

Business Management Units 3 & 4

Chapter 9 — Corporate social responsibility and global operations

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Chapter 9 Corporate social responsibility and global operations — 9A Corporate social responsibility in operations

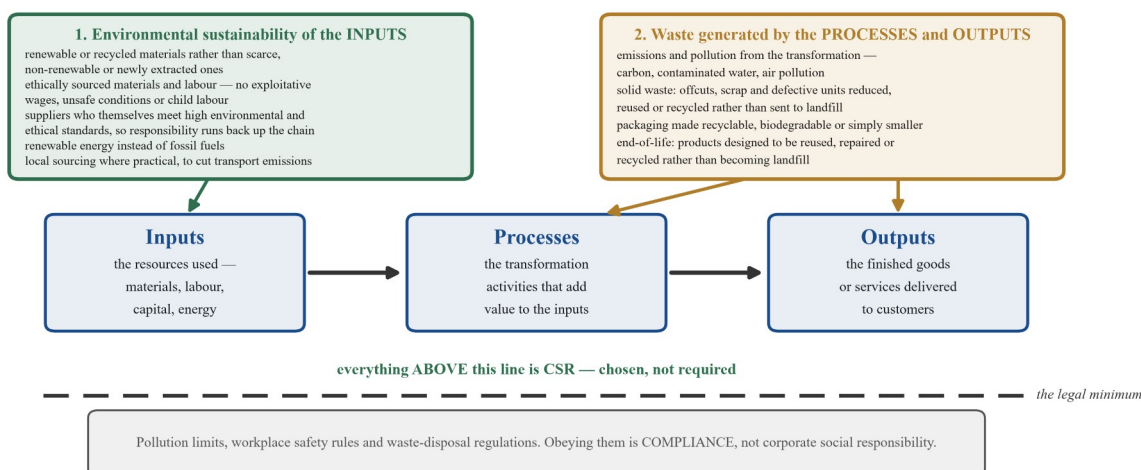
Theory

Corporate social responsibility (CSR) is the extent to which a business goes **beyond its legal obligations and the pursuit of profit** to take responsibility for the **social, ethical and environmental consequences** of its activities. Every business must obey the law — for example, pollution limits, workplace safety rules and waste-disposal regulations — but that is only the **minimum** standard society enforces. A business acts with corporate social responsibility when it **voluntarily** does more than the law requires because it accepts that its decisions affect employees, customers, suppliers, the wider community and the natural environment. CSR is therefore a matter of **choice and values**, not compliance.

CSR can be applied to every part of a business, and it is studied in more than one place in this course — here within the **operations system**, and again in Unit 4 when a business **implements change**. In this area of study the focus is **CSR in the operations system** — the system that transforms **inputs** (the resources used, such as materials, labour, capital and energy) through **processes** (the transformation activities) into **outputs** (the finished goods or services). Because operations physically consume resources and physically create waste, it is where a business's environmental impact is most directly created. For an operations system the study design prescribes **two** CSR considerations:

- the **environmental sustainability of the inputs** a business uses, and
- the **amount of waste generated from the processes and the production of outputs**.

Corporate social responsibility in the operations system — the two considerations sit at opposite ends of it



The same action can be either. Reducing waste PURELY to cut costs is an efficiency motive; the identical action becomes CSR when the business does it because it accepts ethical responsibility for its environmental impact, even where that is not the cheapest option. The action can look the same; the MOTIVE differs.

A complete answer on CSR in operations addresses BOTH ends of the system — what goes in and what comes out — not just one.

The two considerations sit at **opposite ends of the same system**: one governs what goes *in*, the other what the processes and outputs put *out*. A complete answer addresses **both**.

1. The environmental sustainability of inputs. Inputs are the resources fed into the operations system. A socially responsible business looks past simply choosing the **cheapest** inputs and asks whether its inputs are sourced in a way that can be sustained without damaging people or the planet. This includes:

- using **renewable or recycled materials** (for example, recycled metal, paper or plastic, or timber from certified sustainably managed forests) rather than scarce, non-renewable or newly extracted ones;
- **ethically sourced** materials and labour — suppliers who do not rely on exploitative wages, unsafe conditions or child labour;
- choosing **suppliers who themselves meet high environmental and ethical standards**, so that responsibility runs back through the supply chain;

- using **renewable energy** (such as solar or wind) to power operations instead of relying on fossil fuels; and
- where practical, **sourcing locally** to reduce the emissions created by transporting inputs long distances.

2. The amount of waste generated from processes and outputs. As inputs are transformed and as finished products are made, an operations system produces waste. A socially responsible business takes responsibility for **reducing the harm** this causes, including:

- **emissions and pollution** created by the transformation process — carbon emissions, contaminated water or air pollution — which it seeks to cut through cleaner technology and better process design;
- **solid waste** such as offcuts, scrap and defective units, which it tries to reduce, reuse or recycle rather than send to landfill;
- the **packaging** of outputs, which it can make recyclable, biodegradable or simply smaller; and
- the **disposal and end-of-life** of the output itself — designing products that can be reused, repaired or recycled rather than becoming landfill.

The tension. Acting responsibly in operations usually **costs money in the short term**. Sustainable inputs and cleaner processes are often more expensive than the cheapest alternative, and new equipment to cut emissions or recycle waste requires investment. This can **conflict with the objective of maximising short-term profit**, and a manager must weigh the immediate cost against the longer-term gains.

The benefits. Despite the cost, CSR in operations can strengthen a business over time:

- **Reputation and sales.** A growing number of customers prefer to buy from responsible businesses, so a genuine CSR record can build brand loyalty, attract customers and differentiate the business from rivals — while a poor record risks boycotts and negative publicity.
- **Long-term cost savings.** Using less energy, less material and creating less waste often **lowers operating and disposal costs** once the initial investment is made.
- **Reduced risk.** Going beyond the legal minimum reduces the risk of fines, tighter future regulation and reputational damage.
- **Attracting people and capital.** Responsible businesses find it easier to attract and retain staff and to appeal to investors who screen for ethical and environmental performance.
- **Sustainability of supply.** Protecting the resources and communities a business depends on helps secure its **long-term** ability to keep operating.

Keep straight.

- **CSR is beyond legal compliance.** Merely **obeying** environmental and workplace law is **not** CSR — it is the minimum required of every business. CSR is the **voluntary** action a business takes *above* that legal minimum. If the law forces it, it is compliance; if the business chooses it, it is CSR.
- **CSR is not the same as pure efficiency.** A business might reduce waste **purely to cut costs** — that is an **efficiency** motive (waste minimisation through reduce, reuse, recycle is studied elsewhere in this area of study as an operations strategy for improving efficiency *and* effectiveness). The **same action** becomes a **CSR** consideration when the business does it because it accepts **ethical responsibility** for its environmental impact, even where doing so is not the cheapest option. The action can look identical; the **motive** is what differs.
- **Both considerations sit in the operations system.** Input sustainability is about the resources going **in**; waste is about what the processes and outputs put **out**. A complete answer on CSR in operations addresses **both** the inputs and the waste, not just one.

Contemporary example — Visy, February 2024

Visy is a large privately owned Australian packaging and recycling manufacturer with operations in Victoria.

On **15 February 2024** the business opened a **\$50 million** upgrade of its glass recycling plant at **Laverton**, in Melbourne's west. Visy reported that the modernised plant is able to process up to **200,000 tonnes of glass a year**, and that twenty new optical cameras allow it to sort fragments as small as 3 mm, against a 10 mm limit before the upgrade. The recovered glass, known as **cullet**, is sent to the business's container furnace at Spotswood to be remade

into bottles and jars; Visy stated that the upgrade would support an average recycled content of about 70 per cent and would reduce the energy and emissions used in making containers.

The upgrade applies to the **environmental sustainability of the inputs** of a glass-making operations system. Cullet is an **input** that the **processes** transform into new containers as **outputs**, so **recycled material** takes the place of newly extracted virgin resources at the point resources enter the system. It also bears on the second consideration, because glass recovered and reprocessed is **waste diverted from landfill**, and the finer 3 mm sorting means more of that glass can be recovered rather than discarded. The example also shows the **tension**: a \$50 million investment is a substantial short-term cost, while gains such as lower energy use and a more secure supply of material are realised over the **long term**.

Source: Visy, “Glass recycling facility to recycle 200,000 tonnes of glass”, 15 February 2024 — <https://www.visy.com/newsroom/2024/glass-recycling-facility-recycle-200000-tonnes-glass>. Accurate as at July 2026.

Worked examples

Example 1 — scaffolded

Define corporate social responsibility, and describe **one** way a furniture manufacturer could improve the environmental sustainability of its inputs.

Working	Comment
CSR = the responsibility a business takes for the social, ethical and environmental effects of its activities beyond its legal obligations and the pursuit of profit .	A 2-element definition: (i) taking responsibility for social/ethical/environmental impact, (ii) going beyond what the law and profit require.
One input a furniture maker relies on is timber .	Identify a relevant input before proposing a CSR action.
It could source timber only from certified, sustainably managed forests (or use recycled/reclaimed timber) rather than timber from unsustainably logged forests.	Describe a concrete input-sustainability action, not just “be greener”.
∴ this improves the sustainability of its inputs because the raw material is renewable and responsibly sourced , reducing the business’s environmental impact.	Link the action back to input sustainability.

Example 2 — scaffolded

Ravensford Foods bottles pasta sauces. Its production line discards large volumes of vegetable offcuts and packs every jar in a plastic-heavy box. Describe **one** way Ravensford Foods could improve the corporate social responsibility of its operations by reducing waste.

Working	Comment
The relevant CSR consideration is the amount of waste generated from its processes and outputs — here, food offcuts and excess packaging.	Identify which CSR consideration the scenario points to (waste, not inputs).
Ravensford Foods could redesign its packaging to use minimal, recyclable or biodegradable material instead of plastic-heavy boxes.	Give a specific, realistic waste-reduction action applied to this business.
(Alternatively, it could divert vegetable offcuts to compost or animal feed rather than landfill.)	A second valid option shows the range — only one is needed.
∴ reducing packaging and diverting offcuts lowers the waste sent to landfill, so the business takes responsibility for its environmental impact beyond the legal minimum.	Tie the action to CSR — voluntary, beyond compliance.

Example 3 — unscaffolded

Explain why simply obeying environmental laws is not the same as a business acting with corporate social responsibility.

Every business is **legally required** to meet minimum environmental standards — for example, staying within pollution limits and disposing of waste lawfully — and doing so is **compliance**, not a choice. **Corporate social responsibility** describes what a business does **voluntarily, beyond** that legal minimum, because it accepts responsibility for its social, ethical and environmental impact. A business that only does what the law forces it to do is meeting its obligations but is not demonstrating CSR; a business acting with CSR chooses to go further — for example, sourcing renewable inputs or cutting waste well below the legal limit even though it is not required to. ∴ the difference is **choice**: compliance is the enforced minimum, whereas CSR is the responsibility a business takes on above and beyond what the law demands.

Example 4 — unscaffolded

A manager states, “Corporate social responsibility in our operations is just an unnecessary cost that reduces our profit.” Evaluate this statement.

The statement is **partly valid but too one-sided**. It is true that CSR in operations often raises **short-term costs**: sustainable inputs and low-waste, low-emission processes are frequently more expensive than the cheapest alternatives, and new equipment requires investment, which can reduce short-term profit. **However**, treating CSR purely as a cost ignores its **longer-term benefits**. A genuine CSR record can **enhance reputation and attract customers**, particularly as more consumers prefer responsible businesses, which supports sales and market share; using less energy and material and generating less waste often **lowers operating and disposal costs** over time; and going beyond the legal minimum **reduces the risk** of fines, tighter regulation and reputational damage. These gains can outweigh the initial cost, so CSR is better understood as a **long-term investment** than a pure expense. ∴ while the manager is right that CSR carries a short-term cost, the claim that it is “just an unnecessary cost” is a weak position, because a well-chosen CSR approach can strengthen the business’s profitability and competitiveness over the long term.

Practice questions

Scaffolded

- Q1.** Define the term *corporate social responsibility*.
- Q2.** Identify the **two** corporate social responsibility considerations for an operations system prescribed in the study design.
- Q3.** For each of the following, state whether it relates to the **sustainability of inputs** or to the **waste generated from processes and outputs**: (a) buying recycled aluminium instead of newly mined aluminium; (b) fitting filters to reduce air pollution from the production line; (c) redesigning a product’s packaging so that it can be recycled.
- Q4.** Explain the difference between a business **complying with environmental law** and a business **acting with corporate social responsibility**.
- Q5.** A bakery buys its flour from the cheapest supplier and throws all unsold bread into general rubbish. (a) Identify **one** way the bakery could improve the sustainability of its inputs. (b) Explain **one** benefit to the bakery of doing so.
- Q6.** Explain why reducing waste can be viewed as **both** an efficiency strategy **and** a corporate social responsibility consideration.

Unscaffolded

- Q7.** Outline **one** difference between a business reducing waste as an **efficiency** strategy and a business reducing waste as a **corporate social responsibility** consideration. (2 marks)
- Q8.** Describe **one** way a business could improve the environmental sustainability of its inputs. (3 marks)

- Q9.** Distinguish between the **sustainability of inputs** and the **waste generated from processes and outputs** as corporate social responsibility considerations for an operations system. (4 marks)
- Q10.** Explain **one** benefit to a business of adopting corporate social responsibility considerations in its operations. (3 marks)
- Q11.** Explain the tension a manager may face between improving corporate social responsibility in operations and the objective of maximising short-term profit. (4 marks)
- Q12.** Outline **one** advantage and **one** disadvantage of a manufacturer sourcing more expensive, sustainably produced inputs. (4 marks)
- Q13.** Justify why a manufacturer might invest in reducing the waste generated by its production processes as a corporate social responsibility consideration. (4 marks)
- Q14.** Propose **one** way a service business could reduce the waste generated by its operations in a socially responsible way. (3 marks)
- Q15. Case study. Thornvale Activewear** manufactures gym clothing. To keep prices low it imports the cheapest available petroleum-based synthetic fabric, its cutting and dyeing processes send large volumes of fabric offcuts to landfill and discharge dye-laden water, and each item is wrapped in single-use plastic. A growing number of customers have criticised the business online for its environmental impact, and a competitor has launched a popular “recycled-fabric” range. (a) Identify **one** corporate social responsibility consideration relating to **inputs** that Thornvale Activewear is currently managing poorly. (1 mark) (b) Analyse **one** problem this poor management of CSR may be creating for Thornvale Activewear. (3 marks) (c) Propose a **more socially responsible** way for Thornvale Activewear to manage **either** its inputs **or** its waste, and justify your recommendation. (4 marks)
- Q16.** Compare a business that only meets its legal environmental obligations with a business that adopts corporate social responsibility considerations in its operations. (4 marks)
- Q17.** Discuss the sourcing of sustainable inputs as a corporate social responsibility strategy in operations. (6 marks)
- Q18.** Evaluate the view that reducing the waste a business produces is worthwhile only if it also reduces the business’s costs. (4 marks)
- Q19. Extended response.** Businesses face growing pressure to operate responsibly. Analyse how corporate social responsibility considerations for the **sustainability of inputs** and for the **waste generated from processes and outputs** can be applied to an operations system, and evaluate the view that adopting corporate social responsibility in operations always benefits a business. (10 marks)
- Q20. Contemporary example.** In February 2024 Visy opened a \$50 million upgrade of its glass recycling plant at Laverton in Victoria, which sorts recovered glass into cullet that is remade into bottles and jars at the business’s Spotswood container factory. Analyse an investment of this kind against the corporate social responsibility considerations for an operations system. (6 marks)
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Answers

Q1. The responsibility a business takes for the social, ethical and environmental effects of its activities, beyond its legal obligations and the pursuit of profit. **Q2.** (i) The environmental sustainability of inputs; (ii) the amount of waste generated from processes and the production of outputs. **Q3.** (a) sustainability of inputs; (b) waste from processes; (c) waste from outputs. **Q4.** Complying with environmental law is meeting the enforced legal minimum; CSR is voluntarily going beyond that minimum to take responsibility for social/ethical/environmental impact. **Q5.** (a) e.g. buy flour from a supplier using sustainable/local farming, or an ethically certified supplier. (b) e.g. improved reputation with customers who value responsibly sourced ingredients, or reduced long-term risk through a more secure, sustainably produced supply of flour. **Q6.** Reducing waste cuts resource use and cost (efficiency motive) and also lessens environmental harm beyond the legal minimum (CSR motive) — the same action, different motives. **Q7.** Efficiency motive = cutting waste to use resources more productively and lower costs; CSR motive = cutting waste voluntarily, beyond the legal minimum, out of ethical responsibility for the environmental impact. See solutions. **Q8.** e.g. source renewable/recycled materials or use suppliers meeting environmental standards. See solutions. **Q9.** Inputs = responsible sourcing of resources going *in*; waste = responsibly reducing what processes/outputs put *out*. See solutions. **Q10.** e.g. reputation/sales, long-term cost savings, reduced risk, attracting staff/investors. See solutions. **Q11.** CSR raises short-term costs (sustainable inputs, cleaner processes, investment), which can reduce short-term profit — the manager must weigh cost against long-term benefit. See solutions. **Q12.** Advantage: reduced environmental impact / better reputation. Disadvantage: higher input costs may raise prices or cut short-term profit. See solutions. **Q13.** Argue *why* it is appropriate — beyond legal duty, reputation, long-term cost/risk, meeting stakeholder expectations. See solutions. **Q14.** Propose a specific waste-reduction action (must explain what it entails), applied to a service business, done responsibly. See solutions. **Q15.** (a) Using non-renewable, petroleum-based synthetic fabric (unsustainable inputs). (b) reputational damage → lost customers/market share to the recycled-fabric competitor. (c) e.g. switch to recycled/renewable fabric or recyclable packaging + treat/recycle offcuts, justified. See solutions. **Q16.** Similarity: both obey the law. Difference: the CSR business voluntarily goes beyond the minimum. See solutions. **Q17.** Discuss advantages (reduced environmental impact, reputation, reduced risk, sustainability of supply) and disadvantages (higher cost, supplier availability, possible higher prices). See solutions. **Q18.** Evaluate — cost saving is one motive, but CSR also justifies waste reduction for ethical reasons even without a cost saving; reach a judgement. See solutions. **Q19.** Model response in solutions. **Q20.** Link the investment to the **sustainability of inputs** — cullet is a recycled input replacing newly extracted virgin resources — and to the **waste generated from processes and outputs**, since recovered glass is diverted from landfill. Then analyse the short-term cost against the long-term benefits. See solutions.

Fully-worked solutions

Q7. Reducing waste as an **efficiency** strategy means the business cuts the waste generated by its processes in order to **use its resources more productively and lower its costs** — the motive is the business's own financial performance. Reducing waste as a **corporate social responsibility** consideration means the business cuts that waste **voluntarily, beyond its legal obligations**, because it accepts **ethical responsibility** for the environmental impact of its operations — and it will do so even where the responsible option is not the cheapest. The action can look identical; the **difference lies in the motive**.

Q8. A business could improve the environmental sustainability of its inputs by **sourcing renewable or recycled materials** in place of scarce or newly extracted ones — for example, using recycled metal or paper, or timber certified as coming from sustainably managed forests. Because these inputs can be replenished and are produced with less environmental damage, the business reduces the depletion of natural resources and the harm caused by extracting virgin materials, making the resources it relies on more sustainable over the long term.

Q9. The **sustainability of inputs** is a CSR consideration about the resources a business brings **into** its operations system — whether its materials, energy and labour are sourced responsibly, for example by using renewable, recycled or ethically produced inputs and suppliers who meet environmental standards. The **waste generated from processes and outputs** is a CSR consideration about what the operations system puts **out** — the emissions, offcuts, packaging and disposal created as inputs are transformed and products are made, which the business seeks to reduce, reuse or recycle. The two therefore differ in **where in the operations system they apply** — the responsible sourcing of resources going *in* versus the responsible reduction of waste coming *out* — although both express the same underlying commitment to reducing the business's environmental impact.

Q10. One benefit of adopting CSR considerations in operations is an **improved reputation that supports sales**. As more customers prefer to buy from businesses they see as environmentally and ethically responsible, a genuine CSR record — such as using sustainable inputs and minimising waste — can **build brand loyalty, attract new customers and differentiate the business from competitors**. This can increase sales and market share over time, meaning the responsible choices support the business's objectives rather than merely adding cost.

Q11. The tension arises because CSR in operations usually **costs money in the short term** while its rewards come **later**. Sustainable inputs (such as certified or recycled materials) are often **dearer** than the cheapest alternatives, and cleaner, lower-waste processes typically require **investment** in new equipment or methods. These extra costs **reduce profit in the short term**, which conflicts directly with the objective of **maximising short-term profit**. A manager must therefore weigh the immediate reduction in profit against the **longer-term benefits** — reputation, lower running costs, reduced risk and sustainable supply — and decide how far to go beyond the legal minimum. The tension is essentially between **short-term financial performance and longer-term social and environmental responsibility**.

Q12. *Advantage:* sourcing sustainably produced inputs **reduces the business's environmental impact and strengthens its reputation** as a responsible business, which can attract environmentally conscious customers and reduce the risk of criticism or boycotts. *Disadvantage:* because sustainably produced inputs are usually **more expensive** than the cheapest alternatives, the manufacturer faces **higher input costs**, which may reduce short-term profit or force it to raise prices and risk losing price-sensitive customers.

Q13. A manufacturer should invest in reducing production waste because it is a **responsible and worthwhile** use of resources for several reasons. First, it takes responsibility for the business's environmental impact **beyond the legal minimum**, which is the essence of CSR and increasingly expected by the community and customers. Second, reducing emissions, offcuts and landfill can **lower disposal and material costs** over time, so the investment can pay for itself. Third, a credible record of cutting waste **protects and enhances the business's reputation**, helping to attract customers and reduce the risk of fines or tighter regulation. Because the action delivers environmental, financial and reputational value while meeting the expectations of stakeholders, it is an appropriate CSR investment rather than a needless cost — which is precisely why a manufacturer would be justified in making it.

Q14. A service business such as a **hotel** could reduce the waste its operations generate by **replacing single-use items with reusable or refillable alternatives** — for example, installing refillable soap and shampoo dispensers and reusable containers in place of individually packaged miniatures, and switching from disposable to washable table and bathroom linen. This directly **reduces the volume of plastic and packaging waste** sent to landfill by the hotel's day-to-day operations. It is socially responsible because the hotel is voluntarily going **beyond** what the law requires to lessen its environmental impact, and it also tends to **lower ongoing supply and waste-disposal costs**, making it both responsible and practical for a service business to adopt.

Q15. (a) Thornvale Activewear is using **cheap, non-renewable, petroleum-based synthetic fabric** — an **unsustainable input**. (b) Managing its inputs and waste so poorly is **damaging Thornvale's reputation**, and this is beginning to harm the business through a chain of effects: the visible environmental impact (petroleum-based fabric, offcuts to landfill, dye-laden water and single-use plastic) has prompted **public criticism online**, which **weakens customer trust in the brand**; as customers increasingly prefer responsible businesses, some are likely to **switch to the competitor's recycled-fabric range**, causing Thornvale to **lose sales and market share**. The poor CSR record therefore feeds directly into falling demand and a weaker competitive position. (c) Thornvale should **switch from petroleum-based fabric to recycled or renewable fabric** (for example, fabric made from recycled plastic bottles or responsibly grown natural fibres), supported by **recyclable packaging** in place of single-use plastic. This is justified because it addresses the **root cause** of the criticism — the unsustainable inputs and packaging — rather than merely defending the brand; it allows Thornvale to **match the competitor's recycled-fabric offer** and win back environmentally conscious customers; and by taking genuine responsibility **beyond the legal minimum**, it rebuilds reputation and reduces the long-term risk of further lost sales. Although recycled fabric may cost more per unit, the reputational and market-share gains make it an appropriate response for a business already losing customers over its environmental record.

Q16. *Similarity:* **both businesses obey environmental law** — meeting the minimum legal standards for pollution, emissions and waste disposal is required of every business, so neither is acting unlawfully. *Differences:* the first business does **only** what the law requires and treats the legal minimum as sufficient, whereas the CSR business **voluntarily goes beyond** that minimum — for example, sourcing renewable or ethically produced inputs and cutting waste well below the legal limit — because it accepts responsibility for its wider social and environmental impact. As

a result the CSR business typically bears **higher short-term costs** but can gain a **stronger reputation and customer loyalty**, while the compliance-only business keeps costs lower but is more exposed to criticism and to the risk of tighter future regulation. In short, both meet the law, but only the CSR business chooses to do more than the law demands.

Q17. Sourcing **sustainable inputs** — such as renewable, recycled or ethically produced materials and suppliers who meet environmental standards — can be an effective CSR strategy in operations, but it has both advantages and disadvantages. *Advantages:* it **reduces the business's environmental impact** by lessening the depletion of scarce resources and the damage caused by extracting virgin materials; it can **strengthen reputation and attract customers** who prefer responsible businesses, supporting sales and differentiation; it helps **secure long-term supply** by protecting the resources and communities the business depends on; and it **reduces the risk** of criticism, boycotts and tighter future regulation. *Disadvantages:* sustainable inputs are usually **more expensive** than the cheapest alternatives, raising costs and potentially reducing short-term profit or forcing higher prices; suitable **suppliers may be limited or harder to find**, which can complicate the supply chain; and the benefits are often **long-term**, so the business must absorb the extra cost before the reputational and cost-saving gains are realised. Overall, sourcing sustainable inputs is a worthwhile CSR strategy for a business seeking long-term reputation and resource security, provided it can manage the higher short-term costs and supplier constraints.

Q18. The view is **partly valid but too narrow**. It is true that reducing waste **often does** reduce costs — using fewer materials, less energy and sending less to landfill can lower operating and disposal expenses — and where this happens, waste reduction is clearly worthwhile because it improves both efficiency **and** the business's environmental record. **However**, saying it is worthwhile **only** if it also cuts costs **ignores the CSR motive**. A socially responsible business reduces waste because it accepts **ethical responsibility** for its environmental impact, and some waste-reduction measures — such as treating polluted water or using biodegradable packaging — may be **more expensive** yet still worthwhile because they reduce harm, meet community expectations, protect reputation and lower the risk of future regulation. Judging waste reduction purely by whether it saves money treats it only as an **efficiency** measure and overlooks its value as a CSR consideration. ∴ while cost saving is a genuine and common benefit, reducing waste can be worthwhile for ethical and reputational reasons even when it does not cut costs, so the view is only partly correct.

Q19. Model response (10 marks). Corporate social responsibility (CSR) is the responsibility a business takes for the social, ethical and environmental effects of its activities **beyond its legal obligations and the pursuit of profit**. Within the **operations system** — which transforms inputs through processes into outputs — the study design identifies two CSR considerations: the **environmental sustainability of inputs** and the **amount of waste generated from processes and outputs**. Applied to inputs, a responsible business considers whether its resources are sourced sustainably — using **renewable or recycled materials, ethically produced** inputs and labour, **renewable energy**, and **suppliers who meet environmental standards** — rather than simply choosing the cheapest option; this reduces the depletion of scarce resources and the harm caused by extracting virgin materials. Applied to waste, a responsible business takes responsibility for what its processes and outputs put back into the environment — cutting **emissions and pollution**, reducing and recycling **offcuts and scrap**, using recyclable or biodegradable **packaging**, and designing outputs that can be reused or recycled rather than sent to landfill. Managed together, these considerations reduce the environmental footprint at both ends of the operations system: responsibly at the point resources enter, and responsibly at the point waste leaves.

The view that adopting CSR in operations **always** benefits a business is **partly supported but too absolute**. There are real benefits: a genuine CSR record can **enhance reputation and attract customers**, supporting sales and market share; using fewer resources and creating less waste can **lower operating and disposal costs** over time; going beyond the legal minimum **reduces the risk** of fines, tighter regulation and reputational damage; and protecting resources and communities helps **secure long-term supply**. **However**, CSR in operations also carries **short-term costs** — sustainable inputs and cleaner processes are frequently more expensive, and reducing waste or emissions can require significant investment — which can **reduce short-term profit** and create a genuine tension with that objective. Whether a business benefits **overall** depends on factors such as how much customers value its responsibility, whether the cost savings materialise, and how well the strategy is implemented; a poorly judged or purely cosmetic CSR effort may cost more than it returns. ∴ while CSR considerations for the sustainability of inputs and the reduction of waste can strengthen a business's reputation, costs and long-term position, the claim that they **always** benefit the business overstates the case: the benefits are usually **long-term** and must be weighed against **short-term costs**, so CSR in operations is best judged as a **valuable long-term investment rather than a guaranteed benefit** in every situation.

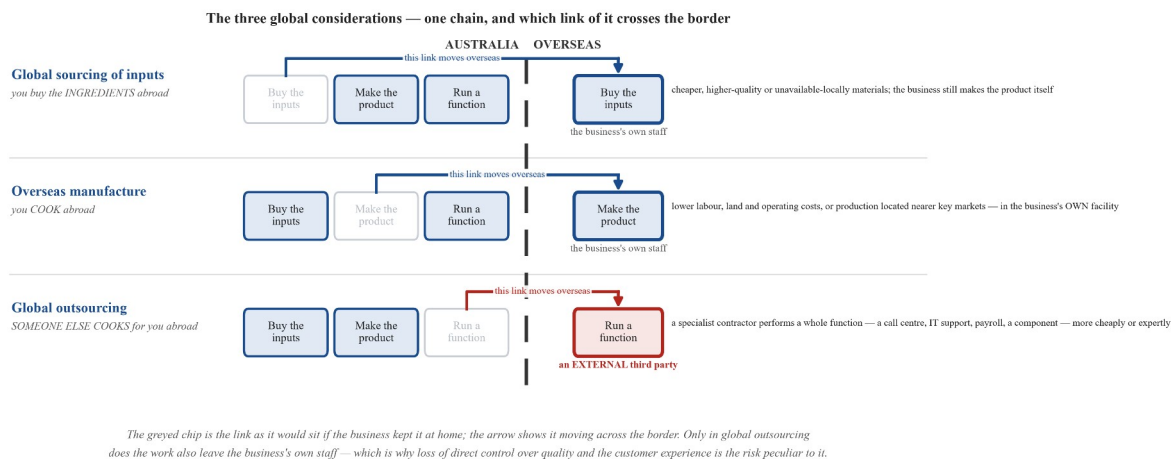
(Full marks require: an accurate definition of CSR; application of both prescribed considerations — input sustainability and waste from processes/outputs — to the operations system; a two-sided evaluation weighing benefits against the short-term cost/tension; and a justified conclusion.)

Q20. On **15 February 2024** Visy opened a **\$50 million** upgrade of its glass recycling plant at Laverton, which it reported can process up to **200,000 tonnes of glass a year** into cullet for remaking into containers at Spotswood. An investment of this kind relates most directly to the CSR consideration of the **environmental sustainability of inputs**. Cullet is an **input** to a glass container operations system, and recovering it on this scale allows **recycled material** to be used in place of **newly extracted virgin resources**, reducing the depletion of scarce natural resources and — as the business stated — the energy and emissions needed to make each container. The responsibility is therefore exercised at the point resources **enter** the system, rather than being added alongside it. The investment also engages the second consideration, the **waste generated from processes and outputs**: glass collected and reprocessed into cullet is material **diverted from landfill**, and sorting fragments down to 3 mm rather than 10 mm means a greater share can be recovered rather than discarded. The two considerations reinforce one another, because what leaves one operations system as **waste** re-enters another as a **sustainable input**. The example equally illustrates the **tension** in CSR: \$50 million is a substantial **short-term cost**, whereas the benefits — lower energy use, a more secure supply of material and a stronger reputation — accrue over the **long term**. ∴ an investment of this kind shows CSR operating **inside** the operations system, through the choice of inputs and the treatment of waste, rather than beside it.

Chapter 9 Corporate social responsibility and global operations — 9B Global considerations in operations management

Theory

Operations take place in a **competitive, global environment**, and managers increasingly look beyond Australia's borders when deciding where to buy inputs, where to make their goods and who should carry out particular parts of their operations. The study design prescribes **three global considerations for operations management: global sourcing of inputs, overseas manufacture and global outsourcing**. Each is a way of using the wider world's resources and providers to help a business achieve its objectives — but each also brings distinctive risks and trade-offs.



Every one of these considerations is judged against the two standing measures of operations performance:

- **Efficiency** — *how well a business uses its resources*: the input-to-output ratio, so a more efficient operation produces the same output with less time, money, materials or waste (lower cost per unit).
- **Effectiveness** — *the degree to which a business achieves its objectives*: producing quality outputs that satisfy customers, expand market share and protect the firm's reputation.

These are **different** measures, and an examiner expects an answer to say **which effect is which**. A global strategy can improve one, the other or both.

Global sourcing of inputs. Global sourcing of inputs means **buying the materials, components or parts** that a business transforms in its operations system **from suppliers located overseas** rather than from domestic suppliers, in order to gain advantages in **cost, quality or availability**. The business still makes the product itself — only the *inputs* come from abroad.

- **Efficiency**: overseas suppliers may offer inputs at a **lower price** (through cheaper labour and materials or greater economies of scale), which lowers the input cost per unit of output and improves the input-to-output ratio. A wider global supply base can also make inputs more reliably available, reducing costly production stoppages.
- **Effectiveness**: sourcing **higher-quality or specialised** inputs that are not available locally can raise the quality of the finished output, helping the business meet customer expectations and its objectives.
- **Risks / trade-offs**: **longer, less certain lead times** (inputs shipped from overseas), harder **quality control** at a distance, **exchange-rate** movements that change input costs unpredictably (a fall in the Australian dollar makes imported inputs dearer), and **ethical / reputational** risk if an overseas supplier uses poor labour or environmental practices.

Overseas manufacture. Overseas manufacture means **producing (making or assembling) a business's goods in a facility located in another country** — commonly to access **lower labour or operating costs**, or to locate production **nearer to key markets or resources**. Here it is the *making of the product itself* that moves offshore.

- **Efficiency:** lower **labour, land and operating costs** overseas reduce the cost of transforming inputs into outputs, improving efficiency; producing near markets or raw materials can also cut transport costs.
- **Effectiveness:** manufacturing **closer to overseas customers** can improve responsiveness and service to those markets, while access to specialised skills or capacity abroad can raise output quality — both helping the business meet objectives such as growing market share.
- **Risks / trade-offs:** **quality control** is harder to supervise remotely; supply lines back to the home market are **longer** (greater lead times); **exchange-rate** and political risk in the host country; and **ethical / reputational** damage if labour conditions are poor or if the domestic community reacts against jobs being sent offshore.

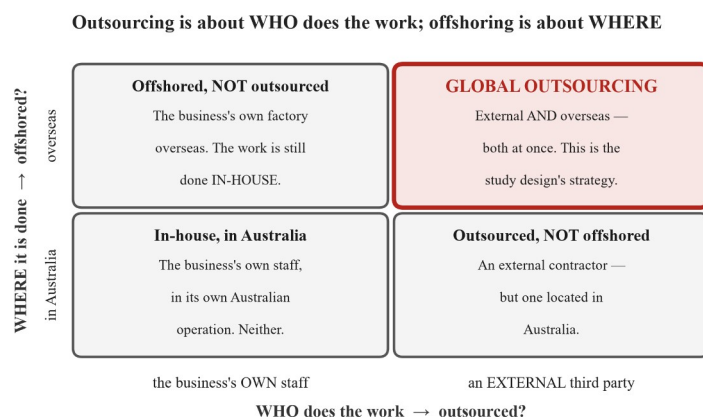
Global outsourcing. Global outsourcing means **contracting a third-party business located overseas to perform a particular business function, process or activity** that the business would otherwise carry out itself — for example an overseas **call centre, IT support, payroll processing** or the manufacture of a component by an external contractor abroad. The distinguishing feature is that an **external party**, not the business's own staff, does the work.

- **Efficiency:** a specialist overseas contractor may perform the function at **lower cost** (lower wages, economies of scale) or more expertly than the business could in-house, and outsourcing frees the firm's own resources and management to concentrate on its **core activities**.
- **Effectiveness:** access to a **specialist provider** can raise the quality of the outsourced function, and focusing management attention on what the business does best can improve overall achievement of objectives.
- **Risks / trade-offs:** **loss of direct control** over the quality and the customer experience (a poor offshore call centre can damage **reputation**); dependence on a third party; **communication, cultural and time-zone** barriers; data-security and confidentiality risk; and the same **lead-time, exchange-rate** and **ethical** exposures as the other strategies.

Keep straight.

- **Global sourcing (inputs) vs overseas manufacture (making) vs global outsourcing (a function / process).** Global sourcing is about **buying inputs** from overseas — the business still makes the product itself. Overseas manufacture is about **making the product itself** overseas. Global outsourcing is about handing an **entire function or process** to an external overseas party. A cook's analogy: sourcing = you *buy the ingredients* abroad; overseas manufacture = you *cook* abroad; outsourcing = *someone else cooks* for you abroad.
- **Outsourcing vs offshoring.** *Outsourcing* is about **who** does the work — an **external third party** rather than the business's own staff (that party could even be in Australia). *Offshoring* is about **where** the work is done — in **another country**. **Global outsourcing is both** at once (external *and* overseas). By contrast, running your *own* factory overseas is offshoring but **not** outsourcing, because the work is still done in-house.
- **Name the effect.** For every strategy, be explicit about whether a benefit is an **efficiency** gain (better resource use / lower cost per unit) or an **effectiveness** gain (better achievement of objectives / higher quality). Blurring the two is a common way to lose marks.

Because *who* does the work and *where* it is done are two independent questions, they make four combinations rather than two — and the two that catch students out are the ones off the diagonal.



Running your own factory overseas is offshoring but NOT outsourcing, because the work is still done in-house. Global outsourcing is both at once.

Contemporary example — Ansell, February 2025

Ansell Limited manufactures protective gloves and clothing; its FY25 annual report describes it as legally domiciled in Melbourne and listed on the Australian Securities Exchange, and its FY25 half-year presentation listed 14 owned manufacturing plants across nine countries, none in Australia.

In its **FY25 half-year results, released on 10 February 2025**, Ansell reported that it was relocating production of some **chemical protective clothing styles from China to Sri Lanka**. The move formed part of the Accelerated Productivity Investment Program, which the business announced on **18 July 2023**; its FY25 full-year results, released 25 August 2025, reported the manufacturing changes as completed during FY25. Ansell's FY25 annual report stated the relocation was made to create sourcing flexibility and to take advantage of lower-cost production capacity, and reported **US\$47 million** of savings from the program in FY25.

This is **overseas manufacture**, not global outsourcing: the garments are made in Ansell's *own* plants, so the work stays **in-house** and only its country changes. The reason the business gave is an **efficiency** one — moving the styles to lower-cost capacity reduces the resources used to transform inputs into outputs, cutting the cost per garment. The second reason, sourcing flexibility, bears on **effectiveness**: a business able to make the same product in more than one country is better placed to keep supplying customers if conditions in one location change. The **risks** the subtopic names still apply — quality control supervised at a distance, longer lead times and exchange-rate exposure.

*Source: Ansell Limited, FY25 half year results presentation, 10 February 2025 —

https://investor.ansell.com/FormBuilder/_Resource/_module/WEtAsUy_jk6Kmk_vOw9f5g/docs/results/Ansell_HYRP_2025.pdf; and Ansell Limited, Annual Report 2025 (for the year ended 30 June 2025) —

https://investor.ansell.com/FormBuilder/_Resource/_module/WEtAsUy_jk6Kmk_vOw9f5g/docs/reports/Ansell_Annual_Report_2025.pdf. Accurate as at July 2026.*

Worked examples

Example 1 — scaffolded

Lumora Lighting is an Australian maker of designer lamps that currently buys its LED modules from a local supplier at \$4.20 each. Explain how global sourcing of inputs could improve the **efficiency** of Lumora's operations.

Working	Comment
Global sourcing of inputs means Lumora buys its LED modules from overseas suppliers instead of from its local supplier.	Begin by defining the strategy in the context of the business.
An overseas supplier may make the same module more cheaply — say \$2.60 rather than \$4.20 — because of lower labour costs and larger production runs.	Identify the cost mechanism that drives the efficiency gain.
Paying less for each module lowers Lumora's input cost per lamp, improving its input-to-output ratio: the same lamps are produced using fewer dollars of resources.	State explicitly that this is an efficiency gain (resource use), not effectiveness.
∴ global sourcing could improve the efficiency of Lumora's operations by reducing the cost of a key input per unit of output.	Conclude by answering the question directly.

Example 2 — scaffolded

Bexley Bikes, an Australian bicycle label, is considering assembling its bikes in its own plant in Vietnam. Explain **one** way overseas manufacture could improve Bexley's effectiveness and **one** risk it would create.

Working	Comment
Overseas manufacture means Bexley assembles its bikes in a facility in another country (Vietnam) rather than in Australia.	Define the strategy in context.

Working	Comment
Vietnam is closer to Bexley's fast-growing South-East Asian customers, so it can supply those markets more quickly and expand its market share — an effectiveness gain, because it advances a business objective.	Link the benefit to effectiveness (achieving objectives), and say so explicitly.
A risk is that quality is harder to supervise from a distance: if assembly faults go unnoticed, defective bikes could reach customers and damage Bexley's reputation.	Identify a genuine risk / trade-off — remote quality control.
∴ overseas manufacture could help Bexley reach new markets more effectively, provided it can manage the risk that distance weakens its quality control.	Weigh the benefit against the risk and conclude.

Example 3 — unscaffolded

Distinguish between global sourcing of inputs and global outsourcing.

Global sourcing of inputs means a business **buys the materials or components** it transforms in its operations from **overseas suppliers**, while continuing to **make the product itself**; only the inputs come from abroad. **Global outsourcing** means the business **contracts an external overseas third party to carry out a whole function or process** — such as customer service or component manufacture — that it would otherwise do in-house. The key difference is **what moves overseas**: in global sourcing it is only the *purchase of inputs* (the business keeps performing its own operations), whereas in global outsourcing it is an *entire activity* that is handed to another firm to perform. ∴ global sourcing changes where inputs are *bought*, while global outsourcing changes *who performs a function*.

Example 4 — unscaffolded

Analyse how global outsourcing can affect both the efficiency and the effectiveness of a business's operations.

Global outsourcing contracts an overseas third party to perform a function the business would otherwise do itself, and this affects performance through several linked relationships. Because the overseas contractor typically pays **lower wages** and specialises in that function, it can perform the work at a **lower cost** than the business could in-house; this reduces the resources the business consumes, **improving efficiency**. At the same time, handing the function to a specialist **frees the business's own management and capital** to concentrate on its core activities, which can lift the quality of what the business does best and so **improve effectiveness** (better achievement of objectives). However, the same arrangement can work in reverse: because the function is now performed by an external party at a distance, the business **loses direct control** over it, and poor service from, say, an offshore call centre can lower customer satisfaction — **reducing effectiveness** even as costs fall. The effect on performance therefore depends on whether the cost savings are outweighed by any loss of quality and control. ∴ global outsourcing tends to improve efficiency through lower costs, but its effect on effectiveness depends on whether the specialist provider maintains the quality the business needs.

Practice questions

Scaffolded

Q1. Define the term *global outsourcing*.

Q2. Identify the **three** global considerations for operations management prescribed in the study design.

Q3. For each of the following, name the global consideration being described: (a) an Australian furniture maker buys its timber and metal fittings from suppliers in Scandinavia; (b) a cosmetics company hires an external firm in the Philippines to handle all of its online customer enquiries; (c) a footwear brand relocates the making of its shoes to its own factory in Indonesia.

Q4. A snack-food manufacturer decides to source its packaging from an overseas supplier. (a) Explain **one** way this could improve the efficiency of its operations. (b) Outline **one** risk associated with the strategy.

Q5. Distinguish between overseas manufacture and global outsourcing.

Q6. Ridgeline Rugs, an Australian homewares business, is considering making its rugs in its own factory in India. (a) Identify the global consideration Ridgeline is considering. (b) Explain **one** way it could improve the efficiency of Ridgeline's operations. (c) Outline **one** risk of the strategy.

Unscaffolded

Q7. Define *overseas manufacture*. (2 marks)

Q8. Outline **one** difference between global sourcing of inputs and global outsourcing. (2 marks)

Q9. Describe how global sourcing of inputs could improve the **effectiveness** of a business's operations. (3 marks)

Q10. Explain how overseas manufacture could improve **both** the efficiency **and** the effectiveness of a business's operations. (4 marks)

Q11. Distinguish between global outsourcing and overseas manufacture. (4 marks)

Q12. Compare global sourcing of inputs with overseas manufacture. (4 marks)

Q13. Justify the use of global outsourcing for a business that wants to concentrate on its core activities. (4 marks)

Q14. Analyse how global sourcing of inputs can affect the efficiency and effectiveness of a business's operations. (6 marks)

Q15. Discuss the use of overseas manufacture as a strategy to improve a business's operations. (6 marks)

Q16. Case study. Solace Skincare is an Australian business that makes natural skincare products. To grow, its owner Priya has made three decisions: buy its botanical oils from certified growers in Morocco; move the filling and packaging of its products to a new plant it will own and run in Malaysia; and contract an external company in the Philippines to run its online customer-service team. Sales are rising, but some customers have complained on social media about slow deliveries and unhelpful replies to their enquiries. (a) Identify the global consideration involved in **each** of Priya's three decisions. (3 marks) (b) Explain how buying botanical oils from Morocco could improve the effectiveness of Solace Skincare's operations. (3 marks) (c) Propose and justify **one** action Priya could take to address the customer complaints about the outsourced customer-service team. (4 marks)

Q17. Evaluate the appropriateness of global outsourcing of a business's customer-service function. (6 marks)

Q18. Explain how exchange-rate movements create a risk for a business that sources its inputs from overseas. (4 marks)

Q19. Extended response. "To stay competitive, modern businesses must look beyond their own country when managing operations." With reference to the statement above, examine how a business could operate both efficiently and effectively by using each of: global sourcing of inputs; overseas manufacture; global outsourcing. (10 marks)

Q20. Contemporary example. In February 2025 **Ansell** reported that it was relocating production of some chemical protective clothing styles from its own plant in China to its own operations in Sri Lanka, as part of a productivity program it announced in July 2023. Analyse how a decision of this kind could affect the efficiency and the effectiveness of a business's operations. (6 marks)

Answers

Q1. Contracting an external third-party business located overseas to perform a function, process or activity the business would otherwise carry out itself. **Q2.** Global sourcing of inputs; overseas manufacture; global outsourcing. **Q3.** (a) global sourcing of inputs; (b) global outsourcing; (c) overseas manufacture. **Q4.** (a) An overseas supplier may sell the packaging more cheaply (lower labour/material costs), lowering the input cost per unit and improving the input-to-output ratio. (b) e.g. longer/less reliable lead times; harder quality control; exchange-rate risk; ethical/reputational risk. **Q5.** Overseas manufacture = the business makes its own goods in a facility in another country (still in-house). Global outsourcing = an **external** overseas party performs a function for the business. **Q6.** (a) Overseas manufacture. (b) e.g. lower labour/land costs in India reduce the cost of making each rug, improving efficiency. (c) e.g. quality harder to control at a distance; longer lead times to ship rugs back to Australia; reputational risk. **Q7.** Producing (making or assembling) a business's goods in a facility located in another country (e.g. to access lower labour costs or be nearer to markets). See solutions. **Q8.** Global sourcing changes only where **inputs are bought** (the business still makes the product); global outsourcing hands an **entire function/process** to an external overseas party. See solutions. **Q9.** Access to higher-quality or specialised inputs unavailable locally raises the quality of the finished output, better satisfying customers and objectives. See solutions. **Q10.** Efficiency: lower labour/operating costs abroad cut the cost per unit. Effectiveness: producing near overseas markets improves service/market share. See solutions. **Q11.** Both send an activity overseas; they differ in **who** does it (own facility vs external party) and **what** moves (making the good vs a whole function). See solutions. **Q12.** Similarity: both use overseas resources to cut costs/improve operations and both carry distance/quality/exchange-rate risks. Difference: sourcing buys inputs abroad while the firm still makes the good; overseas manufacture moves the making itself abroad. See solutions. **Q13.** Outsourcing a function to a specialist frees the firm's resources and management for its core activities, and the specialist may do it better/cheaper — argue **WHY** this benefits the business. See solutions. **Q14.** Model response in solutions (causal relationships, both measures). **Q15.** Advantages (lower costs, nearer markets) vs disadvantages (quality control, lead times, ethics, reputation, exchange rates). See solutions. **Q16.** (a) Morocco oils = global sourcing of inputs; Malaysian plant = overseas manufacture; Philippines customer service = global outsourcing. (b) Certified, higher-quality botanical oils raise product quality, better meeting customer expectations. (c) e.g. tighter service standards / training / switch provider / bring the function back in-house — proposed **and** justified. See solutions. **Q17.** Evaluation — strengths (cost, specialist expertise, focus on core) vs weaknesses (loss of control, reputation, communication) + a justified judgement. See solutions. **Q18.** A fall in the AUD raises the cost of imported inputs (priced in foreign currency), increasing production costs and squeezing margins; rates move unpredictably, adding uncertainty. See solutions. **Q19.** Model response in solutions (10 marks). **Q20.** Name the strategy as **overseas manufacture** (Ansell's own plants — offshoring, not outsourcing); efficiency: lower-cost production capacity cuts the cost of making each garment; effectiveness: sourcing flexibility protects supply to customers; then the distance-related risks (quality control, lead times, exchange rates). See solutions.

Fully-worked solutions

Q7. Overseas manufacture means **producing — making or assembling — a business's goods in a facility located in another country** rather than domestically. Businesses do this to access advantages such as **lower labour or operating costs**, or to locate production **closer to key markets or resources**.

Q8. One difference is **what moves overseas**. Under **global sourcing of inputs**, only the **purchase of materials or components** shifts abroad — the business continues to **make the product itself**. Under **global outsourcing**, an **entire function or process** (such as customer service) is handed to an **external overseas firm** to perform. (Naming both sides of the difference is required for both marks.)

Q9. Global sourcing of inputs can improve **effectiveness** — the degree to which the business achieves its objectives — by giving it access to **higher-quality or specialised inputs** that may not be available from local suppliers. For example, a business could source a superior-grade component or a rare raw material from an overseas supplier. Building these better inputs into its product **raises the quality of the finished output**, so the product more consistently **meets customer expectations**, which helps the business satisfy customers and achieve objectives such as building its reputation and market share.

Q10. Overseas manufacture can improve **both** measures. It improves **efficiency** because **labour, land and operating costs** are often lower in the overseas location, so the business spends **fewer resources to transform inputs into**

outputs — lowering the cost per unit and improving the input-to-output ratio. It improves **effectiveness** because producing **closer to overseas markets** (or to sources of raw materials) lets the business **serve those customers faster and expand into new markets**, advancing objectives such as increasing market share. The first effect is about resource use; the second is about achieving objectives.

Q11. Global outsourcing and overseas manufacture are **similar** in that both send a business activity **overseas** to take advantage of lower costs or overseas capabilities, and both create distance-related risks (quality control, lead times, exchange rates). They **differ** in **who performs the work** and **what is moved offshore**. Under **overseas manufacture** the business **makes its own goods in its own facility** abroad — the activity stays **in-house**, only in another country. Under **global outsourcing** an **external third party** performs a **function or process** on the business's behalf. So overseas manufacture is *offshoring the making of the good*, while global outsourcing is *handing a function to another firm* overseas.

Q12. (*Compare — both similarities AND differences required.*) A **similarity** is that both global sourcing of inputs and overseas manufacture use **overseas resources to reduce costs and improve operations**, and both expose the business to the same distance-related risks — harder quality control, longer lead times and **exchange-rate** movements. **Another similarity** is that in both the business **keeps performing its own operations** (neither hands a function to an external firm). A **difference** is **what moves overseas**: global sourcing moves only the **buying of inputs**, while the business **still makes the product domestically**, whereas overseas manufacture moves the **making of the product itself** to another country. A **further difference** is the **cost mainly targeted**: global sourcing chiefly lowers **input (materials) costs**, while overseas manufacture chiefly lowers **production costs** such as labour. Overall the two strategies overlap in purpose but differ in which part of the operations system is relocated.

Q13. (*Justify — argue WHY, with reasoning.*) Global outsourcing is a sound choice for a business that wants to concentrate on its core activities because it **removes a non-core function from the business's own workload**. By contracting an **external overseas specialist** to perform a support function — for example IT, payroll or customer service — the business **frees its own management, staff and capital** to focus on what it does best, such as designing and marketing its product. This is worthwhile because the specialist provider, which performs that function for many clients, can often do it **more cheaply and to a higher standard** than the business could in-house, so the business gains **lower costs and better support quality at the same time**. Concentrating limited resources on core activities where the business has an advantage is more likely to improve its overall performance than spreading them across functions others can do better — which is why outsourcing the non-core function is justified.

Q14. (*Analyse — causal relationships, not a list of pros and cons.*) Global sourcing of inputs affects operations performance through a chain of effects. Buying materials from **overseas suppliers** that produce at lower cost (cheaper labour, larger scale) **reduces the price the business pays per input**; because inputs are a major part of production cost, this **lowers the cost per unit of output**, which **improves efficiency** by cutting the resources used per unit. Sourcing globally also widens the pool of suppliers, so the business can obtain **higher-quality or specialised inputs** it could not get locally; building better inputs into the product **raises output quality**, which **helps satisfy customers and achieve objectives** — an improvement in **effectiveness**. These effects are not guaranteed, however: because inputs now travel long distances, **lead times lengthen and become less certain**, and if supply is disrupted, production can stall — **reducing efficiency**; and because inputs are priced in a foreign currency, a **fall in the Australian dollar raises their cost**, partially reversing the efficiency gain. So global sourcing improves efficiency and effectiveness *when* lower-cost, higher-quality inputs arrive reliably, but the same reliance on distant, foreign-currency supply can work against both measures if lead times or exchange rates move adversely.

Q15. (*Discuss — advantages and disadvantages; no overall judgement required, and do not double-dip.*) Overseas manufacture has clear **advantages** as an operations strategy. Making goods in a country with **lower labour, land and operating costs** reduces the cost of transforming inputs into outputs, **improving efficiency** and allowing the business to compete on price. Locating production **closer to overseas markets or raw materials** can also **improve service to those markets and cut transport costs**, helping the business grow market share. There are also significant **disadvantages**. **Quality control is harder to supervise** from a distance, so defects may reach customers; **supply lines back to the home market are longer**, increasing lead times and the risk of disruption; **exchange-rate movements** make costs unpredictable; and there is an **ethical and reputational** risk if the overseas workforce is poorly treated or if domestic customers and the community object to jobs being sent offshore. The strategy can therefore deliver lower costs and market access, but at the cost of reduced control, greater complexity and reputational exposure that the business must actively manage.

Q16. (a) Priya's three decisions map onto the three global considerations: buying botanical oils from certified growers in **Morocco** is **global sourcing of inputs**; running her own **filling and packaging plant in Malaysia** is **overseas manufacture**; and contracting an **external company in the Philippines** to run customer service is **global outsourcing**.

(b) Buying botanical oils from **certified growers in Morocco** can improve Solace Skincare's **effectiveness** — how well it meets its objectives — by giving it access to **higher-quality, specialised inputs** that may not be available from Australian growers. Because the oils are certified and of a superior grade, the finished skincare products are of **higher quality**, which **better satisfies Solace's customers** and supports objectives such as building the brand's reputation as a premium natural-skincare business and growing sales. (The gain here is about meeting objectives through quality, not about cost, so it is effectiveness rather than efficiency.)

(c) (*Propose and justify — recommend an action and argue why it works, applied to the case.*) Priya could **set clear service standards for the Philippines provider and require it to train its team in Solace's products and response times, with regular monitoring of enquiry-response quality**. This is justified because the complaints show the outsourced team is giving **unhelpful replies**, and the core weakness of global outsourcing is the **loss of direct control** over a customer-facing function. By building agreed standards, product training and monitoring into the contract, Priya keeps the cost advantage of outsourcing while **restoring control over the quality of customer service**, so replies become accurate and helpful and the damage to Solace's reputation on social media is reversed. (*Alternatively, students may justify bringing customer service back in-house or switching providers — either is creditworthy if the recommendation is clearly justified and linked to Solace.*)

Q17. (*Evaluate — weigh strengths and weaknesses and reach an evidence-based judgement.*) Global outsourcing of customer service has real **strengths**. An **overseas specialist provider** can run the function at **lower cost** (lower wages, economies of scale), improving efficiency, and can offer **round-the-clock coverage and expertise** that a small in-house team could not; outsourcing also **frees the business to focus on its core activities**. There are, however, serious **weaknesses** for a *customer-facing* function in particular. Because customer service is the business's direct point of contact with customers, **losing control** of it is risky: **communication, cultural or time-zone barriers**, or a provider that does not know the product well, can produce **poor, unhelpful service that damages the business's reputation** and undermines effectiveness — the very objective the business is trying to protect. **On balance**, global outsourcing of customer service is **appropriate only when the business can secure strong service standards, product training and close monitoring of the provider**; where it cannot guarantee that quality, the reputational cost of poor customer contact is likely to outweigh the cost savings, making the strategy inappropriate for this particular function. The judgement therefore turns on how tightly the business can control the outsourced provider's quality.

Q18. Exchange-rate movements create a risk for a business that sources inputs overseas because those inputs are **paid for in a foreign currency**, so their cost in Australian dollars **changes as the exchange rate moves**. If the **Australian dollar falls** against the supplier's currency, each unit of that currency costs more dollars, so the **same imported inputs become more expensive**; this **raises the business's production costs and squeezes its profit margins**, and can force it either to absorb the cost or raise prices. Because exchange rates move **unpredictably and are outside the business's control**, they also add **uncertainty** to cost planning and budgeting — the business cannot be sure what its inputs will cost in future. This makes the affordability of global sourcing partly dependent on currency movements rather than on the business's own operations.

Q19. *Model response (10 marks).* Modern operations take place in a **competitive, global environment**, and — as the statement suggests — looking beyond Australia can help a business improve **both efficiency** (how well it uses its resources, measured by the input-to-output ratio) **and effectiveness** (how well it achieves its objectives). The study design identifies three global considerations, and each can lift both measures in a different way.

Global sourcing of inputs — buying materials or components from overseas suppliers — improves **efficiency** when those suppliers, through cheaper labour or larger scale, sell inputs at a **lower price**, cutting the cost per unit of output. It improves **effectiveness** when global suppliers provide **higher-quality or specialised inputs** unavailable locally, so the finished product better satisfies customers. **Overseas manufacture** — making the goods in a facility in another country — improves **efficiency** through **lower labour and operating costs**, reducing the cost of transforming inputs into outputs, and improves **effectiveness** by locating production **closer to overseas markets**, allowing faster service and expansion into those markets. **Global outsourcing** — contracting an external overseas party to perform a function such as IT or customer service — improves **efficiency** because the **specialist provider performs the function more**

cheaply, and improves **effectiveness** by **freeing the business's management to focus on its core activities**, where it can raise the quality of what it does best.

Each strategy, however, must be managed against real risks — harder **quality control** at a distance, longer **lead times**, unpredictable **exchange rates**, and **ethical and reputational** exposure — so a business realises the efficiency and effectiveness gains only if it keeps control of quality and supply. Used well, and in combination, the three global considerations allow a business to buy better and cheaper inputs, produce at lower cost near its markets, and hand non-core functions to specialists — supporting the view in the statement that competing today requires managing operations globally rather than only at home. *(Full marks require: engagement with the statement; each of the three considerations addressed; efficiency and effectiveness written about separately for each; and reference to the risks / limits that condition the outcome.)*

Q20. In its FY25 half-year results of **10 February 2025**, Ansell reported that it was relocating production of some **chemical protective clothing styles from China to Sri Lanka**, under a productivity program it announced in **July 2023**. The strategy is **overseas manufacture**: the goods are made in facilities the business **owns and runs itself**, so the making of the product moves country while the work stays **in-house**. This is offshoring, and it is **not** global outsourcing, because no external party performs the work.

A decision of this kind affects operations performance through a chain of effects. Ansell stated that the relocation was made partly to take advantage of **lower-cost production capacity**; because the same garments are then produced using **fewer dollars of labour and operating resources**, the **cost per unit falls** and the **input-to-output ratio improves** — an **efficiency** gain. (The business reported US\$47 million of savings from the program as a whole in FY25, of which this relocation was one of several manufacturing actions.) The second stated reason, **sourcing flexibility**, bears on **effectiveness**: a business that can make the same product in more than one country is better placed to keep supplying its customers if costs, trade conditions or supply in one location change, protecting objectives such as customer service and market share.

The same distance that lowers cost, however, makes **quality control** harder to supervise, lengthens **lead times** to customer markets, and leaves costs exposed to **exchange-rate** movements; relocating production also carries transition risk while the new lines are brought up to standard. ∴ overseas manufacture of this kind improves efficiency where the relocated capacity genuinely costs less to run, and can support effectiveness through greater sourcing flexibility, provided the business maintains quality and supply from the new location.

Topic 3 Test A — Section A: short-answer and extended-answer questions

Reading time: 5 minutes. Writing time: 55 minutes. Total 40 marks. No calculator. Answer all questions in the spaces provided. Cumulative over Chapters 7–9.

Question 1 (10 marks)

Marloo Footwear is a Melbourne-based business that manufactures leather boots and shoes, which it sells to retailers across Australia.

- a. Define the term *operations system*. 2 marks
- b. Compare the operations of a manufacturing business, such as Marloo Footwear, with those of a service business. 4 marks
- c. Explain how effectively managing its operations could help Marloo Footwear achieve its business objectives. 4 marks

Question 2 (8 marks)

Verdant Tiles manufactures ceramic floor tiles. Its managers are reviewing how the business orders its raw materials and how it checks the quality of the finished tiles.

- a. Explain how forecasting and Just in Time (JIT) could improve the efficient management of Verdant Tiles' inputs. 4 marks
- b. Distinguish between quality control and Total Quality Management. 4 marks

Question 3 (6 marks)

Halden Linen manufactures bed linen and towels in large batches. Its manager wants to reduce delays and waste on the production floor.

Explain how the lean management principles of **takt** and **zero defects** could each improve both the efficiency and the effectiveness of Halden Linen's operations.

Question 4 (6 marks)

Ashgrove Packaging manufactures cardboard boxes. Each week its production process generates a large volume of paper and cardboard offcuts.

- a. Explain how an automated production line and robotics could improve both the efficiency and the effectiveness of the management of Ashgrove Packaging's processes. 3 marks
- b. Propose and justify one strategy Ashgrove Packaging could use to reduce the waste generated by its processes and improve the environmental sustainability of its inputs. 3 marks

Question 5 (10 marks)

“The cheapest place to buy a component, the cheapest place to build a product and the cheapest place to run a service are rarely the same country.”

With reference to the statement above, analyse how an Australian manufacturer's use of global considerations could affect the efficiency and the effectiveness of its operations. In your response, refer to:

- at least **two** of global sourcing of inputs, overseas manufacture and global outsourcing;
- the effect on efficiency and the effect on effectiveness, treated separately;
- at least one contemporary business case study (a business studied within the last four years).

End of Topic 3 Test A

Topic 3 Test A — Solutions

Question 1.

- (a) (2 marks) An **operations system** is the process by which a business **transforms inputs** — resources such as materials, labour and capital — **into outputs**, the finished goods or services provided to customers. (1 mark for the idea of transformation/conversion; 1 mark for identifying that inputs become outputs, i.e. goods or services.)
- (b) (4 marks) A **similarity** is that both a manufacturing business such as Marloo Footwear and a service business operate an operations system that transforms inputs into outputs in order to achieve their objectives. The **differences** lie in the nature of that transformation: a **manufacturing** business produces **tangible** goods (leather boots) that **can be stored** as inventory, tends to be more **capital-intensive** and **standardised**, and generally involves **lower direct customer contact**; a **service** business produces **intangible** outputs that are **perishable** (they cannot be stored), tends to be more **labour-intensive** and **customised**, and usually involves **high customer contact**, with the customer often present as the service is delivered. (Compare requires BOTH a similarity and differences. 1 mark similarity; up to 3 marks for developed differences across characteristics such as tangibility, storability, labour vs capital intensity, customisation and customer contact. A one-sided answer that gives only differences, or only defines the two terms, caps at 2–3.)
- (c) (4 marks) Effectively managing operations means transforming inputs into quality outputs while making the best use of resources, and this **directly affects** the objectives Marloo Footwear can achieve. For example, managing processes to **reduce waste and lift productivity lowers the cost of producing each pair of shoes**, which **increases the profit margin** and helps achieve the objective of **making a profit**. Producing **consistent, high-quality boots satisfies customers and builds the brand's reputation**, which can **increase sales and market share** (effectiveness). Reliable, efficient operations also allow the business to **meet demand on time**, further supporting customer satisfaction and repeat business. (Explain requires the how and why — the causal link running from an operations decision to its effect on an objective — not a list of strengths and weaknesses. Award 2 marks for each developed link between the management of operations and a business objective, to a maximum of 4.)

Question 2.

- (a) (4 marks) **Forecasting** uses past sales data and market information to **predict future demand**, so Verdant Tiles can order the **right quantity** of raw materials (such as clay and glaze). This avoids both **shortages**, which would halt production, and **over-ordering**, which ties up capital and storage space — so inputs are managed more **efficiently**. **Just in Time (JIT)** means materials are ordered so they **arrive only as they are needed** for production, which **minimises inventory holding, storage and handling costs** and reduces waste from materials becoming damaged or obsolete, again improving the **efficiency** with which inputs are used. (2 marks per strategy: identify what it is and explain how it improves the efficient management of inputs. JIT depends on reliable suppliers to work.)
- (b) (4 marks) **Quality control (QC)** is the process of **inspecting and checking** products against a set standard, usually **at the end of the production process**, in order to **detect and remove defective items** before they reach the customer; it is essentially **reactive**, identifying faults after they have occurred. **Total Quality Management (TQM)** is an **organisation-wide, ongoing commitment to continuous improvement** in which **every employee at every stage** takes responsibility for quality, with the aim of **preventing defects from occurring** and continually improving to meet customer needs; it is **proactive** and cultural. The key difference is that **QC detects defects after production at inspection points**, whereas **TQM builds quality in throughout the whole process and involves all staff continuously**. (Distinguish requires both terms defined and the difference drawn out. A response describing only one term caps at ~2 marks.)

Question 3. (6 marks) Both principles are required, each explained in terms of both efficiency and effectiveness AND applied to Halden Linen.

Takt: the pace of production is **set to match the rate of customer demand**. Halden Linen would set its cutting, sewing and hemming stations to a **common pace matched to retailer orders**, so towels no longer **pile up at one machine while another stands idle** — resources are used at an even, appropriate rate and the delays the manager wants to remove are eliminated (**efficiency**) — and output is **completed and delivered on time to meet demand** (**effectiveness**).

Zero defects: the business aims to **eliminate defects through prevention** so that every item is **made right the first time**. Halden Linen would build checks into each stage so that faults such as **flawed dyeing or uneven hems are prevented rather than found at the end of a large batch**. This **cuts the rework, the scrapped fabric and the waste** the manager is concerned about (**efficiency**) and delivers **consistently high-quality bed linen and towels** that meet retailer and customer expectations (**effectiveness**).

(3 marks per principle: name and explain the principle, link it explicitly to BOTH efficiency and effectiveness, and apply it specifically to Halden Linen. Because the question names the business, a generic explanation with no application to the manufacture of bed linen and towels cannot earn full marks. Full marks require both principles treated this way.)

Question 4.

(a) (3 marks) An **automated production line and robotics** carry out tasks **mechanically and continuously with speed and precision**. Because machines can run for long periods and work faster than manual labour, Ashgrove Packaging can **produce more boxes per hour at a lower labour cost per unit**, improving **efficiency**. Because robotics perform each task **consistently and accurately**, there is **less variation and fewer defects**, so the boxes **more reliably meet the required quality standard**, improving **effectiveness**. *(Must give the mechanism and address both efficiency and effectiveness.)*

(b) (3 marks) One acceptable strategy: Ashgrove Packaging could **collect its paper and cardboard offcuts and recycle them back into pulp** to make new board, and **switch to inputs made from recycled or certified-sustainable fibre**. *Justification:* **reusing and recycling the offcuts reduces the volume of waste sent to landfill and lowers raw-material costs**, while **sourcing recycled or certified-sustainable fibre improves the environmental sustainability of its inputs**; together these **strengthen the business's corporate social responsibility and brand reputation** while cutting cost. *(Propose = state a specific, workable strategy and show what it involves; justify = argue the benefit, covering both waste reduction and input sustainability. Merely naming "recycle" without justification caps at 1 mark.)*

Question 5. (10 marks — marked globally.)

Model response. All three considerations are modelled below; the question requires at least two.

The statement holds, and it explains why global considerations exist: the country with the cheapest or best components is rarely the country with the lowest manufacturing costs, and neither is usually the country from which a service is most cheaply run, so a manufacturer that pursues the best result for each part of its operations will end up **buying, building and outsourcing in different places**. Global considerations therefore change **where in the world each part of a manufacturer's operations system is carried out**, and each choice sets off a chain of effects that runs through the transformation process to the cost of producing each unit (**efficiency**) and to how well the outputs meet customer needs and business objectives (**effectiveness**).

Global sourcing of inputs means buying materials or components from **overseas suppliers**. Its first effect is on **input costs**: a supplier operating at greater scale, or in a lower-cost economy, can supply the same component for less, so the **cost of the inputs consumed in each unit of output falls** and, with output unchanged, **efficiency rises**. The chain does not stop there. Access to world suppliers also widens the **range and grade of materials available**, so the manufacturer can specify a **higher-quality or more specialised input** than the domestic market offers, which flows through to a better finished product and therefore to **effectiveness**. The same relationship can run against the business: a longer supply chain means **longer lead times and exposure to exchange-rate movements**, so a fall in the Australian dollar raises input costs and reverses the efficiency gain, while a supplier failure halts production and undermines the business's ability to meet demand on time.

Overseas manufacture means **relocating production itself** to a plant in another country. Lower labour and operating rates at that plant **reduce the cost of transforming inputs into outputs**, so more output is obtained from the same expenditure of resources — a direct gain in **efficiency**. Placing production **closer to overseas customers** shortens delivery distances and lead times, making it easier to supply those markets in the volumes they demand, so the business reaches and satisfies more customers — a gain in **effectiveness**. Distance also weakens **day-to-day supervision of quality**, however, and any rise in defects works back along the chain as rework, higher costs and dissatisfied customers, cutting efficiency and effectiveness together; where a brand's appeal rests on local production, closing an Australian plant can itself reduce sales.

Global outsourcing means paying an **external overseas provider** to carry out a function or process. Because the provider is paid only for the work it performs, **fixed costs become variable costs** and the manufacturer no longer carries the wages and equipment for that function, concentrating its own resources on its **core transformation activities** — so **efficiency** rises. Because the provider is a **specialist**, the work is often performed to a higher standard than the business could achieve in-house, improving the quality of what the customer receives and therefore **effectiveness**. The dependency runs both ways: **control passes to the provider**, so weak performance by the provider becomes weak performance of the business in the customer's eyes.

The causal pattern is consistent across the three. Global considerations act on **efficiency mainly through cost and scale**, and on **effectiveness mainly through quality, expertise and market reach** — but each also lengthens the chain between the business and its customer, so the size of the gain depends on how well the resulting distance, currency and control risks are managed.

(Contemporary case study: a full-mark response sustains the analysis through at least one business studied within the last four years — for example an Australian manufacturer that has moved component sourcing offshore, or a business that has contracted an overseas provider to run one of its functions. Any appropriate, correctly applied contemporary business earns the application marks.)

(Full marks require: explicit engagement with the statement; at least two global considerations analysed; efficiency AND effectiveness treated separately for each; genuine causal chains — how the decision produces the effect — rather than a list of advantages and disadvantages; a contemporary business case study from the past four years; and a sustained, structured response. Responses that ignore the statement, that combine efficiency and effectiveness rather than writing about each, or that list pros and cons instead of showing relationships, are capped.)

Topic 3 Test B — Case study

Reading time: 5 minutes. Writing time: 40 minutes. Total 30 marks. Answers must apply to the case study.

Case study

Kalinda Guitars is a family-owned business in Bendigo, Victoria, that hand-makes acoustic guitars. Founded in 2009 by luthier Tomas Hale, it now employs 24 staff and produces around 900 guitars a year in small batches. Its inputs include Australian-grown timber, imported tuning machines and strings, glues and lacquers, skilled labour and specialised hand tools. Guitars are made through a sequence of processes — cutting and shaping the timber, bracing and assembling the body, fitting the neck, sanding, lacquering and stringing — before each finished instrument is inspected and packed.

Demand has grown strongly since Kalinda's guitars featured on a popular music program, and Tomas is under pressure to lift output without losing the quality the brand is known for. However, 12% of finished guitars currently fail final inspection and must be reworked; timber offcuts make up almost a fifth of input by weight and are sent to landfill; and imported components sometimes arrive late, halting assembly. Tomas is considering several changes: buying a computer-aided manufacturing (CAM) machine to cut timber components, adopting Total Quality Management, and shifting some manufacture to an overseas factory to reduce costs.

Question 1 (2 marks)

With reference to the case study, identify one input, one process and one output in Kalinda Guitars' operations system.

Question 2 (4 marks)

Explain how buying the computer-aided manufacturing (CAM) machine could improve both the efficiency and the effectiveness of Kalinda Guitars' operations.

Question 3 (4 marks)

Kalinda Guitars' imported components sometimes arrive late, halting assembly. Explain how **one** materials management strategy — forecasting or materials requirement planning (MRP) — could help Kalinda Guitars manage these inputs more efficiently.

Question 4 (4 marks)

Explain how adopting the lean management principles of pull and one-piece flow could improve the efficiency of Kalinda Guitars' operations.

Question 5 (4 marks)

Explain how Kalinda Guitars could improve its corporate social responsibility by improving the environmental sustainability of its inputs and reducing the waste generated by its processes.

Question 6 (6 marks)

Discuss the use of Total Quality Management (TQM) to improve the quality of Kalinda Guitars' outputs.

Question 7 (6 marks)

Evaluate Kalinda Guitars' proposal to shift some of its manufacturing to an overseas factory.

End of Topic 3 Test B

Topic 3 Test B — Solutions

Question 1. (2 marks) Any correctly classified elements drawn from the case study, for example: an **input** is Australian-grown timber (accept imported tuning machines, strings, glues, lacquers, skilled labour or hand tools); a **process** is cutting and shaping the timber (accept bracing and assembling the body, fitting the neck, sanding, lacquering or stringing); an **output** is a finished acoustic guitar. (1 mark for correctly classifying at least two of the three elements; 2 marks for all three correctly classified using case-study detail.)

Question 2. (4 marks) A CAM machine uses **computer-controlled tools to cut the timber components automatically**. Because it works **faster and for longer than hand-cutting** and uses material precisely, Kalinda can **produce components more quickly, with less labour time and less timber wasted** per guitar — improving **efficiency** and helping it lift output to meet the growing demand. Because the machine cuts **highly consistent, accurate parts**, the components **fit together more reliably and to a higher standard**, so **fewer guitars fail inspection** — improving **effectiveness** and helping reduce the current 12% rework rate. (Must link to Kalinda and address both efficiency and effectiveness. Merely defining CAM without application caps at ~2 marks.)

Question 3. (4 marks) One strategy, fully explained, earns full marks. Either of the following is acceptable.

Materials requirement planning (MRP) works backwards from the production plan to calculate **exactly which components are needed, in what quantity and by what date**. Kalinda could set out how many guitars it intends to build each month and use MRP to **schedule the orders for its imported tuning machines and strings far enough ahead to allow for shipping time**, so the parts **arrive before assembly needs them**. Assembly is then **much less likely to be halted** by late components, and because only the quantities the plan calls for are ordered, the business also **avoids over-ordering that ties up capital and storage space** — so its inputs are managed more **efficiently**.

Or: **forecasting** uses past sales and current demand information to **predict how many guitars Kalinda will sell**, so it can **order the right quantity of imported components far enough in advance** to cover the growth in demand — again avoiding both the shortages that halt assembly and the cost of over-ordering.

(2 marks for identifying the strategy and explaining what it involves; 2 marks for applying it to Kalinda's late-component problem. A response that explains one strategy fully earns 4 marks; explaining both is not required and earns no extra credit. Note that Just in Time would be a risky choice here, because it relies on reliable, on-time suppliers, which Kalinda does not currently have.)

Question 4. (4 marks) Pull means production is **triggered by an actual customer order** rather than built to a forecast. Because Kalinda builds in small batches, working to a pull system would mean instruments are **only started once there is a buyer for them**, so Kalinda's **limited skilled labour and scarce imported components are directed to guitars that are already sold** rather than to building stock that may not sell — fewer resources are consumed for each guitar the business actually sells, improving **efficiency**. **One-piece flow** means each guitar moves through cutting, bracing, assembly, sanding and lacquering **one at a time** rather than in batches, so **less work-in-progress waits between stages** and a fault in the bracing or sanding is **picked up at the next step instead of at final inspection**, cutting the **labour and materials spent reworking a whole batch** and again improving **efficiency**. (2 marks per principle: what it involves and how it improves efficiency at Kalinda. Must apply to the case study.)

Question 5. (4 marks) Kalinda could improve the **environmental sustainability of its inputs** by **sourcing timber that is certified as coming from sustainably managed forests** and by using **lower-toxicity, water-based lacquers and glues**, so that the materials it consumes do less environmental harm. It could **reduce the waste generated by its processes** by **reusing and recycling the timber offcuts** that currently make up almost a fifth of input by weight — for example, cutting them down into smaller guitar parts, or sending them for recycling or reuse rather than to **landfill**. Together these actions reduce the business's environmental impact and demonstrate genuine corporate social responsibility beyond mere legal compliance. (2 marks for sustainability of inputs applied; 2 marks for waste reduction applied to the offcuts. Must apply to the case study.)

Question 6. (6 marks) **Advantages.** TQM is an **organisation-wide, continuous-improvement approach in which every worker is responsible for quality at every stage**. For Kalinda, building quality in at each process (rather than only checking at the end) could **prevent defects before they occur**, which would help **reduce the 12% of guitars that fail final inspection and must be reworked**, cutting wasted time and materials and **protecting the hand-made-quality reputation** the brand depends on. It can also **improve customer satisfaction** as instrument quality becomes more consistent. **Disadvantages.** TQM requires a **cultural change, staff training and time to embed**, which is

demanding for a small business of 24 staff; there may be **staff resistance**, and the **costs and slower output during implementation** are real, with the **benefits mostly realised in the longer term** rather than immediately. *(Discuss requires advantages AND disadvantages, each applied to Kalinda. Do not “double-dip” — using one point as both an advantage and its own disadvantage. Roughly 3 marks each side; case-study links required for full marks.)*

Question 7. (6 marks) Advantages. Shifting manufacture to an overseas factory could give Kalinda **lower labour and operating costs**, reducing the cost of each guitar and improving efficiency, and could provide the **capacity to lift output** to meet the strong growth in demand that Tomas is under pressure to satisfy. **Disadvantages.** Kalinda’s brand is built on **hand-made craftsmanship in Bendigo**; moving production offshore risks **losing that point of difference and damaging the brand**, makes **quality control harder at a distance** (a serious concern when 12% of guitars already need rework), **lengthens the supply chain**, and could mean **redundancies for the 24 local staff** and reputational harm. **Judgement.** On balance, because Kalinda’s competitive advantage and premium price rest on its locally hand-made quality, shifting manufacture overseas is **likely to be inappropriate**: the cost savings would probably be **outweighed by the loss of quality control and brand value**. Tomas would be better placed to improve efficiency at home — for example through the CAM machine and lean methods — while keeping production in Bendigo. *(Evaluate requires weighing advantages and disadvantages AND reaching an evidence-based judgement that follows from the case study, not a generic “the advantages outweigh the disadvantages”).*