## Production cost analysis and estimation applied problems

Business, Management



Production Cost Analysis Problem a) Fixed inputs include the cost of the oven and the cost or the salary of each worker per week. The variable inputs are the number of pizzas produced and the number of workers. The cost of an oven and the salary of workers per week remain constant while the salary bill and the number of pizzas produced will be increasing and the mean of total cost per pizza will be diminishing.

- b) 6 workers will be more efficient since, they can produce 1, 140 pizzas per where each worker will be producing 190 pizzas per week.
- c) The cost of pizza will be reduced to \$3. 51 per pizza by 6 workers.
- d) The shop has only 4 ovens due to insufficient resources, after an increase in the number of ovens, it will be hard for more workers to work on one oven.
- e) The fixed cost per unit will be reduced to an appropriate range when the fixed cost will not change, but when there is an increase in the fixed cost and the production, diseconomies of scale exists. For instance, the addition of the seventh worker causes a raise in total cost by 12. 5%. When the production increases by 10. 5%, the mean cost of will increase instead of decreasing. Problem 2:

a.

b. The increase in the number of pairs produced every week = Q = 200. From the expression of MC above,

Therefore, for the addition of 2000 sums to 2023. 2

C.

d. This gives the difference between the long run and the short run, earnings are maximized at 8333. 3, and hence expanding Q to 1200 will not affect the profits.

In the long run, demand is expected to increase when the price of a fresh lease is 2000. This makes the firm to believe that it can expand on a new lease if the demands rise.

## Work Cited

Rios, Manuel C., Campbell R. McConnell, and Stanley L. Brue. Economics: principles, problems, and policies. McGraw-Hill, 2013.