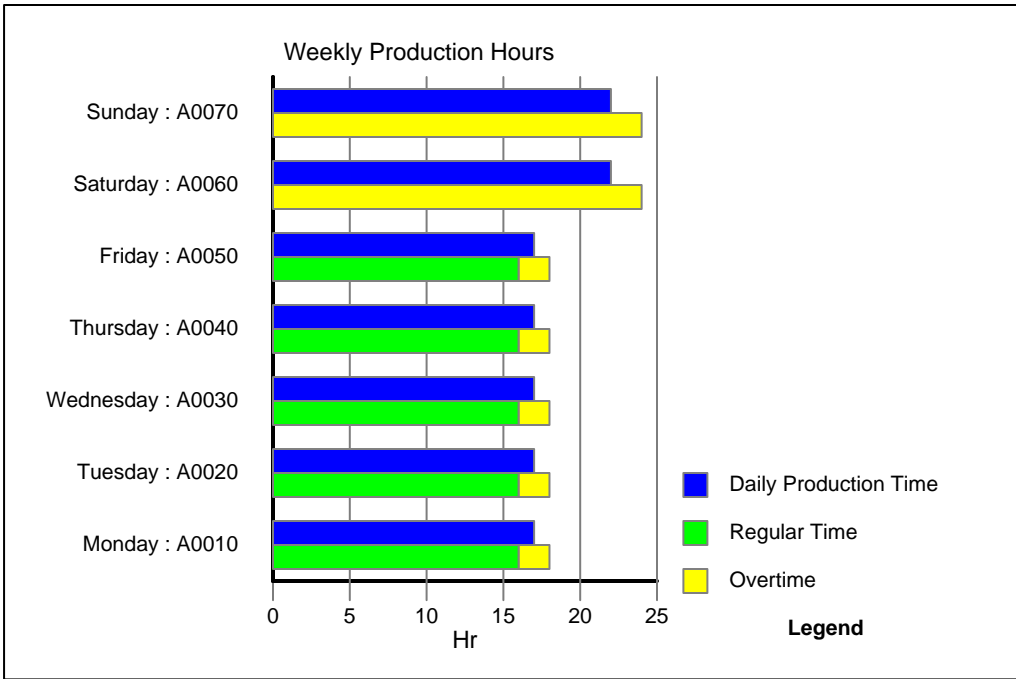
Units	Min	Hr
	60	60
	Sec	Min

Event Circle Wizard



Number Of Steps = 5

Facility Time Pro Wizard



Shift 1		
Shift Start	6	0_24
Shift Duration	8	Hr
Shift Break	0.5	Hr
Shift Overtime	0	Hr
Shift Overtime Break	0	Hr

Shift 2		
Shift Start	14	0_24
Shift Duration	8	Hr
Shift Break	0.5	Hr
Shift Overtime	2	Hr
Shift Overtime Break	0	Hr

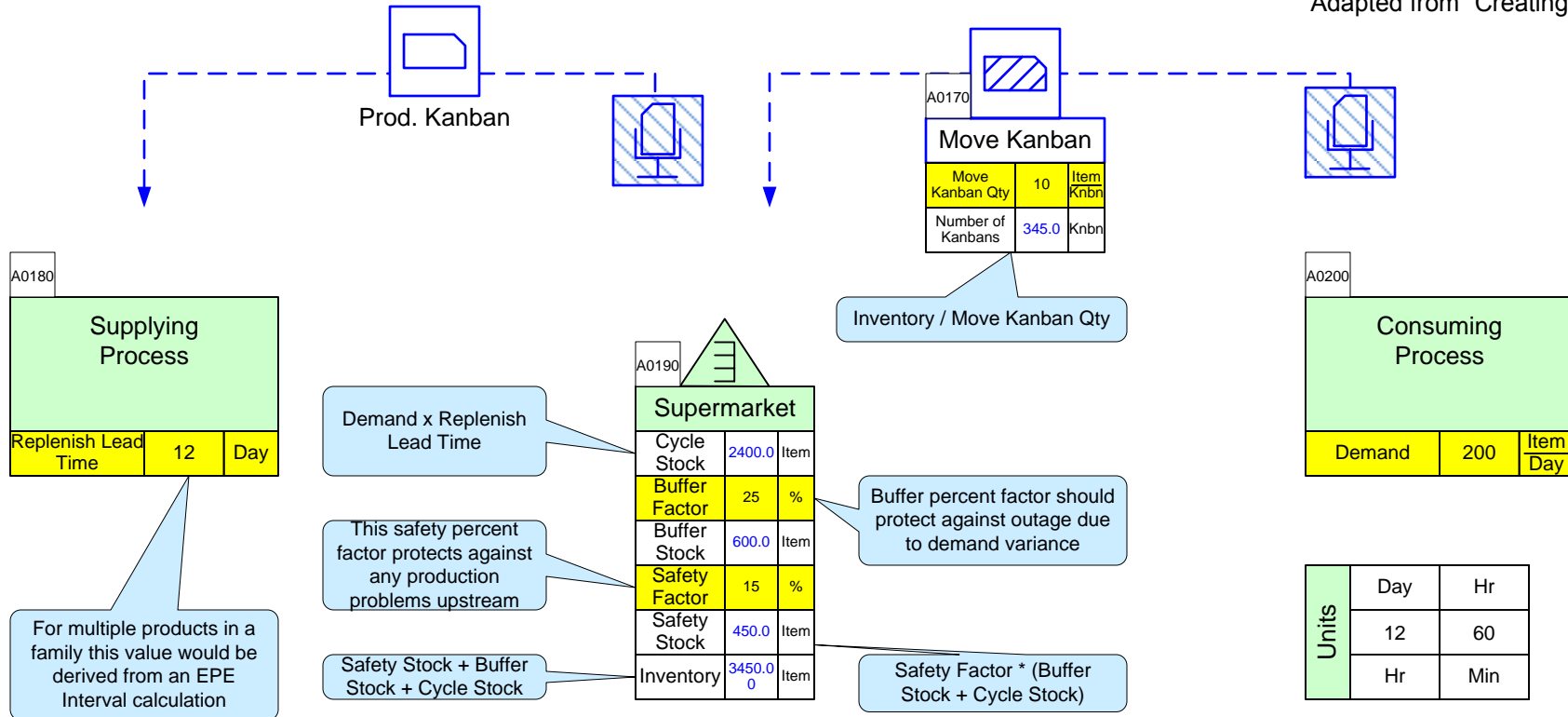
Long Shift 1		
Shift Start	6	0_24
Shift Duration	0	Hr
Shift Break	0	Hr
Shift Overtime	12	Hr
Shift Overtime Break	1	Hr

Long Shift 2		
Shift Start	18	0_24
Shift Duration	0	Hr
Shift Break	0	Hr
Shift Overtime	12	Hr
Shift Overtime Break	1	Hr

Day	Daily Production Time (Hr)	Regular Time (Hr)	Regular Break Time (Hr)	Overtime (Hr)	Overtime Break Time (Hr)	Regular Rate Multiplier	Overtime Rate Multiplier	Costing Time (Hr)
Monday	17.00	16.00	1.00	2.00	0.00	1	1.5	19.00
Tuesday	17.00	16.00	1.00	2.00	0.00	1	1.5	19.00
Wednesday	17.00	16.00	1.00	2.00	0.00	1	1.5	19.00
Thursday	17.00	16.00	1.00	2.00	0.00	1	1.5	19.00
Friday	17.00	16.00	1.00	2.00	0.00	1	1.5	19.00
Saturday	22.00	0.00	0.00	24.00	2.00	1	1.5	36.00
Sunday	22.00	0.00	0.00	24.00	2.00	1	2	48.00
Weekly Summary	129.00	179.00						

Kanban Wizard

Adapted from "Creating Level Pull"



Manufacturing Multi Station Wizard

A012 0		
Machine 1		
Cycle Time_M	10	Sec
Qty Per Cycle_M	1	Item
Stations_M	3	Stn
Activity Time_M	12	Hr Day
OEE Percent_M	98	%
Cycle Time Per Item	0.06	Min
CT Capacity Per Day	12960.0 0	Item
All Stations Time	36.00	Hr Day
QPC Contributor	12960.0 0	ItSq
Capacity Per Day	12700.8 0	Item

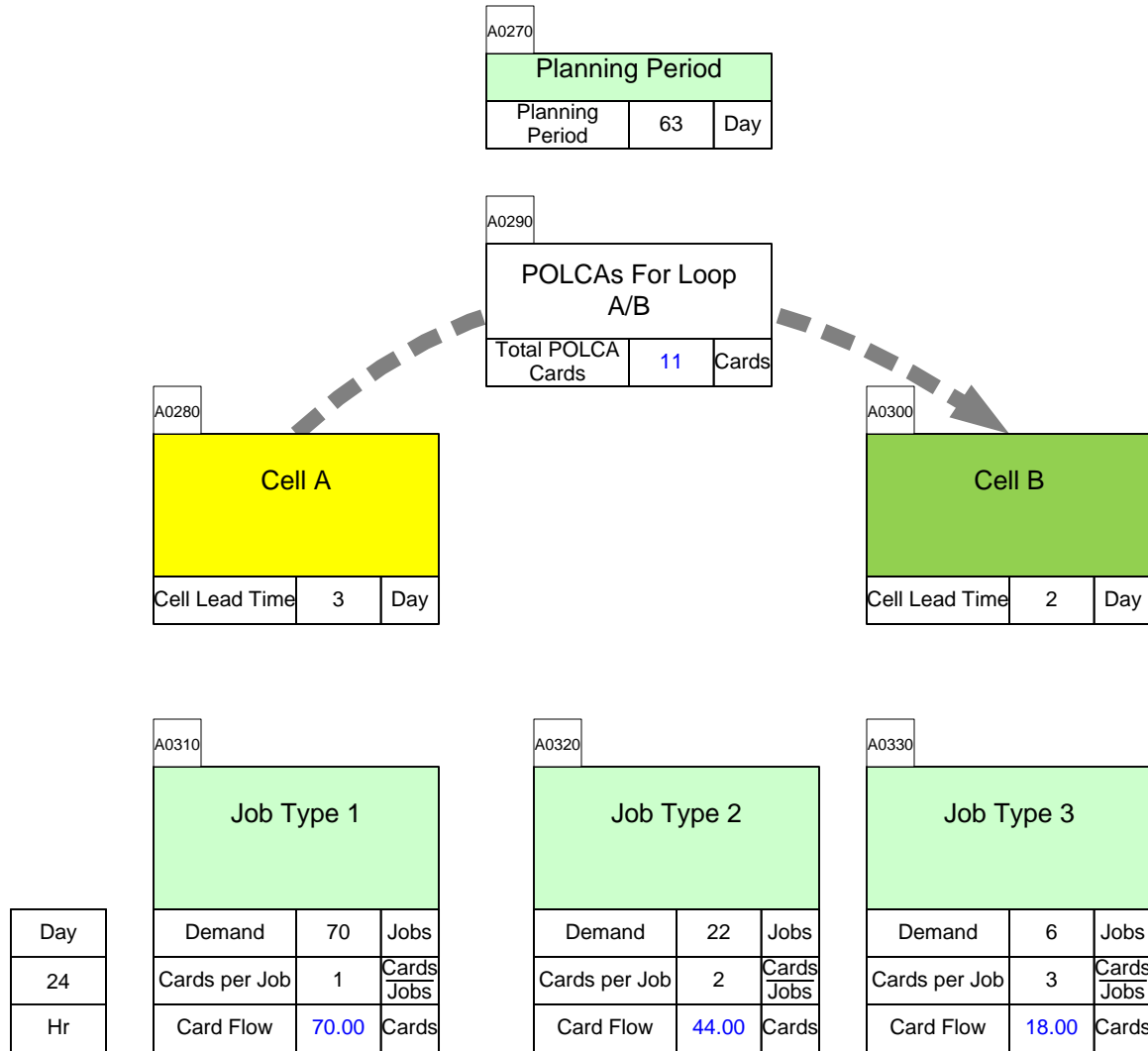
A013 0		
Machine 2		
Cycle Time_M	15	Sec
Qty Per Cycle_M	1	Item
Stations_M	2	Stn
Activity Time_M	10	Hr Day
OEE Percent_M	98	%
Cycle Time Per Item	0.13	Min
CT Capacity Per Day	4800.00	Item
All Stations Time	20.00	Hr Day
QPC Contributor	4800.00	ItSq
Capacity Per Day	4704.00	Item

A014 0		
Machine 3		
Cycle Time_M	1	Min
Qty Per Cycle_M	4	Item
Stations_M	1	Stn
Activity Time_M	14	Hr Day
OEE Percent_M	95	%
Cycle Time Per Item	0.25	Min
CT Capacity Per Day	3360.00	Item
All Stations Time	14.00	Hr Day
QPC Contributor	13440.0 0	ItSq
Capacity Per Day	3192.00	Item

Z001 0		
Multiple Station Equiv.		
Cycle Time	0.29	Min
Qty Per Cycle	1.48	Item
Stations	6.00	Stn
OEE Percent	97.52	%
Activity Time	11.67	Hr Day
MS CT Capacity Per Day	21120.0 0	Item
MS Capacity Per Day	20596.8 0	Item
MS Cycle Time Per Item	0.03	Min

Units	Day
	14
	Hr

POLCA Wizard



Processing Multi Station Wizard

A016 0		P
Machine 1		
Weight per LOQ_M	20	Lb LOQ
LOQ Cycle Rate_M	5	LOQ Min
Step Yield_M	90	%
Stations_M	2	Stn
Activity Time_M	10	Hr Day
OOE Percent_M	83	%
Tot LOQ Cycle Rate	200	Lb Min
CT Capacity Per Day	120000	Lb Day
WPL Contributor	6000	LOQ Day
All Stations Time	20.00	Hr Day
Wt Avg SY Fac_M	89640	Lb Day
Capacity Per Day	99600	Lb Day

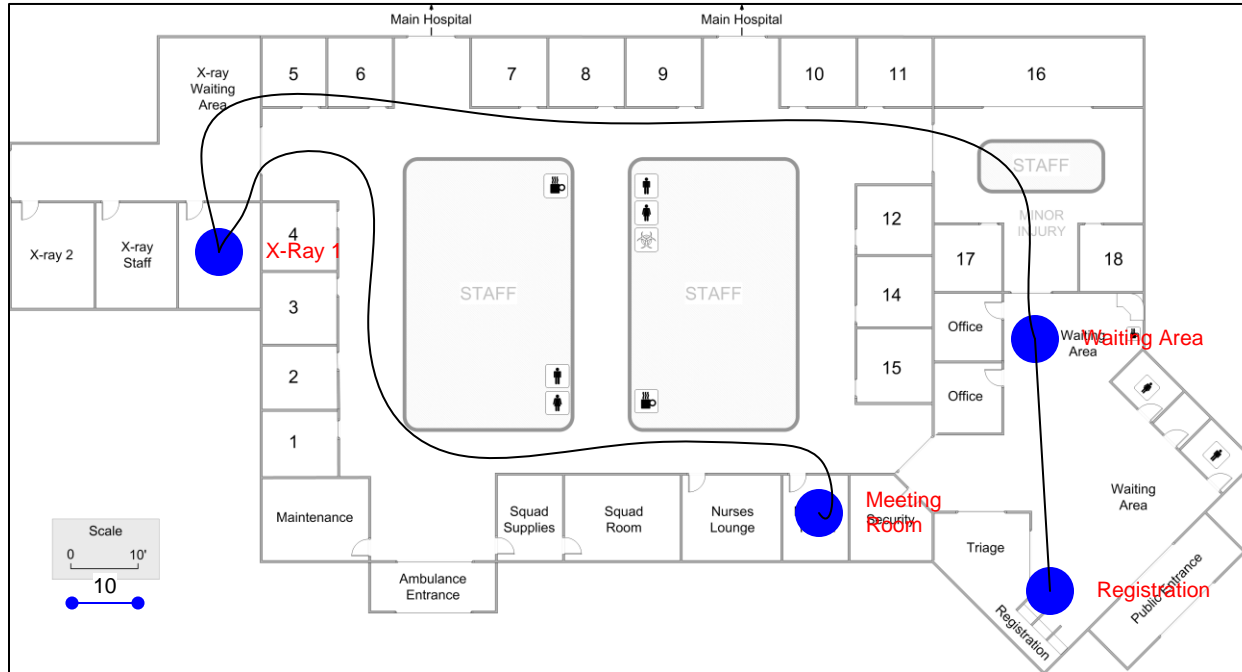
A017 0		P
Machine 2		
Weight per LOQ_M	20	Lb LOQ
LOQ Cycle Rate_M	10	LOQ Min
Step Yield_M	87	%
Stations_M	1	Stn
Activity Time_M	10	Hr Day
OOE Percent_M	80	%
Tot LOQ Cycle Rate	200	Lb Min
CT Capacity Per Day	120000	Lb Day
WPL Contributor	6000	LOQ Day
All Stations Time	10.00	Hr Day
Wt Avg SY Fac_M	83520	Lb Day
Capacity Per Day	96000	Lb Day

A018 0		P
Machine 3		
Weight per LOQ_M	20	Lb LOQ
LOQ Cycle Rate_M	10	LOQ Min
Step Yield_M	88	%
Stations_M	1	Stn
Activity Time_M	10	Hr Day
OOE Percent_M	85	%
Tot LOQ Cycle Rate	200	Lb Min
CT Capacity Per Day	120000	Lb Day
WPL Contributor	6000	LOQ Day
All Stations Time	10.00	Hr Day
Wt Avg SY Fac_M	89760	Lb Day
Capacity Per Day	102000	Lb Day

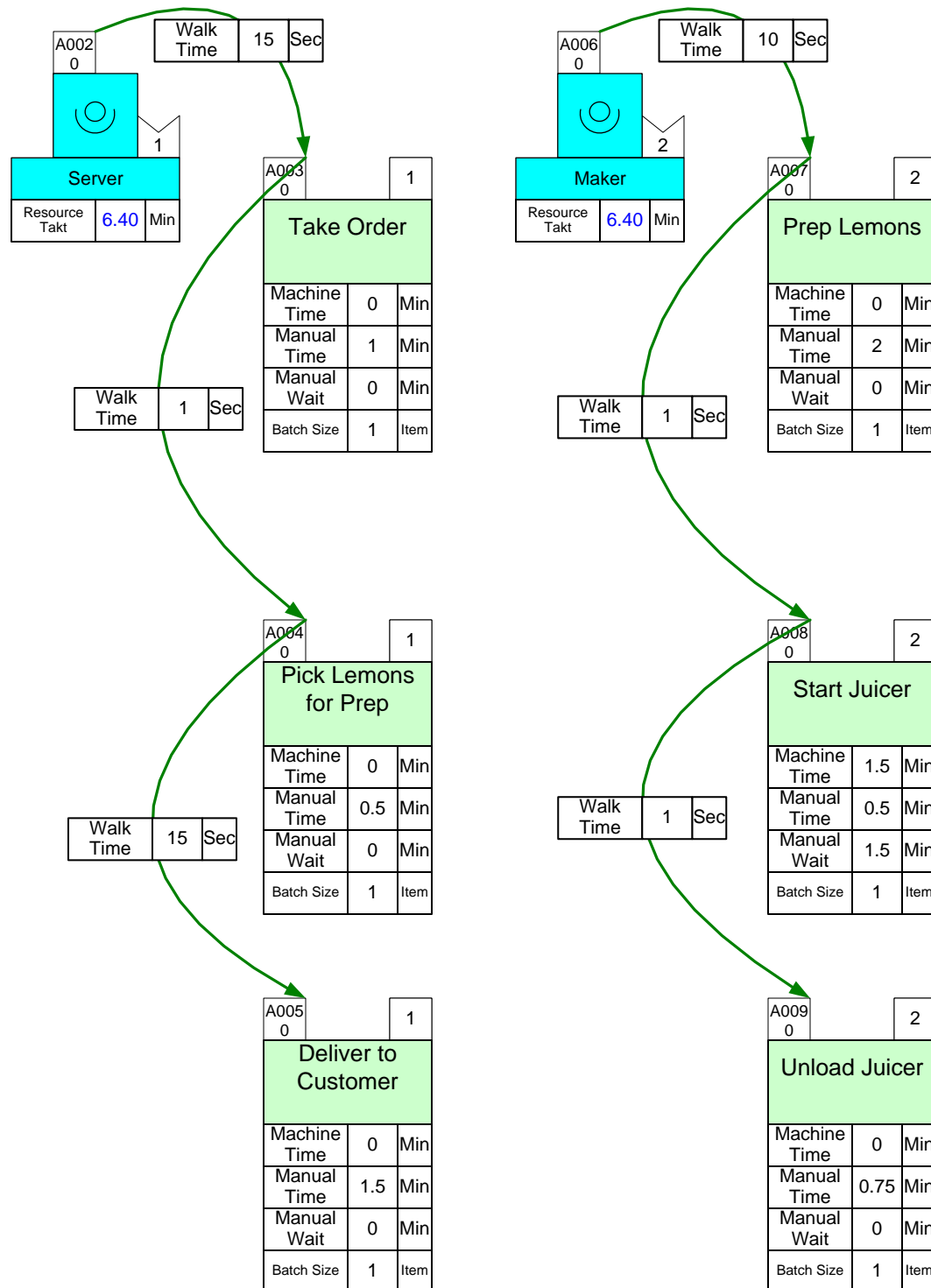
Z001 0		P
Multiple Station Equiv.		
LOQ Cycle Rate	7.50	LOQ Min
Weight Per LOQ	20.00	Lb LOQ
Step Yield	88.35	%
Stations	4.00	Stn
OOE	82.67	%
Activity Time	10.00	Hr Day
MS CT Capacity Per Day	360000	Lb Day
MS Capacity Per Day	297600	Lb Day
Wt Avg SY Fac	262920	Lb Day

Units	Day
	14
	Hr

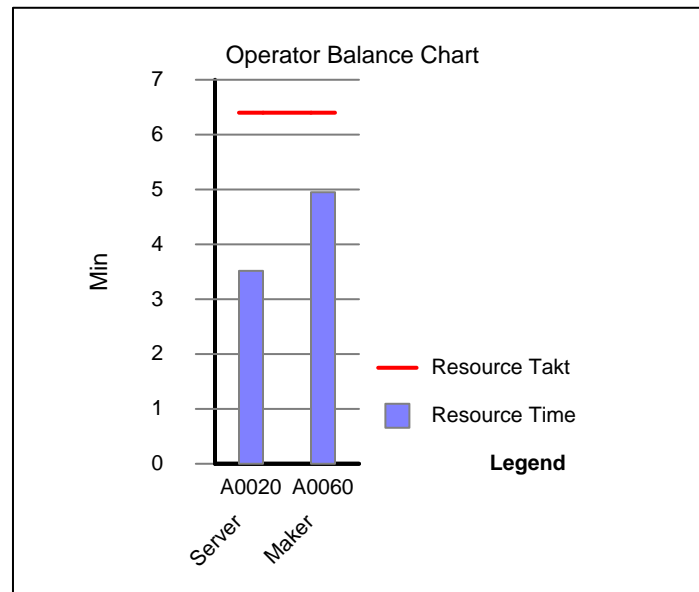
Spaghetti Wizard



Standard Work Wizard



Day	Hr	Min
8	60	60
Hr	Min	Sec



Demand

Demand	75	Item Day
Takt Time	6.40	Min

SWCS Summary

Capacity	96.97	Item Day
FTE	1.32	Staff

