

TEAM FLEXXRAY

COMPANY BACKGROUND

- FOOD INSPECTION
- DUD DETECTION
- RETRIEVAL AND REMOVAL

PROJECT REQUEST

- CREATE PRICING MODEL
- SEGMENT DATA INTO CATEGORIES

TEAM FLEXXRAY

KEY FACTORS

- CREATE A MODEL THAT IMPLEMENTS OPPORTUNISTIC PRICING
- ACHIEVE GOAL OF EIGHTY PERCENT MARGINS
- DETERMINE THE AVERAGE PROCESSING TIME PER PRODUCT TYPES
- FACTOR IN THE COST OF VARYING NUMBERS OF OPERATORS

CHALLENGES

- EFFECTIVELY MEASURING PROCESSING TIMES DUE TO INCONSISTENT RECORDKEEPING
- ASSESSING THROUGHPUT FOR DIFFERENT PRODUCT TYPES AND SIZES BECAUSE METRICS WERE NOT AVAILABLE

Inputs:			
Simultaneous cases on conveyor belt section	1.5	(1 if one-at-a-time, 2 if side-by-side or stacked, 4 if both)	
Scan time for one section, min	1.00	(minutes to scan one case or one set of simultaneous cases)	
Target margin	0.80		
Labor cost/hour	\$ 23.65		
# of workers used simultaneously	4	(from in/out case)	
Total number of cases	84		
Packs per case	12		
Estimated Retail	\$ 5.50		
Outputs			
Per unit:	Cases	Packs	
All workers cost per minute	\$ 1.58	\$	0.13
Time per case, average, min	0.67		0.06
Estimated labor/case, min	2.67		0.22
Labor cost/case	\$ 1.05	\$	0.09
Projected salesprice/case	\$ 5.26	\$	0.44
Percentage of Retail Check			8%

OUR SOLUTION

- FILTER THE PRODUCT BY TYPE, CONTAMINATE, AND WHETHER IT IS IN OR OUT OF CASE
- CALCULATE AVERAGE THROUGHPUT PER MINUTE
- INPUT REQUESTED INFORMATION AND REFRESH THE MODEL