



STRATEGIC MANAGEMENT ACCOUNTING (BSA 3210)

Dr. Brendah Akankunda, PhD

bakankunda@mubs.ac.ug

+256772032695

TOPIC THREE (3): Strategic Cost and process Analysis

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

Topic 3: Strategic Cost and process Analysis

Sub-Topic	Learning Outcomes
3.1 The Process of Strategic Cost Analysis	Understand the steps involved in strategic cost analysis and its role in decision-making.
3.2 Types of Cost System - Full Costing - Activity-Based Costing (ABC) - Time-Driven ABC (TDABC)	• Identify and differentiate between various cost systems and their applications. • Explain the principles of full costing and its impact on financial reporting. • Describe the ABC method and its advantages in cost allocation. • Explain the concept of TDABC and how it improves cost estimation accuracy.
3.3 Activity-Based Costing ✓ Impact of Volume Diversity ✓ Critical Factors in Designing ABC Systems ✓ Activity-Based Profitability Analysis and performance Reports ✓ Application of ABC Systems in Product and Service Systems	• Apply ABC concepts to allocate costs more accurately to products and services with a practice question. ✓ Evaluate how changes in production volume affect costs and profitability. ✓ Identify key considerations in developing an effective ABC system. ✓ Assess product and customer profitability using ABC data. ✓ Implement ABC to optimize costing in manufacturing and service industries.
3.4 Process Analysis	• Examine business processes to identify inefficiencies and cost-saving opportunities.
3.5 Costing Methods Used in Service Sector	• Compare different costing methods applicable in service industries and their impact.

The Four Key Questions for Strategic cost analysis

1. What Did It Cost and Why?

- Classify the cost object.
- Cost unit
- Specify the nature of the cost.
- To enhance managerial performance

2. What Should It Have Costed?

- Setting standards
- Conducting comparisons with the present
 - ✓ Previous cost
 - ✓ Cost of the alternatives
 - ✓ Planned costs
 - ✓ Cost of the Competitor

3. How Can We Improve?

- Managers are Champions of change.
- Managing the performance of each responsibility area
- Conducting Performance measures

4. What Is Our Next Strategic Move?

- Strategic approach required by Managers in organizational roles,
- Focusing on efficiency, contribution,
- Awareness of external factors.

The Process of Strategic Cost Analysis

(Three steps are advised (Al-Hazmi, 2010, p.33))

1. Auditing both existing and planned cost initiatives

To ensure that the proposed changes improve the organization's strategic cost management



2. Extending the scope of internal costing beyond the walls of the factory.

a manufacturing, service, or public organization

Investigate the departments and activities that would be managed more successfully



3. Extending the cost management program beyond the boundaries of the firm.

Consider the external environment

The process of strategic cost Analysis should therefore;

- ❖ Build on the core competencies of the organization
- ❖ Identify the costs that are relevant to its needs
- ❖ Generate valuable comparisons with its plans
- ❖ Support the search for improved performance

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

Strategic Cost Analysis Functions / Roles

- Managers need Strategic cost accounting to perform these functions;
 - i. **Identifying Costs**
 - ✓ Common phrase “different costs for different purposes.
 - ✓ implication of this is that each management purpose or objective requires specific cost identification and will require appropriate costing methods and techniques.
 - ✓ The purpose of a costing system is to “help guide management in making decisions on how to best use these limited resources strategically
 - ii. **Comparing with Plans**
 - ✓ Comparing actual with predetermined performance,
 - ✓ management can make assessments and conduct investigations to remedy deficiencies and promote good practices.
 - ✓ Comparing with plans is therefore part of a control loop; the plans should lead to action (degree of predictability of the capacity; stability of the marketplace)
 - ✓ By comparing the actual performance against plans, you can assess your managerial abilities.

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

Strategic Cost Analysis Functions

• **iii. Seeking Improvements**

- know how you can improve your performance.
- A range of techniques have been developed and are still being generated to support managers improve
- Improving the company's performance is geared to the external economics and the internal dynamics.

iv. Performance Measurement; What to Measure

- Metrics used to assess how you have performed as a manager are normally based on some form of comparison of the actual costs, revenues, or profits against a predetermined amount.
- These are usually the financial components of the agreed strategy.
- Demonstrate improved performance by maintaining the quality of the activity but reducing the costs or improving the quality while maintaining the cost level.
- In some circumstances you can reduce cost levels and simultaneously improve quality.

v. Performance Rewards

- Cost systems affect behavior in the workplace because they either explicitly or implicitly recognize or reward the performance of managers.
- E.g Bonuses, career progression, and even slaps on the back and congratulatory words are likely to direct a manager's efforts and behavior.
- The direction followed will be what is being measured and rewarded. This can be in conflict with what is required to achieve organizational strategy.

RECALL THE CLASSIFICATION OF COST

○ The different bases of cost classification are:

(1) By time (Historical, Pre-determined).

(2) By nature or elements (Material, Labour and Overhead).

(3) By degree of traceability to the product (Direct, Indirect).

(4) Association with the product (Product, Period).

(5) By Changes in activity or volume (Fixed, Variable, Semi-variable).

(6) By function (Manufacturing, Administrative, Selling, Research and development, Pre-production).

(7) Relationship with accounting period (Capital, Revenue).

(8) Controllability (Controllable, Non-controllable).

(9) Cost for analytical and decision-making purposes (Opportunity, Sunk, Differential, Joint, Common, Imputed, Out-of-pocket, Marginal, Uniform, Replacement).

(10) Others (Conversion, Traceable, Normal, Avoidable, Unavoidable, Total

3.2 Types of Cost System

- Two primary methods for calculating the total cost of a product or service:
 - **Full costing**
 - **Activity-based costing (ABC).**

TYPES OF COSTING SYSTEMS

- ❑ Direct costing systems only assign direct costs to cost objects.
 - ✓ Because they do not assign indirect costs to cost objects they report contributions to indirect costs.
 - ✓ Periodic profitability analysis would thus be used to highlight negative or low-contribution products
 - ✓ Direct costing systems can only be recommended where indirect costs are a low proportion of an organization's total costs
- ❑ Both traditional and ABC systems assign indirect costs to cost objects.
 - ✓ Full costing system allocates overheads to production and service cost centers (typically departments) and then reallocates service department cost center costs to the production departments.
 - ✓ ABC system assigns overheads to each major activity (rather than cost centres or departments).

1. Full Costing or Absorption Costing

- Full costing,” also known as absorption costing or traditional costing, as a cost accounting method designed to identify the material, labor, and overhead costs incurred to provide a product or service.

The purpose of the technique is to find the total cost, including overheads, of the cost object.

Full costing seeks to provide answers to two practical problems:

- How to share the total overheads of the organization over the various production cost centers.
- How to share the overheads for a particular production cost center over the various products passing through it.

The stages of sharing organizational overheads under full costing

- Charge those overheads to the department that causes them.
- Share the remaining overheads over the departments by preparing an overhead analysis statement (Primary sheet).
- Charge a share of the departmental overhead to each cost object passing through it to give the total production cost of each cost object.



March 3, 2025

ACTIVITY BASED COSTING (ABC)

- Meaning, Importance, Characteristics
- Elements and Steps involved
- ABC vs. Traditional Costing
- Uses and Limitations

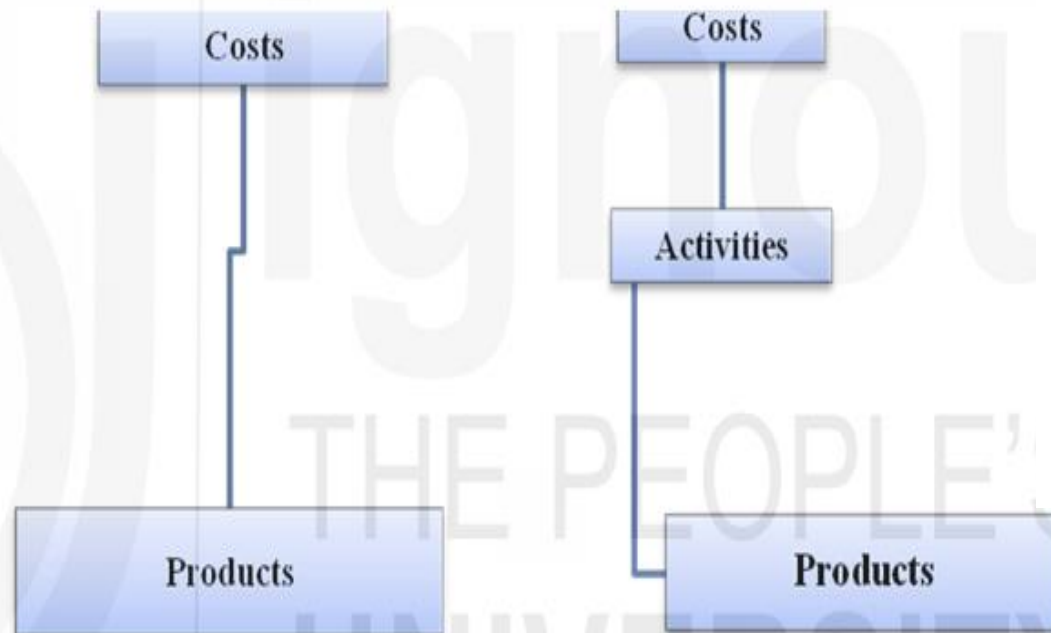
ABC

- Activity-Based Costing (ABC) is a system of costing, where costs are first traced to activities and then to products.
- Introduced in the mid-1980s through several Harvard Business School
- This costing system works with an assumption that activities are responsible for the costs that are incurred.
- Costs are charged to products based on the individual product's use for each activity.
- The Chartered Institute of Management Accountants, UK (CIMA) defines ABC as “an approach to the costing and monitoring of activities which involves tracing resource consumption and costing final outputs. Resources are assigned to activities, and activities to cost objects based on consumption estimates

Features of Activity Based Costing (ABC)

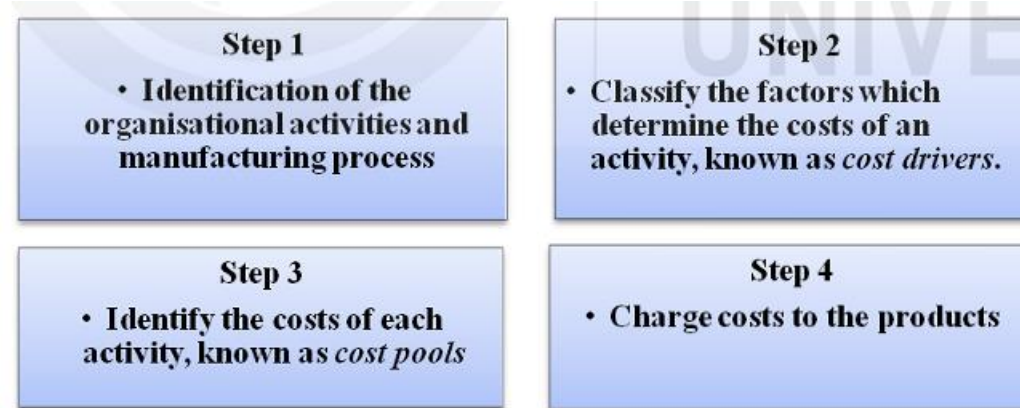
- ✓ ABC is a modern approach to the allocation of indirect costs. Costs allocated to each activity symbolise the resources consumed by the activity.
- ✓ ABC is not restricted to the allocation of indirect costs to departments. It moves further to identify the individual activity for indirect cost allocation as the lowest unit.
- ✓ Based on consumption, resources are allotted to each activity and then to cost objects.
- ✓ ABC identifies the activities using the activity cost drivers and results in a more accurate cost calculation.
- ✓ This approach facilitates easy identification of cost according to activities cost driver.
- ✓ This costing method is suitable if there is more than one product in the manufacturing line and overheads have a high share in total cost.
- ✓ This approach creates a straight cause and effect association with various resources.

Activity Based Costing Vs Traditional Costing System



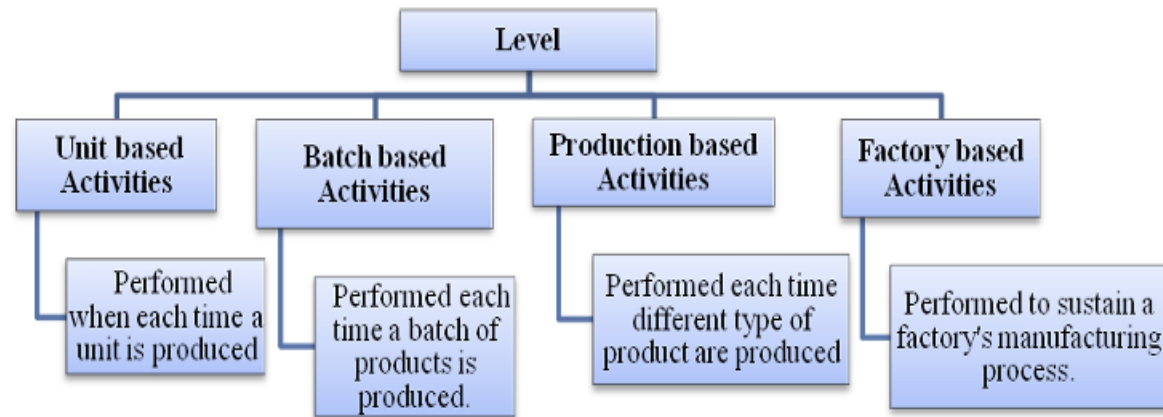
No.	Activity Based Costing	Traditional Costing System
1	Allots overheads on the basis of various cost pools and activities.	Assigns overhead based on a single overhead rate
2	Favourable for technology-driven manufacturing process	Favourable for labour driven manufacturing process
3	Favourable when the overhead increase is based on various activities that different for various product	Favourable when the overhead increases are based on traditional components like labour hours

Steps involved in the ABC



Grouping of Activities

For a manufacturing company, activities are classified as follows:



Time-Driven Activity Based Costing

The traditional ABC model has been difficult for many organizations to implement because of the high costs incurred to interview and survey people for the initial ABC model,

the use of subjective and costly-to-validate time allocations, and the difficulty of maintaining and updating the model as;

- (i) processes and resource spending change,
- (ii) new activities are added, and
- (iii) increases occur in the diversity and complexity of individual orders, channels and customers.

Time-driven ABC

- Time-driven ABC requires estimates of only two parameters:
 - (1) the unit cost of supplying capacity and
 - (2) the time required to perform a transaction or an activity.
- A time-driven ABC model:
 - can be estimated and installed quickly
 - is easily updated to reflect changes in processes, order variety, and resource costs
 - can be data fed from transactional ERP and CRM systems
 - can be validated by direct observation of the model's estimates of unit times
 - can scale easily to handle millions of transactions while still delivering fast processing times and real-time reporting
 - explicitly incorporates resource capacity and highlights unused resource capacity for management action
 - exploits time equations that incorporate variation in orders and customer behavior without expanding model complexity

For example, the costs of warehousing goods would be driven to activities – such as Receiving, Inspection, Put away, Picking, Packing, and Shipping – based on estimates by warehouse personnel of the percentage of their time they spent on each of the activities. The project team then calculated activity cost driver rates, used to assign activity costs to individual products or customers, by dividing these activity costs by the outputs of each activity – such as number of receipts, number of inspections, number of items picked, and number of shipments.

Time-Driven ABC: A Simple, Accurate Approach

is simpler, less costly, and faster to implement, and allows cost driver rates to be based on the practical capacity of the resources supplied.

Robin Cooper articulated the difference between transactional and “effort” cost drivers.

- ✓ Transactional cost drivers count the number of times an activity is performed.
- ✓ Examples include number of production runs, number of setups, number of shipments, number of purchase orders, and number of customer orders.
- ✓ When the resources required to perform each occurrence of an activity vary, such as when some setups are more difficult or complex to do than others, or when some customer orders require more time and effort to process than others, then simply counting the number of times an activity is performed gives an inaccurate estimate of the resources required to accomplish the work.

Differences between TDABC and ABC

TDABC uses a time equation to allocate resource costs directly to products, rather than ABC's two-stage method of assigning resource costs to activities and then allocating activity costs to products.

ABC generates costing systems with two explicit stages.

- ✓ In Stage I, resource costs are combined into resource cost pools, which are then assigned to activities.
- ✓ In Stage II, activity costs are collected into activity cost pools and then allocated to cost objects.

TDABC generates costing systems with one composite stage.

The heart of TDABC is the time equation, which directly allocates the costs from resource cost pools to cost objects but allows them to consume resources in different proportions depending on their specific characteristics

Differences between TDABC and ABC

ABC aggregates information in the **resource-to-activity** matrix by resource columns. A set of resources forms a resource cost pool, and then the costs in the resource cost pool are assigned to activities by one resource cost driver (i.e., one resource column).

In contrast, TDABC selects **activity-by-resource** partitions from the resource-to-activity matrix and calculates cost rates for each partition. Because aggregation occurs along fundamentally different dimensions (columns versus partitions).

Time-Driven Activity-Based Costing TDABC focuses on subtask-by-resource partitions.

For each partition, resource costs are allocated to cost objects (for instance, customers) in one composite step using two sets of estimates: (1) the capacity cost rate, and (2) the subtask time.

Differences Between ABC and Time-Driven ABC (TDABC)

Aspect	Activity-Based Costing (ABC)	Time-Driven Activity-Based Costing (TDABC)
• Cost Allocation Basis	Uses multiple cost drivers (e.g., number of transactions, machine hours) to allocate costs.	Uses time equations to allocate costs based on the estimated time required for activities.
• Complexity	More complex due to multiple cost drivers and frequent updates.	Simpler and more flexible as it requires fewer estimates and can be easily adjusted.
• Data Requirements	Requires detailed data collection on each activity and its drivers.	Uses estimates of time required for each activity, reducing the need for extensive data collection.
• Scalability	Difficult to scale due to high maintenance and complexity in assigning cost drivers.	More scalable as it adjusts automatically when operational changes occur.
• Cost Driver Usage	Requires defining multiple activity cost drivers.	Uses a single time-based cost driver for all activities.
• Capacity Consideration	Does not explicitly consider unused capacity.	Accounts for unused capacity, helping in better resource management.
• Implementation Effort	Time-consuming and resource-intensive to implement and maintain.	Easier to implement with fewer cost drivers and less effort in data gathering.
• Accuracy of Costing	Can be highly accurate but prone to errors due to reliance on multiple cost drivers.	Provides dynamic and real-time cost allocation based on operational conditions.
• Best for	Organizations with relatively stable processes and cost structures.	Companies with dynamic operations where time efficiency and capacity management are crucial.

General Practice Questions on Activity-Based Costing (ABC)

1. What is **Activity-Based Costing (ABC)**, and how does it differ from traditional costing methods?
2. What are the key components of ABC, and how are cost drivers identified?
3. How does ABC improve cost allocation accuracy compared to traditional overhead allocation methods?
4. What types of organizations benefit most from using ABC?
5. What are the main challenges in implementing ABC in a company?
6. How does ABC help in decision-making, such as pricing, cost control, and process improvements?
7. How can ABC support sustainability and environmental cost management?
8. How does ABC handle indirect costs, and what are its limitations?

Industries Where ABC and TDABC Are Applicable

Costing Method	Applicable Industries	Key Focus
1. Activity-Based Costing (ABC)	- Manufacturing (e.g., automotive, aerospace)	Allocating overhead costs to products/services based on multiple cost drivers like machine hours, material handling, and R&D expenses.
	- Retail & Supermarkets	
	- Pharmaceuticals	
	- Technology & Electronics	
2. Time-Driven Activity-Based Costing (TDABC)	- Healthcare (e.g., hospitals, clinics)	Assigning costs based on time spent on activities, improving efficiency and capacity management.
	- Banking & Financial Services	
	- Call Centers & Customer Support	
	- Logistics & Transportation	

Practice Questions on Time-Driven Activity-Based Costing (TDABC)

1. What is **Time-Driven Activity-Based Costing (TDABC)**, and how does it improve upon traditional ABC?
2. How does TDABC simplify cost allocation compared to the traditional ABC model?
3. What are the key steps in implementing TDABC within an organization?
4. How does TDABC use **time equations** to allocate costs more efficiently?
5. How does TDABC address the challenge of estimating cost driver rates in ABC?
6. In what industries is TDABC most effective, and why?