North Star Analysis

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Executive Summary:

This report provides an analysis and evaluation of the buying of t-shirts by Lucinda Ramirez T-Shirt Company. There were many methods of analysis used to provide evidence for our findings. These include; decision tree, measures of merit, ROI percentages, and bar graph. All calculations can be found in the appendices. Results of the data found that Lucinda Ramirez was wrong. Through careful analysis, the decision team reached the decision of buying an order size of 6,000 shirts.

Issue:

The problem associated with this case was whether or not Lucinda Ramirez should buy her chosen option of 4,000 shirts.

Assumption:

Due to the recent canceling of the last concert, this concert will not be canceled. It is also assumed that there will be an attendance of 50,000 at this concert due to past attendance rates.

Alternatives:

There were two other options for the decision of buying t-shirts. The first alternative is to buy 8,000 shirts costing $31,750. The second alternative is buying 4,000 shirts costing $17,750.

Proposed Solution:

Lucinda Ramirez was incorrect in buying the 4,000 t-shirts because 6,000 shirts were the correct purchase.

Discussion:

As shown in appendix 1, Lucinda Ramirez decided to buy 4,000 shirts costing $17,500. The first alternative of selling 8,000 shirts was rejected because the probability of selling all of the t-shirts was the lowest. It was also found that the risk outweighed the potential gains. By buying a high quantity of shirts with such little buyers, she would need to sell the highest amount of leftover shirts to the discount clothing store in order to make up the lost profit. By buying so much, she ruined her chances to generate the most profit.

The second alternative of buying 4,000 shirts was rejected because there was only a small amount of profit to be had. With the assumption of 50,000 people will be in attendance, it would not make sense to buy 4,000 shirts because there would not be enough to meet the demand. They would sell out of the shirts but would not have gains in profit from selling the rest to a discount clothing store. While 4,000 shirts had the highest probability to sell out of the shirts, the profit margin was not high enough to outweigh the costs of the t-shirts and create a high ROI percentage. By buying a smaller amount of shirts, she lost potential profit gained from leftover shirt sales by the discount clothing store.

The alternatives are not possible at this time due to their high risk and low profit return. Because of the assumption that 50,000 people will attend the concert, the choice of buying 6,000 shirts will generate the highest profit possible with the least amount of shirt left over. The ROI percentage for 8,000 shirts shows the most promise. However, through careful analysis it can be found that with 81% ROI, Lucinda Ramirez would generate the greatest profit possible. She would be able to sell the most shirts at the concert venue while generating profit from the leftover shirts through the discount clothing store. By buying 6,000 shirts, she ensures a high number of sales at the concert as well as the profits of her selling to the discount clothing store.

Appendix Items:

- Appendix 1- Decision Analysis
- Appendix 2- Financial Analysis

Appendix 1

Attached is the re-bid proposal quote for Lucinda Ramirez's T- Shirt Company. Note that the band in question has canceled concerts before.

Issue:

The problem associated with this case was whether or not Lucinda Ramirez should buy her chosen option of 4,000 shirts. The re-bid proposal is below.

Proof:

Below is the possible solution to the buying of t-shirts.

Decision Tree:

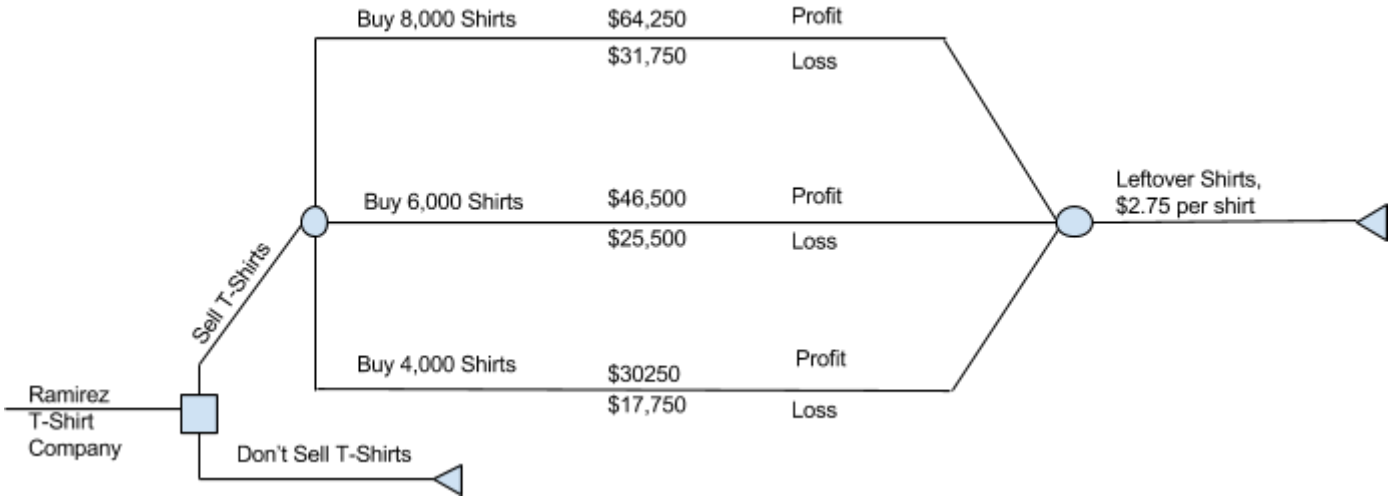
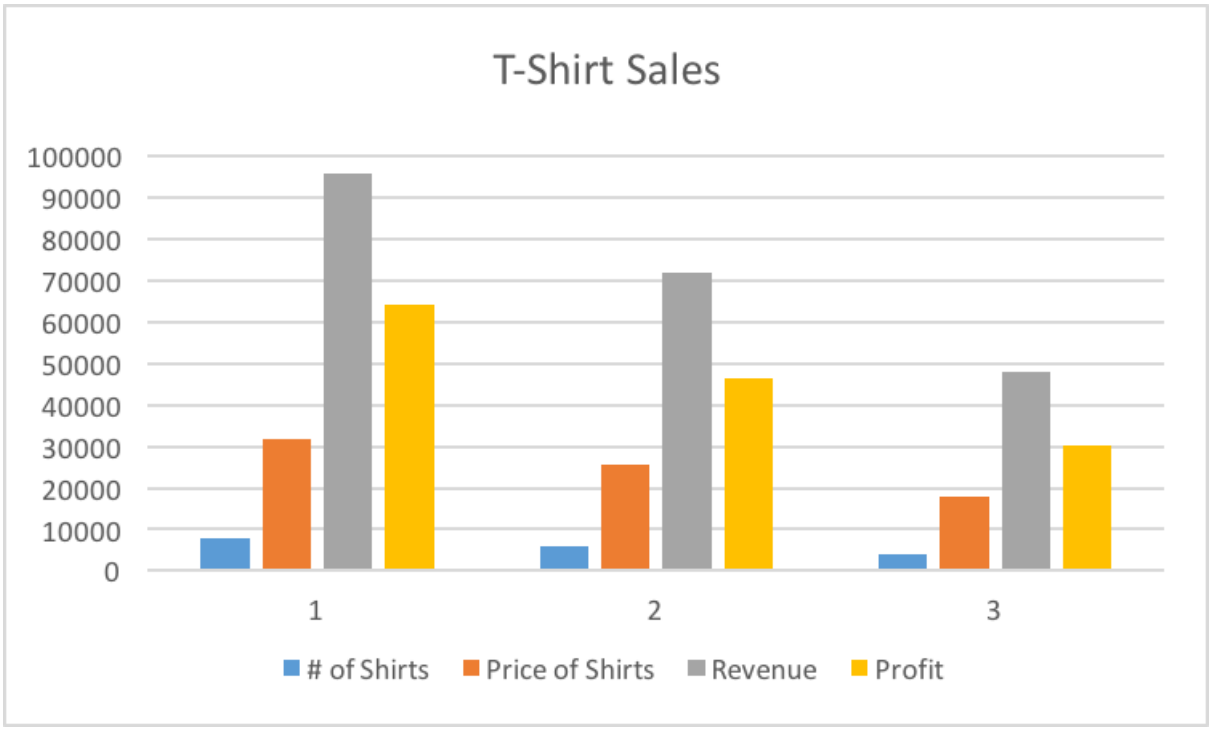


Chart of T-Shirt Sales:



Appendix 2

Measures of Merit:

Measures of Merit

Attendance	% of Attendance to Buy	# of Attendees to Buy	# of Shirts Ordered	Price of Order	Highest Revenue (Retail Price: $12)	Profit of Whole Order Sold	Revenue of Attendees Purchases	Profit of Attendees Purchases	Revenue of Leftover Shirt Sales	Profit of Leftover Shirt Sales	# of Shirts Leftover	Total Revenue	Total Profit
90,000	10%	9,000	8000	$31,750	$96,000	$64,250	$96,000	$64,250	-	-	(1,000)		
			6000	$25,500	$72,000	$46,500	$72,000	$46,500	-	-	(3,000)		
			4000	$17,750	$48,000	$30,250	$48,000	$30,250	-	-	(5,000)		
50,000	10%	5,000	8000	$31,750	$96,000	$64,250	$60,000	$28,250	$8,250	$8,250	3,000	$68,250	$36,500
			6000	$25,500	$72,000	$46,500	$60,000	$34,500	$2,750	$2,750	1,000	$62,750	$37,250
			4000	$17,750	$48,000	$30,250	$48,000	$30,250	-	-	(1,000)	$48,000	$30,250
25,000	10%	2,500	8000	$31,750	$96,000	$64,250	$30,000	($1,750)	$15,125	$13,375	5,500	$45,125	$11,625
			6000	$25,500	$72,000	$46,500	$30,000	$4,500	$9,625	$9,625	3,500	$39,625	$14,125
			4000	$17,750	$48,000	$30,250	$30,000	$12,250	$4,125	$4,125	1,500	$34,125	$16,375

ROI Percentages:

ROI Percentages and Statistics

8,000	ROI %	102%
6,000		81%
4,000		70%
Average Attendance		Average Sales
48,350		5,042
4,000 T-shirts requires 40,000		
6,000 T-shirts requires 60,000		
8,000 T-shirts requires 80,000		
**10% chance the band doesn't even show up		
**25% chance the audience reaches 60k +		
**10% chance the band doesn't show up		
**8% chance the audience reaches 80,000		

Percent (Sales/Attendance)
10%