

**BUSINESS MANAGEMENT**

2020

**Unit 3 AOS3 SAC 3**

**SUGGESTED SOLUTIONS/RESPONSES**

SkinShine Bros Pty Ltd is a skin cosmetics company located in the outer Eastern suburbs of Melbourne. The business manufacture 2 skin products: an anti-ageing cream called “RQ21” and a sunscreen, called ‘Sun Block 3000”. The assembly line production method used by SkinShine uses a conveyor-belt where machines add labels and the creams to the plastic bottles. A machine packs the bottles into boxes of 12 or 24 at the end of the production line.

CEO Greg Shine is concerned about falling profit levels. Tina Fiore has been recently employed and is the new Operations Manager. Greg has indicated that Tina’s performance will be judged on her ability to reduce the costs of production. In the last 2 years SkinShine’s input product costs have increased by 30%, but over the same time the sale price of SkinShine’s products on supermarket shelves and chemist stores has not changed.

**Question 1**

1. Describe two key elements of the operations system at SkinShine. In your response, use examples. 4 marks

**Suggested Solution**

One element is the inputs, being the raw materials, man-made products and human expertise and skills used to assist in the making of the creams at SkinShine. The use of human skills in managing production runs, designing safe and desirable skin products is a good example of an input used in operations. (2 marks)

Another key element is the processing(transformation) stage, which involves the inputs being used (combined) to make SkinShine cream products. The machinery used along the automated assembly production, combined with the cream inputs and the packaging features (plastics and labels) allow for the skin creams to be made. (2 marks)

***2 marks for briefly outlining inputs and providing examples relevant to SkinShine***

***2 marks for briefly outlining processing and providing examples relevant to SkinShine***

***Alternate Solution***

**Output-** the product to be consumed by the end-user; people who use SkinShine’s creams

1. At a meeting Tina Fiore suggested adopting Computer-Aided Manufacturing in the production process.

Describe **one** advantage and **one** disadvantage of using this technology at SkinShine.

4 Marks

**Suggested Solution**

One advantage of using CAM will be SkinShine can increase the efficiency of the operations. With production runs of anti-ageing creams and sunscreen being programmed to operate at required times 24 hours 7 days a week. As a result, the amount of wasted resources(expenses) used in the process is reduced – greater precision of when to use the facility will ensure a smaller amount of inputs are required to generate the same number of products for SkinShine. (2 marks)

One disadvantage of adopting CAM is the system is very expensive to establish. In combination with Computer Aided Design (CAD) the manufacturing process can be directed and controlled through CAM. When introducing this new software and manufacturing system at SkinShine it will be very costly, possibly forcing the business into some short-term debt. (2 marks)

***2 marks for stating and explaining one advantage of using CAM***

***2 marks for stating and explaining one disadvantage of using CAM***

**Alternative Responses**

Advantages

* Remove dangerous or repetitive tasks
* Reduced wastage

Disadvantages

* System breakdown suspends production
* Technical training
* Large scale redundancy (PR crisis)

1. Explain how the use of ‘forecasting’ and ‘Just-in-time’ materials methods could assist Tina in reducing the input and production costs of SkinShine. 6 Marks

**Suggested Solution**

Forecasting involves a planning model where data from the past and the present is used to analyse the trends in demand and production needs for the future. By effectively using forecasting, Tina will prepare operations for seasonal changes to demand, such as a rise in demand for sun- screen during the summer months. With accurate forecasting SkinShine will have the ability to bulk buy inputs e.g plastic bottles and keep the cost-per-unit produced as low as possible. (3 marks)

Just-in-time material management ensures that the right amount of material inputs arrive only as they are needed in the material management process. Tina when combining the appropriate forecasting models to orders will ensure inputs like cream extracts, plastic bottles and packaging goods will be delivered to the manufacturing site as they are needed. Skinshine will reduce storage and handling costs by successfully using just-in-time. Ultimately, keeping production costs lower and improving SkinShine’s competitiveness. (3 marks)

***1 mark defining forecasting***

***2 marks for explaining how when applied at SkinShine can reduce costs***

***1 mark defining Just-in-time material management***

***2 marks for explaining how when applied at SkinShine can reduce costs***

1. Describe why lean management could increase the level of efficiency of SkinShine. 3 marks

**Suggested Solution**

Lean management is strategy that aims to improve the effectiveness and efficiency of operations by eliminating waste and improving quality. Through implementing a ‘one-piece-flow’ method of production the amount of waste will be minimized. With each bottle of cream moving through the process one at a time, deliberately adding value and removing unnecessary steps. The reduced level of idle time for each machine, decreases the amount of inputs needed to create the SkinShine creams resulting in a higher level of productivity. (3 marks)

***1 mark for definition of Lean Management***

***1 mark for ‘one’ key principle of Lean Management explained***

***1 mark for application to SkinShines production process***

Customer satisfaction surveys for SkinShine’s sunscreen product have revealed a drop in the quality of the product. The most significant problem highlighted being the inconsistency of the texture and durability of the product.

**Question 2**

1. Describe why SkinShine adopting the quality strategy of Quality Assurance, may improve the customer perception of the quality of SkinShine’s products. 4 Marks

**Suggested Solution**

Quality Assurance is a proactive quality control strategy involving an independent body assessing the internal processes of a business to meet a criteria of set standards. At Skinshine, by achieving these quality standards it attains accreditation and is endorsed by an independent body, such as having an ISO 9001 certification. If SkinShine attains ISO accreditation it will mean its skin products will consistently meet the high-quality standards demanded by customers. In addition, SkinShine can highlight independent endorsement, improving its reputation through a promotions campaign that shifts customers perceptions of SkinShine to be more positive.

***1 mark defining quality assurance***

***1 mark for explaining how QA could relate to SkinShine***

***2 marks for application of QA to SkinShine and why it could change customer perceptions***

Government authorities has asked manufacturers like SkinShine to “re-tool” during the COVID 19 Pandemic, manufacturing anti-bacterial creams or medical supplies.

At an emergency meeting Greg and Tina expressed a difference of opinion. Greg wanting to switch to making anti-bacterial creams as quickly as possible to take advantage of the high demand, but Tina disagreed, saying the increased costs of changing the production process, would hurt the profit figures.

**Question 3**

1. Evaluate the costs and benefits of SkinShine changing operations to make anti-bacterial creams. 6 Marks

**Suggested Solution**

SkinShine by re-adjusting manufacturing processes to produce ‘anti-bacterial creams’ will in the short-term provide a significant opportunity to increase production runs, take advantage of swelling demand and increase revenue. However, the re-modelling of the production runs will add to the immediate costs and increase expenses, of transitioning to new suppliers and re-fitting assembly line processing. Reducing the potential profits gained from the increased demand for anti-bacterial creams.

The corporate image of SkinShine would improve if they opt to ‘re-tool’ and start supplying critical medical supplies to the Australian public during this public health crisis. It demonstrates SkinShine being a socially responsible organisation by taking action providing medical supplies that assist health workers on the front-line of the crisis, however is considered action that is beyond their legal requirements of the business. Although it could pose issues for the current workforce at SkinShine, who are without the skills to transition to new way of operating quickly. Staff needing on-the-job and some off-the-job training will suspend production for several days and increase staff development expenses for SkinShine.

Overall, the benefits outweigh the risks of SkinShine ‘re-tooling’ and producing medical supplies. In the short-term expenses will be incurred but in the long-term the favourable publicity, the improved corporate reputation and the agility shown by the firm will improve its competitiveness in the market.

***1-2 marks for briefly outlining a few costs or benefits***

***3-4 marks for explaining 2 costs and benefits (but no conclusion)***

***5-6 marks for comprehensive examination of 2 costs and benefits, with a definitive conclusion***

SkinShine’s transition to producing anti-bacterial would coincide with more product inputs being sourced from overseas.

1. Would you suggest they import more inputs from overseas during the global corona virus Pandemic? Justify your view. 3 marks

**Suggested Solution**

I would advise SkinShine to source inputs locally, from within Australia during the pandemic. The reason for sourcing inputs locally as supply chains could be disrupted by widespread business closures overseas. Overseas orders could lengthen the delivery times for essential inputs like plastics, creams, and factory machinery parts. Threatening the ability for SkinShine to make a quick, efficient transition to providing new anti-bacterial creams to medical facilities as quickly as possible.

***1 mark for stating a view of whether the sourcing strategy is viable***

***2 marks for justifying the strategic advice***