What is Lifecycle Costing?

Worksheet

Lifecycle costing sums every cost a product generates over its life - development, production, distribution, service, and disposal - to reveal true total profitability.

Questions

1. A product's costs are: Dev $100,000, Mfg $300,000, Disposal $20,000. What is total lifecycle cost?

A) $400,000
B) $420,000
C) $320,000
D) $120,000

2. Which stage typically includes R&D and prototyping costs?

A) Decline
B) Design & development
C) Maturity
D) Disposal

3. What is a key benefit of lifecycle costing over traditional costing?

A) It ignores disposal costs
B) It captures pre-production and post-production costs for a full profitability picture
C) It only measures manufacturing cost
D) It removes the need for budgeting

4. Which of these is NOT typically part of total lifecycle cost?

A) Development cost
B) Distribution cost
C) Retirement/disposal cost
D) Shareholder dividend payments

5. A product has $150,000 development cost, $400,000 manufacturing cost, and $50,000 disposal cost. What is total lifecycle cost (ignore other categories)?

6. If a product generates $900,000 in lifetime revenue and its total lifecycle cost is $600,000, what is lifecycle profit?

7. A company spends $200,000 on R&D upfront but saves $50,000 in customer service costs by improving design. What is the net lifecycle cost impact?

8. Define: What is lifecycle costing?

9. Define: Why is lifecycle costing useful?

10. Define: Name the main cost categories in lifecycle costing.

Answer Key

1. B) $420,000 - TLC = 100,000+300,000+20,000 = $420,000.

2. B) Design & development - Design and development is the earliest stage, before launch.

3. B) It captures pre-production and post-production costs for a full profitability picture - Lifecycle costing captures the full cost span, unlike traditional costing which focuses on the production period.

4. D) Shareholder dividend payments - Dividends are a distribution of profit, not a product lifecycle cost.

5. TLC = Cd + Cm + Cr TLC = 150,000 + 400,000 + 50,000 = $600,000

6. Lifecycle profit = Lifetime revenue Total lifecycle cost = 900,000 600,000 = $300,000

7. Net impact = Extra development cost Service cost saved = 200,000 50,000 = $150,000 net increase in lifecycle investment, but better product quality

8. Accumulating all costs a product incurs across its entire life - design through disposal.

9. It reveals true total profitability, not just manufacturing-stage cost, guiding better pricing and design decisions.

10. Development, manufacturing, distribution, customer service, and retirement/disposal.