

Chapter 01: Section 02

Part II

Strategic Management Accounting Techniques



Continuous Improvement Methodologies



1. Kaizen Costing and Learning Curve

- Kaizen costing focuses on making small, continuous improvements rather than radical changes. Unlike standard costing which maintains predetermined targets, Kaizen actively seeks to lower costs through employee involvement.



Learning Curve

- The phenomenon where cumulative average time per unit decreases as output doubles.
- The learning curve effect occurs because workers develop more efficient methods and reduce errors through repetition.

Learning Curve Formula

$$Y = aX^b$$

Y = cumulative average time

a = first unit time

X = Cumulative units

b = learning index

(Log leaning curve / log 2)

Practice Questions: 12 and 13

Kaizen Costing Implementation



2. Just-in-time Principles and Waste Reduction

- Production system used to make and deliver items only when they are needed, in the exact quantities required.
- **Kanban** is a scheduling system for lean manufacturing that signals when to produce or move items.
- Implementing a **demand-pull system** is the primary mechanism through which JIT builds operational agility.
- **Embedding Quality at the Source** (Jidoka) is the principle of stopping work immediately when a defect is detected.
- JIT systems depend on **highly reliable suppliers** who can deliver small quantities of high-quality materials frequently and precisely when needed.

2. Just-in-time Principles and Waste Reduction

- **Lot sizes** and **safety stock** should be reduced
- **Level scheduling** should be implemented – smoothening production hikes and dips stemming from demand variability.

<Calculation of Takt Time>

- Reduce **setup times (SMED)** - (Single-Minute Exchange of Die (SMED))
- Establish Error-Proofing Processes (Poka-Yoke): any mechanism that help operators avoid errors
- Establish flexible cost structures

Formula for JIT

- Kanban Quantity =
$$\frac{\text{Daily Demand} \times \text{Lead Time} \times (1 + \text{Safety Factor})}{\text{Container Size}}$$

- Takt Time =
$$\frac{\text{Available Production Time per Period}}{\text{Customer demand per Period}}$$



Practice Questions: 14, 15 and 16

Agility Enhancement and Flexibility Development



1. Agility Dimensions and Agility Improvement Mechanisms

- There are three dimensions:
 - Strategic agility: decision making speed
 - Operational agility: process flexibility
 - Portfolio agility: Resource reallocation
- Building Rapid Response Capabilities
- Designing Flexible Cost Structures
- Developing Adaptive Processes
- Partnership Agility Approach
- Establish Shared Services Centres
- Leverage Cloud and Digital Platforms

Advanced Accounting Techniques



1. Throughput Accounting

- Throughput accounting is the process you use to manage system constraints and maximise profitability by focusing on the rate at which the system generates money through sales (Sales – Material cost).



2. Backflush Accounting Implementation

- Backflush accounting is the system you use to delay recording costs until goods are completed or sold. Its primary goal is to eliminate detailed work-in-process tracking by “flushing” costs backwards from output to inputs.

