

Problems

- ❖ The company believes that it can be more efficient with the way it implements its many processes within the company workings.
- ❖ They have neither the manpower nor time to perform this currently, thus have decided to hire out to a private consulting agency.



Fig.1. RF Gun

Objectives

- ❖ Observe the daily operations of the company in order to provide recommendations for the company to operate more smoothly.
- ❖ Audit efficiency of Euclid Beverage's warehouse systems and equipment
- ❖ Identify areas for increased profit or verify areas of current maximization of profit

Recommendations

- ❖ Build Efficiency Database.
- ❖ Implement Voice Recognition into other tasks of the Warehouse Management System.
- ❖ Add additional measurement metrics for improved performance tracking.
- ❖ We observed unnecessary queuing and recommend that a review of quality control for bottle necks.
- ❖ Our survey indicated that voice recognition works well for picking. We encourage expanding its use wherever it is possible.
- ❖ Rationalization of small volume delivery products.

End of Day- Performance Evaluation Chart

DATE	Computer Mistake	Broken	No delivery	Overage	Mispick	No One Home	Short Picks	Overpick	No Money	Total
2-Mar	0	1	5	1	3	1	0	0	0	11
3-Mar	0	0	0	0	4	0	0	0	0	4
4-Mar	0	0	4	0	1	1	1	0	2	9
5-Mar	0	0	3	0	2	0	0	0	1	6
6-Mar	0	0	1	2	0	0	1	1	0	5
10-Mar	0	2	1	2	0	1	1	2	0	9
11-Mar	0	0	1	0	3	0	1	1	1	7
12-Mar	1	0	0	0	4	0	0	0	1	6
13-Mar	3	3	1	1	2	0	1	1	0	12
16-Mar	0	2	2	2	3	1	1	0	0	11
17-Mar	1	2	3	1	1	0	2	1	0	11
18-Mar	1	0	1	3	6	0	1	0	2	14
19-Mar	1	2	3	2	4	0	0	1	1	14
20-Mar	0	0	3	6	1	0	1	0	0	11
23-Mar	1	0	7	2	1	1	0	0	0	12
24-Mar	0	0	3	3	3	3	0	1	0	13
25-Mar	0	2	3	1	3	1	0	0	0	10
26-Mar	0	0	0	2	2	0	1	2	0	7
27-Mar	2	1	3	4	2	0	1	0	1	14
30-Mar	1	0	4	1	4	0	1	0	2	13
31-Mar	1	6	2	1	2	0	0	1	0	13
INCIDENT TOTAL	12	21	50	34	51	9	13	11	11	212
MINUTES PER INCIDENT	7	18	27	26	7	27	24	7	27	
MINUTE TOTAL	84	378	1350	884	392	243	312	77	297	4017
TOTAL LABOR COST	\$48	\$214	\$765	\$501	\$222	\$138	\$177	\$44	\$168	\$2,276
TOTAL GOODWILL	\$60	\$105	\$250	\$170	\$255	\$0	\$65	\$0	\$0	\$905
TOTAL INVENTORY	\$0	\$231	\$550	\$374	\$561	\$99	\$143	\$121	\$121	\$2,200
GRAND TOTAL	\$ xxx	\$ xxx	\$ xxx	\$ xxx	\$ xxx	\$ xxx	\$ xxx	\$ xxx	\$ xxx	\$ xxx

- This particular data in this table is not the actual.
- Minutes per incident represents best guess estimations based on our observations.
- Goodwill costs represent possible loss of customer goodwill from an error.
- Inventory costs represent cost of maintaining a higher than necessary inventory investment due to errors.

Methodology

- ❖ Team structure
 - Improving Efficiency team
 - Reducing mistake team
- ❖ Site visits: Figure out the system, Take survey
- ❖ Make actual process map



Fig.2. Inside of Warehouse

Areas of Opportunity

- ❖ Voice technology
- ❖ Incentive structure for workers
- ❖ Low volume products
- ❖ Refused deliveries

