

Markscheme

Business management

Higher level

Paper 3

1. **With reference to business management motivation theory, describe one need that CES satisfies for individuals and families requiring clean cooking stoves.** [2]

A business management theory which could be linked to needs in this case is Maslow's Hierarchy of Needs, especially physiological and safety needs.

The need which CES satisfies through its clean cooking stoves is linked to physiological needs, breathing clean air inside the home is essential for survival. Without indoor clean air people are at risk of serious health problems such as stroke and lung cancer and premature death.

The need which CES satisfies through its clean cooking stoves is linked to safety needs by providing clean energy solutions reducing the risk of household air pollution and reducing or eliminating the negative health impacts faced by families in rural areas using traditional cooking stoves.

Mark as [1+1]

2. **Explain two possible challenges facing CES.** [6]

The Operations challenges could include:

- Supply Chain Disruptions
- Inventory Management Issues

One of the main challenges facing Clean Energy Solutions (CES) is its unstable supply chain, which is leading to inventory management problems. As outlined in the memo from the Operations Manager, CES experiences significant delays in sourcing waste and recycled materials needed for its solar-powered and energy-efficient cooking stoves. The inconsistent quality of materials received further exacerbates the problem, resulting in excess stock that does not meet CES's quality standards. These supply chain disruptions hinder production planning and cause CES to operate below capacity, directly impacting their ability to meet customer demand efficiently. This situation not only increases operational costs due to potential wastage and storage of unusable materials but also reduces customer satisfaction, which could hurt CES's reputation in the market.

The Marketing challenges could include:

- Promotion Strategies
- Distribution Channels

Another significant challenge for CES is its underperforming sales, largely attributed to ineffective marketing and poorly designed distribution channels, as highlighted in the email from Sarah Jones, the marketing consultant. The current marketing strategy primarily focuses on environmental benefits, which may not resonate as strongly with CES's target market compared to immediate health and safety benefits. Additionally, the distribution channels are not effectively reaching the rural communities that need CES's products the most. Without improving brand awareness and ensuring that the health benefits of clean stoves are communicated more effectively, CES may struggle to increase its sales and market share. This misalignment of marketing strategy with customer needs could further strain the company's financial resources, as seen by the negative variances in the budgeted versus actual figures for 2023.

Mark as [3+3].

Award [1] for identification of a challenge, [1] for explanation and [1] for application to Beans of Change.

3. **Using all the resources provided and your knowledge of business management tools and theories, recommend a possible plan of action for CES over the next five years. [17]**

Clean Energy Solutions (CES) faces significant challenges related to supply chain inefficiencies, marketing strategy, and sales performance. To address these issues and align with its mission of improving household air quality, CES needs a strategic five-year action plan. This plan focuses on optimizing operations, repositioning its marketing strategy, adjusting pricing, driving product innovation, and expanding into new markets.

CES's supply chain is currently unreliable, resulting in production bottlenecks and high defect rates. (Resource 5) supplier delays and inconsistent material quality are causing production capacity to remain at only 75%, which hinders CES's ability to meet market demand. To address this, CES should pursue vertical integration, establishing its own material recovery facility. By **controlling raw material sourcing**, CES will be able to reduce supply chain risks, improve product quality, and ensure a more consistent production process.

This strategy would stabilize CES's operations, benefiting both internal stakeholders such as employees and external stakeholders like customers. The reduced delays and improved production quality would enhance customer satisfaction and **strengthen brand loyalty**. However, there are significant financial risks involved.

To further improve efficiency, CES should implement lean production and Just-In-Time (JIT) management, aligning production with actual demand to **reduce excess stock**. Resource 2 highlights, stock turnover is currently a critical issue for CES, with inventory days standing at 60. Implementing lean production could **reduce inventory holding costs** and improve cash flow. However, it's important to note that JIT systems rely **on highly reliable suppliers**, so the success of JIT will be closely linked to CES's progress in vertical integration.

CES's current marketing strategy emphasizes the environmental benefits of its stoves, but this messaging has failed to resonate effectively with its target market (Resource 4). A shift is needed to focus on health benefits, particularly the reduction of indoor air pollution and its positive impact on respiratory health. By leveraging **Porter's Focus Differentiation Strategy**, CES can target specific customer segments for example women, this shift in focus would directly address the most pressing concerns of CES's target market and increase product adoption rates.

Incorporating data from Resource 3 (WHO health impacts) into the **marketing message** would further strengthen CES's brand by emphasizing the life-saving potential of its stoves. However, CES's ability to reposition itself as a health-focused brand may depend on its ability to demonstrate measurable health outcomes. This could require closer collaboration with healthcare organizations and NGOs, which may have their own expectations regarding product efficacy and health impact metrics.

CES also needs to **improve its distribution network**. **Strategic alliances** and or partnerships with local NGOs, government bodies, and international organizations would help CES reach underserved rural areas more effectively while **reducing distribution costs** (Resource 1). Expanding the marketing message through these alliances or partnerships would not only improve access to CES's products but also create a trusted network for educating consumers on the health benefits of clean stoves.

CES's current pricing strategy limits its competitiveness in price-sensitive markets, where low-cost alternatives like Power Stove have gained market share (Resource 7). **CES should implement a**

pricing model that includes both premium and more affordable products, supported by Porter's Generic Strategy of Differentiation and Cost Leadership. For price-sensitive consumers, CES could develop a more affordable stove using cost-efficient materials, while maintaining its solar-powered premium stoves for higher-income households.

This approach would allow CES to broaden its reach without compromising the premium quality associated with its high-end products. However, there is a risk that offering a lower-priced version could dilute CES's **brand image**. CES must clearly differentiate between the premium and affordable product lines to maintain its positioning as a provider of high-quality clean energy solutions.

CES should **collaborate with microfinance institutions** and explore government subsidies to make its products more accessible to lower-income households. This aligns with **CES's social mission** of improving health outcomes through cleaner stoves. While the expansion into lower-income markets would improve CES's sales volume, the company must carefully manage costs to ensure that narrower profit margins do not erode its overall financial sustainability.

To remain competitive in the rapidly evolving clean cooking technology market, CES must invest in **research and development (R&D)** to innovate its product offerings. Integrating smart technology into its stoves, such as remote monitoring and automatic safety shutoff, would set CES apart from competitors and appeal to more tech-savvy consumers. This innovation could also contribute to better user experience and safety, making CES's products even more attractive to middle-class and urban customers.

Improving the energy efficiency of CES's stoves, as noted in Resource 7, would help consumers save on fuel costs, **making the products more sustainable** and affordable in the long term. However, investing in product innovation involves financial risks, particularly with R&D costs. CES should prioritize innovation areas that offer the most significant competitive advantage while ensuring that these investments are financially viable.

Finally, **CES should pursue market development** by expanding into new geographic regions, as suggested by the Ansoff Matrix. Targeting areas in Sub-Saharan Africa and Southeast Asia, where the reliance on traditional cooking methods is still high, presents a significant growth opportunity (Resource 3). CES can form partnerships with local governments and NGOs to support its entry into these new markets, leveraging subsidies and support for clean energy initiatives.

Geographic expansion would **diversify CES's revenue streams**, reducing its dependency on existing markets and providing new avenues for growth. However, this expansion carries risks, particularly in regions with unstable political or economic environments. CES must evaluate these risks and establish partnerships with local organizations that have a deep understanding of regional challenges. This will help mitigate potential entry risks and lower the cost of expansion.

In conclusion, CES's five-year action plan should focus on optimizing its supply chain, repositioning its marketing strategy to focus on health benefits, adjusting its pricing strategy to appeal to both high-end and low-income consumers, driving product innovation, and expanding into new geographic markets. **By carefully considering stakeholder impacts, evaluating financial risks, and balancing long-term investments with operational improvements, CES can achieve sustainable growth while fulfilling its social mission.**

Proposed Timeline

- Year 1: Focus on planning for supply chain optimization, implementing lean production, and adjusting the marketing strategy.

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- Year 2: Implement vertical integration, complete R&D for product innovation, and form new partnerships.
- Year 3: Begin geographic expansion into Sub-Saharan Africa and Southeast Asia.
- Year 4-5: Scale operations in new regions, continuously improving production efficiency and expanding market share.

Possible Theories (but not limited to):

- Porter's Generic Strategies for analyzing pricing strategy and positioning.
- Ansoff Matrix for evaluating market development and product diversification.
- SWOT Analysis to assess CES's internal strengths and external opportunities.
- Lean Production & JIT to address supply chain inefficiencies and reduce stock turnover.
- Cost-Benefit Analysis for evaluating the trade-offs of product innovation and investment in new markets.
- Marketing strategies (product, price, place and promotion)
- Sources of finance for expansion and growth

Accept any other relevant argument for a possible plan of action to ensure the sustainability of SML for the next five years.

Marks should be allocated according to the assessment criteria on pages 6-7.

Notes on the assessment criteria:

Criterion A:

Students need to make reference to all resource materials provided to effectively support the recommended plan of action in order to get full marks.

Criterion B:

Students need to use theories and/or tools in their answers to support the recommended plan of action. These are some examples of theory / tools could be used for the BOC case study:

- Porter's Generic Strategies for analyzing pricing strategy and positioning.
- Ansoff Matrix for evaluating market development and product diversification.
- SWOT Analysis to assess CES's internal strengths and external opportunities.
- Lean Production & JIT to address supply chain inefficiencies and reduce stock turnover.
- Cost-Benefit Analysis for evaluating the trade-offs of product innovation and investment in new markets.
- Marketing strategies (product, price, place and promotion)
- Sources of finance for expansion and growth

Accept any other relevant theory / tool that is appropriate.

Criterion C:

Students need to develop balanced arguments for their recommended plan of action and the expected impact on CES

The following assessment criteria will be used for question 3.

Criterion A: Use of resource materials

To what extent does the student use the resource materials provided to effectively support the recommended plan of action?

Marks	Level descriptor
0	The response does not reach a standard described by the descriptors below.
1	The response makes limited reference to the resource materials provided or the resources identified have been used ineffectively to support the recommended plan of action.
2	The response makes some reference to the resource materials provided or the resources identified have been used in a superficial way to support the recommended plan of action.
3	The response makes reference to most of the resource materials provided to support the recommended plan of action.
4	The response makes reference to all resource materials provided to effectively support the recommended plan of action.

Criterion B: Business management tools and theories

To what extent does the student's plan of action effectively apply appropriate business management tools and theories?

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1	The response demonstrates limited application of appropriate business management tools and theories.
2	The response superficially applies appropriate business management tools and theories.
3	The response satisfactorily applies appropriate business management tools and theories.
4	The response effectively applies appropriate business management tools and theories.

Criterion C: Evaluation

To what extent does the student effectively evaluate the expected impact of their plan of action on the relevant areas of the business?

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1–2	The response is largely descriptive with limited analysis or evaluation of the expected impact of their plan of action. There is limited reference to the relevant areas of the business.
3–4	The response analyses the expected impact of their plan of action with some reference to the relevant areas of the business. There is some evidence of evaluation but it is not sustained.
5–6	The student effectively evaluates the expected impact of their plan of action on the relevant areas of the business and considers the trade-offs between those areas.

Criterion D: Sequencing of ideas and plan of action

To what extent are the student's ideas and plan of action sequenced in a clear and coherent manner?

Marks	Level descriptor
0	The response does not reach a standard described by the descriptors below.
1	The response is limited in its sequencing of ideas and plan of action.
2	The response consists of ideas and a plan of action but these are not always sequenced in a clear manner.
3	The response effectively sequences appropriate ideas and a plan of action in a clear and coherent manner.