

# Performance indicator case analysis

[Business](#), [Management](#)



**PRODUCT FLOW ALONG SUPPLY CHAIN: SOURCING IN CHINA vs. HONG KONG**

They are many aspects involved making a decision on which styles to source from China and which styles to source from Hong Kong. The differences between the producing the products in China and Hong Kong are: \* ORDER SIZES: The minimum production quantity for a style in China is 1200 units while in Hong Kong it is 600 units. Thus Hong Kong factory can produce smaller order quantities effectively, thus enabling the company's to increase the range of products it offered and manage the inventory risk.

Reason: This difference in production abilities is mainly due to the high skilled labor coupled with shorter production lines in Hong Kong compared to the low skilled and long production lines in China \* LABOUR The workers in Hong Kong worked about 50% faster compared to the workers in China. As a result the parka line in Hong Kong requires only 10 workers to complete all the operations whereas the parka line in China require up to 40 workers. This resulted in the longer production lines.

In spite of the high quality of workers in Hong Kong, the unemployment rate in the country is very low and most of the younger workers prefer office jobs. Hence it is difficult to acquire labor in Hong Kong. Reason: The differences in the efficiency might be due to the variances in the trainings given to the workers in China and Hong Kong. The workers in Hong Kong were more cross functional and were trained to work in broader range of jobs compared to the Chinese workers. \* TOTAL COST The overall cost of production is lower in China as compared to Hong Kong.

Though there is a definite cost advantage, there are strict quota restrictions by the U. S government on shipping goods from China when compared to

Hong Kong. Reason: The lower production costs in China can be mostly attributed to the low wage rates compared to the wage rates paid in Hong Kong. The workers are paid \$0.16 per hour in China compared to \$3.84 per hour paid in Hong Kong. \* QUALITY Another main difference between sourcing in China and Hong Kong is the quality of the products. The quality and reliability of the products from China is relatively low when compared to Hong Kong.

Reason: The difference in quality could mainly be attributed to the labor skill and efficiency in both the regions. The workers in Hong Kong have the capability to ramp up the production faster and thus they had the shorter production lines. Longer production lines in China led to the greater imbalances both in the quality and time required in manufacturing the product. Recommendation Based on our analysis we found the order quantity for each of the 10 parkas. A detailed order quantity for each of the 10 parkas is given in appendix 3. Steps for calculating order quantity: For Obermeyer we have  $C_u = \$27$  and  $C_o = \$9$  from this we calculate CSL for Obermeyer = 0.75. This means that there is 25% probability for a stock out applicable for each of the 10 parkas. \* We used two standard deviations for the normal distribution of demand. \* By using the formula  $Q = Z \cdot S \cdot D + \text{mean}$  for 25% stock out the overall quantity to be ordered is calculated to be 26412. \* Since we need to order 10,000 units the summation of order quantity of all the 10 parkas is equal to 10,000. \* We assume that the demand for each of the 10 parkas will be in same proportion.

Using this we calculate for Z;  $Z = 1.06$ . \* Using the z value, mean and standard deviation we calculate the order quantity for each of the 10 parkas.

(See appendix 3) \* Also total expected profit for 10 parkas is approximately \$2.3 Million and average left over quantity is 69 units per parka.

APPENDIX 1) Cost analysis at different stages of production. OBERSPORT | | | cost if made in hongkong | \$60.08 | | | cost if made in China | \$51.92 | | | weighted average cost | \$56.00 | | | | | Greig Shell fabric | \$9.00 | | | Finishing of Shell fabric | \$3.90 | | |

Finished lining fabric | \$3.90 | | | Insulation | \$4.80 | | | Zippers | \$3.60 | | | Thread | \$0.60 | | | Logo, Patches etc | \$3.00 | | | Snaps | \$0.90 | | | Dyeing of snaps | \$0.30 | | | | \$30.00 | | | | | Agent fee | | | Hong Kong | 3.49 | | | China | 2.98 | | | | | Labor cost per unit | | | China | 0.78 | | | Hong Kong | 10 | | | | | Transportation cost (weighted average ) | Quantity | charge/unit | total | Ocean | 160000 | 1.4 | 224000 | Air | 40000 | 5 | 200000 | weighted average | 200000 | | 424000 | weighted average/unit | | | \$2.12 | Appendix 2

Appendix 3