OPERATIONS DECISION

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Question 1:

Case one, perfect competition. This is the previous state of the market structure. From the information provided, the company no longer falls in this type of market. The consumers have adequate product and price information; producers are price takers and no entry barriers (Chatterjee, 2014).

Case two, monopoly which is the opposite of perfect competition. It is characterized by a single producer who produces a given product or service. Since there is only one producer, the firm has total control over the price label on their product. Target market has no choice but to purchase the product at the listed price. Moreover that, in monopoly there is no competition, and the market entry barriers are a challenge to aspiring competitors (Sloman, Norris & Garrett, 2013). The organization does not fall under this structure since there are other competitors in the food industry.

Case three, oligopoly type of market structure where there are a few number of firms producing and selling goods to the consumers. It is characterized by; first, unique commodities and creating awareness is the key to success (Sloman, Norris & Garrett, 2013). Second, there are market entry barriers. However, their impact is not as strong as in monopoly. Third, the pricing of products in one firm affects the pricing in the competitor firms. Fourth, there are very few industry players that control a large market share (Chatterjee, 2014). In this case, the company does not control a large share of the market. Hence, the only option left is the monopolistic market structure.

Case four, monopolistic type of market. This is the new market structure for Katrina's Candies. First, in this category, each firm has control over the pricing model, and this is the lead that Katrina's Candies has. Second, the firms in this industry try as much as possible to

optimize price, and the company is trying to achieve this objective. Third, no major entry and leaving barriers in such as in the food industry.

Two competitors in this industry are McDonald's and Kentucky Fried Chicken (KFC). Both companies have global reach and operate as fast food chains. KFC organization specializes in fried chicken and notes the approximate calories in the chicken pieces. The prices are higher than the industry charges, and the company is profitable (Ryan, 2016). McDonald's uses the 4 P's pricing model; that is the place, promotion, price, and product (Bomey, 2016). Both companies are profitable with McDonald's leading the industry and followed by KFC.

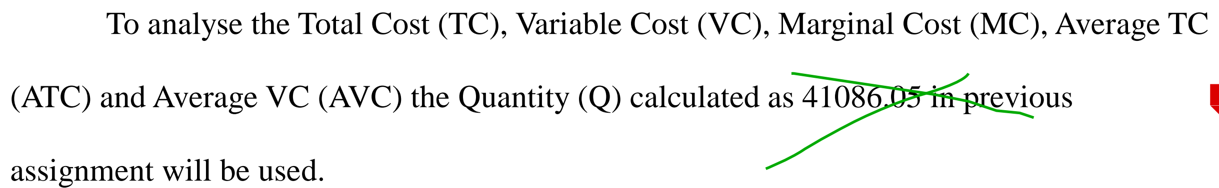
Question 2:

Changes in the market structure reflect the change in target market factors such as purchasing power, tastes, and preferences (Ganesan, 2012). First, change in purchasing power means the consumer's income capacity has changed. An increase in purchasing power illustrates the consumers have more money. The more the customers have money, the higher their rate of spending and acquiring expensive goods (Chatterjee, 2014). Low purchasing power translates to limit spending among the consumer. This is because the limited earning can cater for the necessities first.

Second, changes in tastes and preference is another factor that works hand in hand with purchasing power. Preferences indicate the features a customer gives more priority and he/she determines his/her preferences depending on the utility of the item. If the product according to the consumer is a must have and serves a given purpose, the consumer will prefer to buy the product based on the function he/she want in that product (Ganesan, 2012). In a case where target market are impressed by the product, no matter their purchasing power, they will buy it. This is as a result of the product fitting the tastes and preferences of the

consumers. If a product is cheap and the customers do not like it, they will not buy the good. A firm can control the impressive factor of a good to consumers through quality goods serving the customer needs at the value perceived by the consumers (Sloman, Norris & Garrett, 2013).

Question 3:



To analyse the Total Cost (TC), Variable Cost (VC), Marginal Cost (MC), Average TC (ATC) and Average VC (AVC) the Quantity (Q) calculated as 41086.05 in previous assignment will be used.

Equations given as;

$TC = 160,000,000 + 100Q + 0.0063212Q2$

$VC = 100Q + 0.0063212Q2$

$MC = 100 + 0.0126424Q$

Variable Cost and Average Variable Cost calculations:

$VC = 100Q + 0.00632Q2$

$= 100*41086.05 + 0.00632*(41086.052)$

$=314,777,400.04782$

Average Variable Cost = VC/Q

$314,777,400.04782/41086.05 = 7,661.41793$

Marginal Cost calculation:

$MC = 100 + 0.0126Q$

$=100 + 0.0126*41086.05$

$=617.68423$

Total Cost and Average Total Cost calculation:

$TC =160,000,000 + 100Q + 0.0063212Q2$

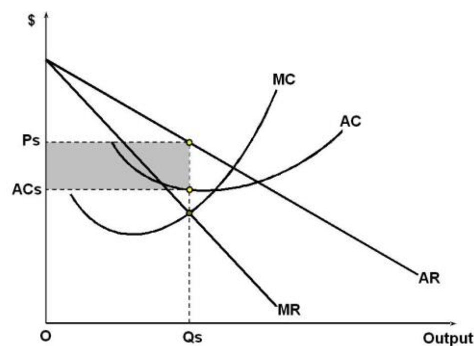
=160,000,000 + 100*41,086.05 + 0.00632*(41,086.052)

= 64,108,864.66385

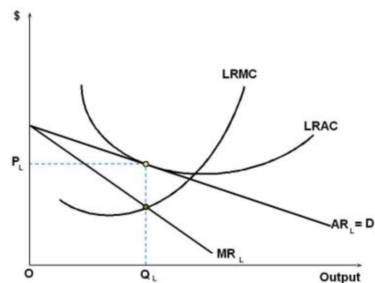
Average Total Cost = TC/Q

164,108,864.66385/41,086.05

= 3,994.27214



The equilibrium for short-run



The equilibrium for long-run

The mathematical analyses show the various areas equilibrium while holding the price and quantity at the same value. However, note that the calculations for equilibrium cannot be held constant (Sloman, Norris & Garrett, 2013). There are some factors that keep affecting and changing the equilibrium. These factors include the cost of resources (raw input), the purchasing power of the target market, prices for competitor goods and the tastes and

preferences of customers (Chatterjee, 2014). These factors can raise or lower the point of equilibrium.

Question 4:

A firm may choose to stop operations in the whole firm, (that is to close shop) or in parts of the firm (such as divisions) after considering a number of reasons. These reasons can either be affecting the long run or the short run operations of the organization. If the consumers are no longer purchasing the commodities because they cannot serve their needs, the business may undergo closure. On the other hand, if the manufacturing equipment becomes obsolete and it cannot be upgraded or used to produce other goods, a business closure is a practical reality. Closing a business does not necessarily mean the equipment is rendered completely non-usable. Some of the equipment can be disposed and earn some money for the business (Chatterjee, 2014). However, equipment can only be disposed of if valuable.

In case the market share shrinks to levels no longer profitable and the production equipment cannot cope with the competitor's plants, the organization can opt for a business closure. This implies the company could no longer serve the dynamic demographics and their competitors have competitive advantage over them. The competitive advantage at the disposal of the rivals could be able to thrive through lowered prices hence attracting more market share (Sloman, Norris & Garrett, 2013). Therefore, losing market share and unable to beat the competitors may call for a business closure.

However, before considering to close shop. The firm should also consider alternatives such as extending to a new product line. A new product line introduces the production of another product apart from the originally produced one (Ganesan, 2012). However, this is possible if the production plant can accommodate the making of a new good and probably

different from the first one. The previous product ceases production, and that marks the commencement of making a new product. If the plant cannot adopt to the alternative production of a new good, the long run solution will suit disposing of the assets and close the business. Disposing of the assets ensure the business does not incur a total loss on investment (Ganesan, 2012).

Question 5:

Profit is at maximum when the cost of producing an extra good (MC) is equal to the revenue earned on that extra good (MR) (Chatterjee, 2014). Therefore, when MC = MR, the output and profit level are at maximum. MC = 100 + 0.0126Q, MR = 3,500 – 0.02Q.

100 + 0.0126Q = 3,500 – 0.02Q.

0.0126Q + 0.02Q = 3,500 -100

0.0326Q = 3,400 Divide both sides by 0.0326

Produce 104,294 units to maximize output.

Price (P) = MC + ATC

= 3,994.27214 + 617.68423

= 4611.95637

Charge 4,611.96 per unit.

The firm can make a profit by ensuring the price label on each product cover the variable and fixed costs to produce that commodity (Sloman, Norris & Garrett, 2013). If the price charged can cover the production cost, the company can determine the profit it can make on each product. This is because it has high control over pricing and since the company knows the cost of production, it can charge a price that covers the cost plus some profit (Ganesan, 2012).

Question 6:

A monopolistic market structure entry barriers are not very strict, and new competitors will likely join the industry (Sloman, Norris & Garrett, 2013). They come in with new means of production and well versed with the details in the industry, which is enough research and feasibility study. Therefore, continue to operate at profit making level will not guarantee the company continuity. Moreover, that, for the company to make maximum profit, it has to consider the total cost of production before deciding on the price that maximizes profit (Wehn, Hoppe & Gregoriou, 2013). The company needs to consider developing an updated customer tastes and preferences. The details will help the organization a lot in making a decision about the best ways to continue producing and offering goods that are impressive to consumers.

Question 7:

For a profit-making organization to thrive in the long run, the price label on each product should concur with the target market value for that good and the other economic factors such as the cost of production (Sloman, Norris & Garrett, 2013). However, pricing techniques play an important role in increasing sales and sales revenue in an environment where the economy forces the consumers to be sensitive with their spending habits (Wehn, Hoppe & Gregoriou, 2013). For this organization to make a profit, it has to consider additional factors apart from pricing such as marketing channels and quality products.

First, the company should consider advertising its products through channels that reach a great population within their target market. Advertising can be in the form of creating awareness about the products, to increase sales and lastly to remind the public about the product. Creating awareness can open up the products to a new user who is curious to try the goods, and they may become recurring customers (Ganesan, 2012).

Second, the quality of the existing products can be improved. To improve a product, the firm can ensure proper processing of raw products and effective production lines (Ganesan, 2012). This will reduce the lost costs and ensure quality goods can be produced. Moreover that, the business can research and come up with the profitable recipes both to the organization and to the consumers as well.

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