

Faculty of Commerce, Department of Accounting, BACHELOR OF SCIENCE IN ACCOUNTING (BSA) Strategic Management Accounting (BSA 3210)

Strategic Management Accounting (BSA 3210)

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TOPIC ONE: INTRODUCTION TO STRATEGIC MANAGEMENT ACCOUNTING

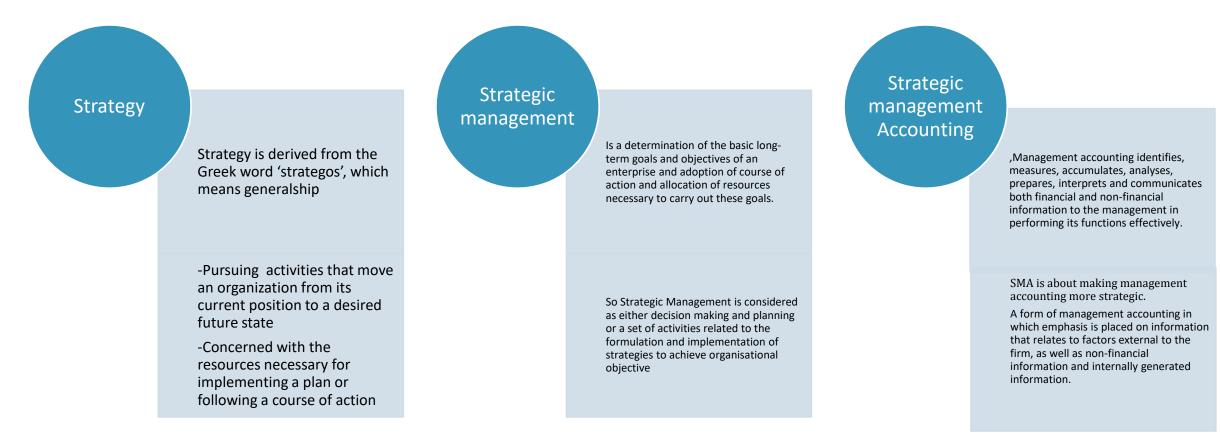
MUBS: To enable the future of our clients through creation and provision of knowledge

Topic One: Introduction to Strategic Management Accounting

Introduction to Strategic Management accounting	 Define of strategic management accounting SMA significance in decision-making. Functions of Strategic Management Accounting
Elements of Strategic Management accounting	 Identify and explain the key elements/features, functions of strategic management accounting and their application.
Strategic management accounting process	•Describe the strategic management accounting process and its role in business performance
Strategic Management accounting in a dynamic business environment	 Evaluate the role of strategic management accounting in adapting to dynamic business environments Demonstrate ethical decision-making principles within the scope of management accounting.
Organizations, their objective, and information for decision making	 Analyze organizational objectives and how strategic management accounting supports decision- making
Tools to implement SMA	•Strategic Cost Analysis explains the tools that managers need to implement the strategies: Value analysis, Activity-based Costing, Life Cycle Costing, Target Costing, Total Quality Management, Just In Time, Backflush Costing, Benchmarking, attributable costing, Through put

Strategic Management Accounting (BSA 3210)

Strategy and strategic management



(Chandler Alfred, 1969; Simmonds, 1981, Roslender & Hart, 2003; CIMA, 2005).

Strategic Management Accounting (**BSA 3210**)

The Evolution of Strategic Management Accounting (SMA)

□ Management accounting was mainly internally orientated.

To improve the quality of management accounting information for managers it was necessary to focus more widely on the external environment of the firm and thus the concept of strategic management accounting evolved.

To enhance the quality of management accounting information for decision-makers, it became essential to adopt a broader focus on the firm's external environment.

This shift led to the evolution of the concept of Strategic Management Accounting (SMA).

This shift evolved over the past 30 years.

The first main change has been concerning the competitive environment of organizations.

Advancements in technology have empowered customers with more information (Price, quality, variety, value).

FEATURES | QUALITIES | CHARACTERISTICS | ELEMENTS OF STRATEGIC MANAGEMENT ACCOUNTING

Feature / elements	Description	
 ✓ Internal and External Focus 	Emphasizes both internal and external factors like market trends, competitors, and customer preferences.	
✓ Value Creation	Identifies and enhances value-generating activities through tools like value chain analysis.	
✓ Competitive Analysis	Uses competitor data to guide strategic decision-making.	
✓ Cost Management	Focuses on cost reduction and efficiency improvements while maintaining quality.	
✓ Long-term Perspective	Aims at sustainable financial performance rather than short-term gains.	
 ✓ Performance Measurement 	Incorporates non-financial metrics like customer satisfaction and innovation.	
✓ Market-Driven Approacl	Aligns accounting strategies with changing market dynamics and customer needs.	
 Integration with Strateg 	Links financial data with overall business strategy for better decision-making	

MY ASK

Group Take-home

Quiz: Differences between traditional and strategic management accounting

Distinguishing features that make SMA different from Cost and Management Accounting.

Feature	Strategic Management Accounting (SMA)	Cost Accounting	Management Accounting
	Long-term, strategic objectives and value		Tactical decision-making and performance
Focus	creation	Short-term cost control and reduction	management
	Broad, covering external factors, competitive	Internal cost tracking, allocation, and	Internal focus with some external financial
Scope	analysis, and market trends	efficiency	analysis
	Combines financial and non-financial data,	Primarily quantitative, focusing on	Mainly financial data with some non-
Information Base	including qualitative factors	financial costs	financial metrics
	Supports strategic decisions such as market	Supports decisions on cost efficiency and	Aids operational and tactical decisions for
Decision-Making	positioning and competitive advantage	budgeting	internal management
	Long-term, forward-looking, with an emphasis	Short-term, historical, focused on past	Medium-term, often involves both past
Time Horizon	on future opportunities	performance	performance and future projections
	Emphasizes creating shareholder, customer, and	Focuses on cost minimization and profit	Supports overall business performance and
Value Creation	stakeholder value	maximization	internal value generation
	Strong external focus, including competitors,		Limited external focus, primarily on
External Focus	market trends, and regulatory environments	Little to no external focus, purely internal	financial regulations and standards
	Advanced techniques such as Balanced		
	Scorecard, Value Chain Analysis, and	Standard costing, job costing, process	Budgeting, variance analysis, financial
Techniques	Benchmarking	costing	planning
Integration with	Directly linked to the organization's strategic	Often disconnected from broader strategic	Supports management but not always
Strategy	goals and objectives	goals	integrated with strategy
Stakeholder	Considers a wide range of stakeholders,	Primarily concerned with shareholders	Focuses on internal stakeholders such as
Consideration	including customers, suppliers, and society	and cost efficiency	management and employees

2.0 Organizations, their objective, and information for decision making

Strategic Management Accounting (SMA) provides financial and non-financial information to help organizations make strategic decisions. It integrates external market factors and internal financial performance to align with business goals.

Organizations & Their Objectives: Organizations set objectives to guide their strategic direction.

- Goals and objectives provide the foundation for measurement.
- >Goals are outcome statements that define what an organization is trying to accomplish, both programmatically and organizationally.
 - Goals are usually a collection of related programs, a reflection of major actions of the organization, and provide rallying points for manager.
- **>objectives** are very precise, time-based, measurable actions that support the completion of a goal.
 - Objectives typically must (1) be related directly to the goal; (2) be clear, concise, and understandable; (3) be stated in terms of results; (4) begin with an action verb; (5) specify a date for accomplishment; and (6) be measurable.

Examples : MUBS

2.1 Goals and objectives

Difference between objectives and goals.

- •Scope: Goals are broad and overarching, while objectives are specific and well-defined.
- •**Timeframe**: Goals are set for a relatively longer period, whereas objectives are typically short-term and time-bound.
- •Influence: External environmental factors more influence goals, while objectives are driven by internal planning and execution.
- •Measurability: Goals are generally qualitative and not easily quantified, whereas objectives are measurable and quantifiable.
- Flexibility: Goals provide general direction and vision, while objectives are precise actions that contribute to achieving the goals.

Need for Establishing Objectives

- Objectives provide yardstick to measure performance of a department or SBU or organization.
- Objectives serve as a **motivating force**. All people work to achieve the objectives.
- •Objectives help the organization to **pursue its vision** and mission. Long term perspective is translated in short-term goals.
- Objectives **define the relationship of organization** with internal and external environment.

•Objectives provide a **basis for decision-making**. All decisions taken at all levels of management are oriented towords accomplishment of objectives

2.2 Organizations & Their Objectives

Profit-oriented organizations (e.g., banks, manufacturing firms) – Aim to maximize shareholder value.

Non-profit organizations (e.g., NGOs, government agencies) – Focus on social welfare and service delivery.

Public Enterprises (e.g., Uganda Development Corporation) – Aim to balance economic development and financial sustainability.

2.3 What Objectives are Set (Areas for setting objectives)

- Profit Objective (performance objectives)— It is the most important objective. In order to earn a profit, an enterprise has to set multiple objectives in key result areas such as market share, new product development, quality of service etc.
- •Marketing Objective : To increase market share to 20 percent within five years. or to increase total sales by 10 percent annually. They are related to a functional area.
- Productivity Objective: expressed in terms of ratio of input to output. This objective may also be stated in terms of cost per unit of production.
- •Product Objective: expressed in terms of product development, product diversification, branding.
- •Social Objective: described in terms of social orientation. It may be tree plantation or provision of drinking water or development of parks or setting up of community centers.
- •Financial Objective relate to cash flow, debt equity ratio, working capital, new issues, stock exchange operations, collection periods, debt instruments etc.
 - For example a company may state to decrease the collection period to 30 days by the end of this year.
 - Human resources objective may be described in terms of absenteeism, turnover, number of grievances, strikes and lockouts etc. An example may be "to reduce absenteeism to less then 10 percent by the end of six months.

2.4 Key Performance Indicators (KPIs)

Key Performance Indicators, also known as KPI or Key Success Indicators (KSI), help an organization define and measure progress toward organizational goals.

Once an organization has analyzed its mission, identified all its stakeholders, and defined its goals, it needs a way to measure progress toward those goals. Key Performance Indicators are those measurements.

What Are Key Performance Indicators (KPI)

- Key Performance Indicators are quantifiable measurements, agreed to beforehand, that reflect the critical success factors of an organization. They will differ depending on the organization.
- •A business may have as one of its Key Performance Indicators the percentage of its income that comes from return customers.
- •A school may focus its Key Performance Indicators on graduation rates of its students
- A Customer Service Department may have as one of its Key Performance Indicators, percentage of customer calls answered in the first minute.

social service organization; KPIa might be number of beneficiaries supported during the year.

2.5 Information for Decision-Making in SMA

- SMA provides various types of information to support managerial decision-making:
- •Costing Information: Activity-based costing (ABC) helps in pricing decisions.
- •Competitor Analysis: Benchmarking against industry leaders.
- •Customer Profitability Analysis: Evaluating the most valuable customers.
- •Performance Metrics: Balanced Scorecard (BSC) approach.
- •Risk Management Data: Identifying financial and operational risks.

2.6 Strategic Decision-making

Strategic decision concept is based on strategy which is a major action in an organisation.

Strategic decision making is a major choice of actions concerning allocation of resource and contribution to the achievement of organizational objectives.

It has following characteristics:

- i. The strategic decision affects the whole part of organisation and largely relates to the responsibilities of senior management.
- ii. It contributes directly to the achievement of objectives.
- iii. It has normally three elements;
 - (a) Action element, which specifies the work to be done;

(b) **Result element**, which specifies the desired result to be **achieved** through the implementation of decision.

(c) **Commitment element**, which directs to undertake **the course of action**, makes personnel involvement for attaining the objective and allocates resources to them

2.7 Strategic Decision-making models

The fundamental strategic decision relates to the choice of **a mission**.

With regard to objective setting, the senior management is faced with alternatives regarding the different criteria to measure performance. Then they select the strategy from a number of strategic alternatives in order to adopt one specific course of action for achievement of goals and realisation of mission.

Various models have been suggested about how decisions are made. Such as rational analytical, intuitiveemotional and behavioural-political.

2.8 Decision-Making Models and Their Assumptions

Decision Models	Assumptions	Limitations
Rational-Analytical		
Model	- The decision-maker is a unique, rational actor.	- Decision-makers are often not unique actors.
	- Has the ability to gather and recall all necessary information.	- Complete information is rarely available.
	- Can calculate all expected results of possible alternatives.	- Cost and complexity prevent determining all possible alternatives.
		 Ranking alternatives under uncertainty is difficult. Humans are not perfectly rational; they often settle for satisfactory rather than optimal decisions.
Intuitive-Emotional		
Model	- Useful for unstructured, non-routine decisions.	- Highly subjective and influenced by emotions.
	 Decision-makers rely on past experience, reflective thinking, and natural impulse. 	- May lead to biased decisions based on past experiences.
	- They identify an implicit favorite early in the decision process.	- Difficult to justify decisions that lack structured reasoning.
	- They continue to search for and evaluate additional alternatives.	- Not suitable for high-risk or large-scale decisions.
	- They make a confirmation decision by comparing alternatives.	
Political-Behavioural		
Model	- Decision-makers must consider pressures from various stakeholders.	- Decisions may prioritize political compromise over optimal solutions.
	 Organizations engage in interdependent exchange relationships. 	- Stakeholder power imbalance can lead to unfair outcomes.
	 Power dynamics influence decision-making (e.g., shareholders, customers, employees). 	- Can lead to ethical concerns if powerful stakeholders manipulate outcomes.
	- Decisions result from negotiation, mutual adjustment, and political compromise.	- Decision-making may be slow and inefficient.
	 The best decisions occur when rational, emotional, and political factors intersect. 	

Decision-Making Models and Their Assumptions

Desion Models	Assumptions	Limitations
Bounded Rationality Model	- Decision-makers have cognitive and informational limitations.	- Does not always result in the best decision.
	- They simplify problems to manageable levels.	- Satisficing may lead to missed opportunities.
	- They search for alternatives but settle for a "good enough" solution (satisficing).	- Decisions may not be optimal in the long run.
		- Can be difficult to determine when to stop searching for better
	 Decision-making is influenced by organizational constraints. 	alternatives.
	 Decisions emerge from a mix of problems, solutions, participants, and 	
Garbage Can Model	opportunities.	 Lacks structured decision-making processes.
	- Choices are made in an unpredictable, non-linear manner.	- Can result in irrational or inconsistent choices.
	 Useful in chaotic and ambiguous organizational environments. 	 Not suitable for high-stakes decisions requiring accountability.
		- Hard to implement in hierarchical organizations.
Incremental Model	- Decisions are made in small, incremental steps rather than radical changes.	- Can be slow in responding to urgent challenges.
	 Reduces risk by making gradual improvements. 	- May ignore the need for transformational change.
	- Allows flexibility in adapting to new conditions.	- Less effective in disruptive or highly competitive industries.
AI & Data-Driven Decision		
Model	 Uses artificial intelligence and data analytics for decision-making. 	- Heavily dependent on data quality and availability.
	- Reduces human bias by relying on data-driven insights.	- Lacks human intuition and ethical considerations.
	 Processes large amounts of data quickly and accurately. 	- May be costly and complex to implement.
		- Susceptible to algorithmic biases.

DAY THREE:

The dynamic environment

SMA Process

SMA Tools.

Strategic Management Accounting

Delivering Value in a Changing Business Environment Through Integrated Reporting

Strategic Management accounting in a dynamic business environment

Rapid Changes & Adaptation

- Businesses must adapt to fast-changing environments.
- •Example: Digital transformation in finance (AI-driven and cloud accounting).

•Key Business Issues

- •Corporate governance, environmental concerns, external reporting, and operational efficiency.
- •Example: ESG reporting & carbon footprint tracking.

• Role of Finance & Accounting Professionals

- Must embrace change to remain relevant in managerial decisions.
- •Example: Shift towards strategic management accounting and sustainability accounting.

•Analytical & Reporting Expertise

- •Accountants provide clear, relevant financial insights for decision-making.
- •Example: Data-driven financial forecasting for business resilience.

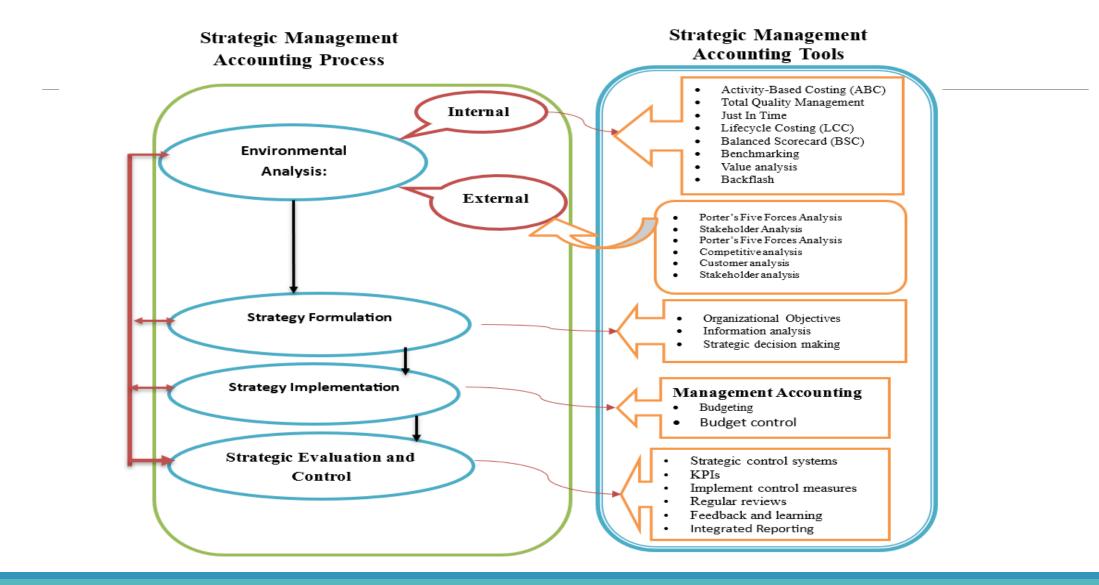
• Processes & Systems for Accuracy

- Efficient procedures needed for data collection, analysis, and reporting.
- •Example: Implementation of ERP systems like SAP for financial tracking.

2.9 Strategic Management accounting in a dynamic business environment

Considerations	Assumptions	Examples
 Real-Time Decision Support 	✓ Businesses operate in dynamic markets requiring fast responses.	 Using data analytics to monitor competitor pricing and adjust strategies dynamically.
 Focus on Long-Term Sustainability 	 Decisions should consider long-term impacts on profitability and stakeholder value. 	 Implementing sustainability initiatives like energy-efficient systems to reduce costs and enhance reputation.
 Integration with Strategic Goals 	✓ Management accounting should align with overall organizational strategy.	 Linking performance metrics like ROI with strategic goals such as market share expansion.
 Use of Advanced Technologies 	✓ Technological advancements allow enhanced data collection and analysis.	 Employing AI to analyze customer purchasing behavior and predict future trends.
 Risk Management and Scenario Analysis 	 External environments are volatile; decision-making must factor in uncertainties. 	 Conducting scenario analysis for global supply chain disruptions and creating contingency plans.
Value Creation for Stakeholders	 SMA must focus on creating value not only for shareholders but also for employees and customers. 	 Evaluating customer lifetime value (CLV) as a metric to align marketing strategies with customer retention goals.
Cross-Functional Collaboration	 Decision-making requires input from multiple departments for effective strategies. 	 Finance, operations, and marketing working together to evaluate the feasibility of launching a new product.
 Globalization Awareness 	✓ Organizations must consider global market trends and cultural variations.	 Adjusting pricing strategies for products in emerging markets versus developed markets to remain competitive.
Emphasis on Innovation	 Constant innovation is essential to stay competitive in a dynamic environment. 	 Allocating budgets for R&D to develop innovative products like electric vehicles in the automotive industry.
 Ethical and Social Responsibility 	 Decision-making must align with ethical principles and social responsibility. 	 Avoiding cost-cutting measures that could harm employee well-being, such as layoffs, and instead opting for upskilling programs.

STRATEGIC MANAGEMENT ACCOUNTING PROCESS



1.7 The role of accountants in the adoption and implementation of SMA

- Competitive Data Analysis: Collecting and estimating cost, volume, and price data on competition to inform strategic decisions
- Strategic Position Assessment: Calculating the relative strategic position of a firm and its competitors as a basis for forming a business strategy.
- Shareholder Value Integration: linking corporate strategies with shareholder value analysis, ensuring that strategic decisions align with maximizing shareholder returns.
- Acquisition Target Valuation: Assessing the financial value of potential acquisition targets to support informed merger and acquisition decisions.
- Cost Optimization: identify and exploit opportunities for cost reduction, contributing to the firm's competitive advantage.
- **Cross-functional Coordination**: Bringing together different functions and disciplines within the firm.

(SMA requires a multi-functional team, where accountants work closely with operations and marketing employees)

Strategic Management Accounting (ACC 7103)

1.8 The key challenges facing management accountants

SMA represents the transition of accounting services and accounting professionals from the role of historically oriented record-keepers to that of action-oriented professionals who assist in senior-level decision-making.

Hint: The important changes are (a) globalization of world trade; (b) deregulation in various industries; (c) changing product life cycles; (d) advances in manufacturing and information technologies; (e) focus on environmental and ethical issues; (f) a greater emphasis on value creation; and (g) the need to become more customer-driven, (h) Pressures from Market Competition; (i) Rapid Changes in Technology; (j) New Management Accounting Tools.

1.9 The key challenges facing management accountants

Challenge	Description	Impact on Management Accounting; MA Need to
Pressures from Market Competition	Increased competition - businesses to be more cost-effective, innovative, and responsive to market demands.	To provide more detailed and timely financial analysis to support strategic decision-making under pressure.
Changes Due to Globalization	Globalization forces organizations to adapt to diverse markets, regulations, and economic conditions across countries.	To understand international financial standards, currency exchange impacts, and cross-border transactions.
Globalization	Globalization involves the integration of economies and cultures, affecting market dynamics.	Track global economic trends, and analyze their impacts on business operations, and financial performance.
Customer Focus	A shift towards customer-centric business models where customer satisfaction and experience are paramount.	Assess the financial implications of customer satisfaction strategies and measure the profitability of customer relationships.
Rapid Changes in Technology	Technology is evolving rapidly, impacting how businesses operate and deliver products/services.	Adapt to new technologies for data analysis, financial reporting, and automate routine tasks to improve efficiency.
Management Accounting Tools	The need for advanced tools to process and analyze financial data to aid in decision-making and strategy development.	Continuously update their skills to use new management accounting software and tools effectively for accurate financial insights.

My Ask

READ ABOUT

Ethics, decision-making, and management accounting

1.11 Tools to implement SMA

- Target costing
- Life-cycle costing
- Competitor cost analysis, competitive position monitoring, competitor performance appraisal
- Activity-based costing, activity-based management (activity-based cost management),
- Attribute costing
- Customer accounting

Hint: Definition, Steps, Merits and demerits, Practice Examples.

(References: Strategic Analysis and Strategic Cost Management by the Institute of Cost Accountants of India); STRATEGIC COST MANAGEMENT(Theory) by Mohit Arora; Strategic Cost and Management Accounting (SCM) study materials by https://www.caluniv.ac.in/academic/Commerce/Study

Strategic Cost Analysis

- In every business, the owners and managers need to know what their product or service costs to deliver and what they can sell it for.
- They want to make strategic decisions that maximize their profits, and they require information to do this.
- Even not-for-profit businesses have a service or product that they wish to offer but are constrained by the funding they receive from grants, donations and bequests.
- The simple truth is that you can not decide what to do unless you know the cost.
- Strategic decisions cannot be successfully made unless you understand cost information

Strategic Cost Analysis

Strategic Cost Analysis explains the tools that managers need to implement the strategies.

It examines the different **methods** of calculating cost, **techniques** for controlling and monitoring costs, and **ways to integrate cost data** and strategy into **every aspect of the organization**.

It helps companies identify, analyze and use strategically important resources for continuing success.

Strategic Cost Analysis (SCA) focuses on an organization's various activities, identifies the reasons for their costs, and financially evaluates strategies for creating a sustainable competitive advantage.

The technique provides organizations with the total costs and revenues of strategic decisions.

This requires creative thinking, and managers need to identify and solve problems from an integrative and cross functional viewpoint.

Example of SCA

- Deciding on product mixes and production volumes
- Outsourcing decisions
- Cost reductions
- Investment and profit growth in different markets
- Responses to suppliers' and competitors' activities
- Changes in consumer demand

Strategic Cost Analysis:

TARGET COSTING, LIFE CYCLE COSTING, VALUE ANALYSIS AND VALUE ANALYSIS

Cost + Mark-up = Selling price

Under SCA; customers rule, and SMA departments attempt to find answers to the following questions:

- Are customers homogeneous or can we identify different segments within the market?
- What features does each market segment want in the product?
- •What price are customers willing to pay?
- To which competitor products or services are customers comparing ours?
- How will we advertise and distribute our products? (There are costs associated with those activities too.)

SMA says that there is no point in management, engineers and accountants sitting in darkened rooms dreaming up products, putting them into production, adding on, say 50% for mark-up then hoping those products sell. At best this is **corporate arrogance**; at worst it is corporate suicide.

Instead of starting with the cost and working to the selling price by adding on the expected margin, target costing will start with the selling price of a particular product and work back to the cost by removing the profit element. This means that the company must find ways of not exceeding that cost.

An emphasis

Activity-based costing plays an important part in target costing.

By understanding the cost drivers (cost causers) a company can better control its costs.

For example, costs could be driven down by increasing batch size, or reducing the number of components that have to be handled by stores.

The concept of value analysis can be important here.

Value engineering / analysis aims to reduce costs by identifying those parts of a product or service which do not add value – where 'value' is made up of both:

•use value (the ability of the product or service to do what it sets out to do – its function) and

•esteem value (the status that ownership or use confers). The aim of value engineering is to maximise use and esteem values while reducing costs.

E.G: if a company is trying to reduce the costs of manufacturing a car, there might be many components that could be satisfactorily replaced by cheaper or simpler ones without damaging either use or esteem values. However, there will be some components that are vital to use value (perhaps elements of the suspension system) and others which endow the product with esteem value (the quality of the paint and the fabric).

TARGET COSTING

Target Costing is a structured approach to determine the cost at which a proposed product with specified functionality and quality must be produced, to generate a desired level of profitability at its anticipated-selling-price.

Target costing is a system under which a company plans for the price points, product costs, and margins that it wants to achieve for a new product.

Key conditions

- Prices are determined by market conditions, considering several factors, such as
- Homogeneous products,
- Level of competition -competition is intense,,
- No/low switching costs for the end customer, etc.
- When these factors come into the picture, management wants to control the costs, as they have little or no control over the selling price

TARGET COSTING Example

Consumer Electronics 🔠 💻

- •Smartphones, laptops, and TVs from brands like Samsung, Apple, Dell, and Sony operate in a market where prices are dictated by competition and customer expectations.
- •The products are **homogeneous**, meaning features across brands are often similar.
- •Customers can **switch brands easily** if prices are too high or if a competitor offers better value.
- •Manufacturers control costs by selecting cost-effective components, optimizing designs, and outsourcing production.
- •The product's price is based on its cost, but no one might want to buy at that price.
- •The product might incorporate features that customers do not value and therefore do not want to pay for, and competitors' products might be cheaper, or at least offer better value for money.
- •Cost + Mark-up = Selling price

Steps involved in implementing a Target Costing System

1. Create a Project Charter: this is a document, approved by top management that describes its goals and what it is authorized to do. This Charter is based on the corporate mission statement and related goals. Written approval of the Project Charter by the top management provides the target costing effort with a strong basis of support and direction in all subsequent efforts.

2. Obtain a Management Sponsor: A management Sponsor is an individual belonging to top management. His role will be to support the initiative in all respects, to obtain funding, to coordinate with other members of top management, and to eliminate problems promptly.

3. Obtain a Budget: The funding should be based on a formal allocation of money through the corporate budget. The fund should be given unreservedly to the target costing effort.

Steps involved in implementing a Target Costing System

4. Assign a Strong Team Manager: The Target Costing Team involves the active participation of many members with diverse backgrounds. A strong Team Manager is required to bring the group together as a smooth functioning team focused on key objectives. He should be skilled in dealing with management, the use of project tools, and working with a diverse group of people. This manager should be a full-time employee so that his or her complete attention can be directed towards the welfare of the project.

5. Enroll Full-time Participants: It is essential that the members of the team be devoted to it full-time rather than trying to fulfill other commitment elsewhere in the company at the same time. They should have a single focus on ensuring the success of the target- costing program.

6. Use Project Management Tools: Target costing can be a highly complex effort, especially for high-cost products with many features and components. The team should use all available project management tools, such as Microsoft Project (for tracking the completion of specific tasks), a company database containing various types of cost information, and a variety of product design tools.

Advantages of Target Costing:

1. Innovation: It reinforces top-to-bottom commitment to process and product innovation and is aimed at identifying issues to be resolved.

2. Competitive Advantage: It enables a firm to achieve a competitive advantage over other firms in the industry. The firm, which achieves cost reduction targets realistically, stands to gain in the long run.

3. Market-Driven Management: It helps to create a company's competitive future with market-driven management for designing and manufacturing products that meet the price required for market success.

4. Real Cost Reduction: It uses management control systems to support and reinforce manufacturing strategies and to identify market opportunities that can be converted into real savings to achieve the best value rather than simply the lowest cost.

Problems with Target Costing

1. The development process can be lengthened to a considerable extent since the design team may require several design iterations before it can devise a sufficiently low-cost product that meets the target cost and margin criteria.

2. A large amount of mandatory cost-cutting can result in finger-pointing in various parts of the company, especially if employees in one area feel they are being called on to provide a disproportionately large part of the savings.

3. Representatives from several departments on the design team can sometimes make it more difficult to reach a consensus on the proper design.

Practice Question

For example, if a company normally expects a mark-up on cost of 50% and estimates that a new product will sell successfully at a price of `12, What is the maximum cost of production?

Cost + Mark-up = Selling price

That means if the cost is **100%**, then the mark-up is **50% of the cost**.

=100%+50%=150%

100% + 50% =150% of the cost

Since the total selling price is **150% of the cost**, we can write:

150%×C=12

150%×C=12

150/100×C=12

1.5C=12; C=12/1.5, thus C=8

- •If **cost = 8**, then mark-up is:
- •Mark-up=50%×8=4
- •Cost+ Mark-up=8+4=12

Multiple choices for Practice

Question 1: A company applies a 40% mark-up on cost. If the cost of a product is `10, what is the selling price?

A) 12

B) 14

C) 16

D) 18

Question 2:

A product is sold for 24 after applying a 20% mark-up on cost. What was the original cost price?

A) 18 B) 19 C) 20 D) 22

Question 3: If a company expects a 30% profit margin on the selling price, and the selling price is `130, what is the cost price?

A) 91

B) 100

C) 110

D) 115

Question 3: A shopkeeper marks up a product by 25% on the cost price. If the cost price is `80, what is the mark-up amount?

A) 15

B) 20

C) 25

D) 30

Question 5: A retailer buys a product for 90 and sells it for 135. What is the percentage mark-up on cost?

A) 40%

B) 45%

C) 50%

D) 55%

Life Cycle Costing

- It is a system that tracks and accumulates the actual costs and revenues attributable to cost object from its inception to its abandonment.
- **Lifecycle costing** is the process of calculating the total cost of designing, manufacturing, operating, and maintaining a product, asset, or project over its entire lifespan.
- It includes initial costs, operating costs, maintenance, and disposal costs to help make cost-effective decisions.
- It aims at cost ascertainment of a product, project over its projected life.
- Product life cycle is a pattern of expenditure, sale level, revenue and profit over the period from new idea generation to the deletion of product from product range.
- As mentioned above, target costing places great emphasis on controlling costs by good product design and production planning, but those up-front activities also cause costs.

Lifecycle costing

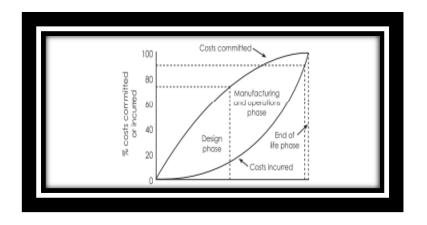
There might be other costs incurred after a product is sold such as warranty costs and plant decommissioning. When seeking to make a profit on a product it is essential that the total revenue arising from the product exceeds total costs, whether these costs are incurred before, during or after the product is produced.

This is the concept of life cycle costing, and it is important to realise that target costs can be driven down by attacking any of the costs that relate to any part of a product's life.

The cost phases of a product can be identified as:

Phase	Examples of types of cost
Design	Research, development, design and tooling
Manufacture	Material, labour, overheads, machine set up, inventory, training, production machine maintenance and depreciation
Operation	Distribution, advertising and warranty claims
End of life	Environmental clean-up, disposal and decommissioning

The pattern of costs committed, and costs incurred is observed.



Observations:

The diagram shows that by the end of the design phase approximately 80% of costs are committed.

The design phase locks the company in to most future costs and it this phase which gives the company its greatest opportunities to reduce those costs.

Four principal lessons in lifecycle costing

• All costs should be considered when working out the cost of a unit and its profitability.

•Attention to all costs will help to reduce the cost per unit and will help an organisation achieve its target cost.

• Many costs will be linked. For example, more attention to design can reduce manufacturing and warranty costs. More attention to training can reduce machine maintenance costs. More attention to waste disposal during manufacturing can reduce end-of life costs.

•Costs are committed and incurred at very different times. A committed cost is a cost that will be incurred in the future because of decisions that have already been made. Costs are incurred only when a resource is used.

Examples of Companies/Industries Using Lifecycle Costing

Lifecycle costing is used in industries where long-term costs (not just the initial purchase price) are critical for decision-making.

Energy – Solar & Wind Companies (Tesla Energy, Vestas) Assumptions:

- •High **initial investment** in solar panels/wind turbines.
- •Long-term savings from reduced electricity costs.
- •Maintenance costs and efficiency decline over time.
- •End-of-life disposal or recycling costs for materials.

Automotive Industry – Tesla, Toyota

Assumptions:

- •The **initial purchase price** of electric vehicles (EVs) is high.
- •Operating costs (fuel vs. electricity) vary over time.
- •Maintenance costs for EVs are lower than gaspowered cars.
- •Resale value and battery replacement impact total cost.

Lifecycle Costing Example for JIBs Ltd – Ethanol Stove and Fuel

JIBs Ltd is planning to launch a new **ethanol stove** to provide a clean and efficient cooking solution. Market research suggests that the company can sell **10,000 units** at a price of **Ugx 21 per unit**. The company aims for a **40% markup** on the product cost.

The estimated **lifetime costs** of the ethanol stove are as follows:

1.Design and development costs: Ugx 50,000

2.Manufacturing costs: Ugx 10 per unit

3.End-of-life costs (disposal/recycling): Ugx 20,000

JIBs Ltd is also considering an additional investment of **Ugx 15,000 in design improvements**, which could lead to **reduced manufacturing costs per unit**. This investment decision will help optimize the total lifecycle cost of the ethanol stove, ensuring cost efficiency while maintaining product quality.

Solution

Step 1: Calculate Total Product Cost

(a) Cost + Mark-up = Selling price

100% + 40% =140% ; 140%*C=21; 140/100C=21; 1.4C=21; C=21/1.4=15

Check; 40%*15=6

Thus, 15 + 6 = Ugx 21

1.(b) The original life cycle cost per unit =Total costs/Units to be produced or sold; Design and development costs + Manufacturing costs+End-of-life costs (disposal/recycling)/Units to be produced/sold.

```
(Ugx 50,000 + (10,000 Units x Ugx 10(Man cost)) + `20,000)/10,000 = Ugx 17
```

Target cost is in a is Ugx 15 against 17

This cost/unit is above the target cost per unit, so the product is not worth making.

(c) Maximum total cost per unit = `15. Some of this will be caused by the design and end-of-life costs:

(`50,000 + `15,000 + `20,000)/10,000 = `8.50

Therefore, the maximum manufacturing cost per unit would have to fall from `10 to (`15 - `8.50) = `6.50.

Lifecycle Costing Question Examples (Using UGX)

1. Construction & Infrastructure – Smart Highway Project

A government agency in Uganda is planning to build a **smart highway** with advanced technology to improve traffic flow and reduce maintenance costs. The total project is expected to last **30 years**.

Key Cost Components:

- Initial Costs:
 - Design & planning: UGX 10 billion
 - Road construction: UGX 80 billion

• Operational Costs (30-year lifecycle):

- Smart traffic management system: UGX 15 billion
- Regular maintenance: UGX 20 billion
- End-of-Life Costs:
 - Demolition & recycling materials: UGX 5 billion

The agency is considering an **extra investment of UGX 5 billion in durable road materials** that could reduce maintenance costs by **UGX 8 billion over 30 years**.

Question:

Using lifecycle costing, determine whether the extra investment in durable materials is financially justified. What is the total cost of the highway with and without the additional investment?

Automotive Industry – Hybrid vs. Diesel Delivery Trucks

A logistics company in Uganda is deciding whether to purchase hybrid delivery trucks or diesel-powered trucks for its fleet. The trucks are expected to operate for 12 years.Key Cost Components (per truck):Cost Factor Hybrid Truck Diesel TruckInitial Purchase Price (per truck) UGX 300 million UGX 230 millionFuel Costs (12 years per truck) UGX 100 million UGX 200 millionMaintenance Costs (12 years per truck) UGX 30 million UGX 70 millionEnd-of-Life Resale Value (per truck)UGX 50 million UGX 20 millionThe company is purchasing 20 trucks and is considering investing an extra UGX 20 million per hybrid truck in battery upgrades, which would lower fuel costs by UGX 25 million per truck over 12 years.Question:Using lifecycle costing, calculate the total cost of ownership for both truck options over 12 years. Should the company invest in the hybrid fleet, and is the battery upgrade a financially sound decision?

CLASS PRESENTATIONS

- Target costing
- Life-cycle costing
- Competitor cost analysis, competitive position monitoring, competitor performance appraisal
- Activity-based costing, activity-based management (activity-based cost management),
- Attribute costing
- Customer accounting

Hint: Definition, Steps, features /assumptions/conditions, Merits and demerits, Key Industries where the tool is applicable.