

**Modern Costing Techniques and Their Role in Enhancing Business Efficiency
and Competitive Advantage**

Course Name: Cost Accounting

Module Code:

Student Name: Devendra singh

Student ID: DE240333

Instructor Name:

Institution:

Submission Date:

Abstract

Today's companies face a very competitive business environment with a fast-paced changing technology, global markets, high expectations from customers and cost cutting pressures to run the business profitably. The traditional costing systems are no longer adequate in providing accurate and timely cost information for making strategic decisions. Consequently, in modern costing, methods like ABC, Target Costing, Life-Cycle Costing and Kaizen Costing have become important managerial tools to achieve efficiency and maintain competitive edge.

This report critically looks at the relevance of modern costing systems in improving the performance and strategic decisions of an organization. The study investigates the advantages of the application of these techniques in terms of cost accuracy, effective pricing strategy, operational control and profitability. The report also examines the difficulties in implementing advanced costing systems, such as the complexity of data, resistance from employees, and the technical needs.

The study applies secondary research methodology, which includes literature from academia, industry and real-world examples from companies like Toyota, Sony, etc. The results have shown that the utilisation of modern costing system in right way and rightly in the process of the organization can highly improve managerial decision making and operational efficiency. It is found that with the application of new costing methods, companies are more likely to have sustainable competitive advantage in a competitive world.

Table of Contents

1	Introduction	4
2	Literature Review	6
2.1	Modern Costing Systems	6
2.2	Activity-Based Costing (ABC)	6
2.3	Target Costing	8
2.4	Life-Cycle Costing	11
2.5	Kaizen Costing	13
2.6	Modern Costing and Strategic Decision Making	15
3	Methodology	17
3.1	Findings	18
4	Discussion	22
5	Conclusion	23
6	References	26

List of Figures and Tables

Figure 1: Traditional Vs ABC	7
Figure 2: Target Costing Model	9
Figure 3: Product Lifecycle Cost	12
Figure 4: Declining Unit Production Cost.....	14
Figure 5: ABC Vs Traditional	18
Figure 6: Target Costing and Projection.....	19
Figure 7: Lifecycle Cost.....	20
Figure 8: Kaizan Costing	21
Figure 9: Comparison.....	23

1 Introduction

Cost accounting is a basic tool for organisational planning, control and decision making as it helps managers to be equipped with correct information about costs and profitability of the organisation (Susilowati, 2023). As in today's business world, companies are increasingly competing, customers have changing tastes, technology is advancing and business costs are on the rise. These challenges have led companies to go beyond the traditional costing and accounting systems, and use more advanced costing systems that can better assist in strategic management decisions. In a complex production setting, traditional costing techniques that primarily assign overhead costs according to volume factors may not yield an accurate product costing. This can lead to incorrect cost allocation, loss of profitability, and poor and inefficient use of resources, all of which can lead to incorrect pricing decisions.

Thus, modern costing techniques have become essential tools for enhanced cost management, operational efficiency, and competitiveness (Abbood & Faisal, 2025). Activity Based Costing (ABC), Target Costing, Life-Cycle Costing and Kaizen Costing are all techniques that can be used to identify cost drivers, to eliminate waste, to make the processes more efficient and to match the production activities with customer expectations. Unlike the conventional costing system, the modern costing systems are driven on strategic cost management, continuous improvement and long-term value creation. These methods help organisations to benefit from informed prices decisions, product development, process optimization and profitability analysis.

Advanced costing systems are widely used in today's business world, especially in extremely competitive sectors like automotive manufacturing, consumer electronics, and the technology industry, to ensure profitability and operational excellence. In fact, companies like Toyota and Sony have managed to introduce the contemporary costing techniques in their

operations, and this has helped to enhance efficiency and competitiveness in the market (Azzi, 2025). Likewise, Apple applies the principles of life-cycle costing to control profitability of a product across the entire life cycle of the product.

This report aims mainly to critically discuss the significance of modern costing methods for enhancing the effectiveness and competitiveness of a business. The report analyses the theoretical frameworks of Activity Based Costing, Target Costing, Life Cycle Costing and Kaizen Costing and then discusses their strategic role to support management decisions and cost management. Moreover, the implementation barriers of modern costing system are estimated and the possibility of using these methods to gain the sustainable competitive advantage in the changing business environment is discussed.

2 Literature Review

2.1 *Modern Costing Systems*

Modern costing systems are referred to as the complex managerial accounting systems that are used to increase the accuracy of the cost, improve the operation of the organisation (Ordynskaya et al. 2021). Traditional costing systems were originally designed for manufacturing firms with a small number of products and relatively low manufacturing overheads. But, in organisations, the indirect costs have become huge, due to the advancement of automation, technology and customisation of products, which has diminished the effectiveness of traditional costing methods.

2.2 *Activity-Based Costing (ABC)*

ABC uses indirect costs as a result of activities that utilise organisational resources, not just as a result of activities that are allocated on a traditional basis (Quesado & Silva, 2021). The

need for ABC arose because of the shortcomings of traditional costing systems, such as are found in production settings with many product lines and high overheads. A traditional approach to costing products would tend to overlook the true costs of each product since the overhead costs will be spread evenly among products, without regard to the activity taking place in their production. ABC resolves this by directly associating the overhead costs with the activities that create the overhead costs.

In the ABC system, the first step is to identify the major activities of an organisation including machine set up, quality inspection, material handling, etc. and customer service. Activity costs are allocated to cost pools, which are then allocated to products based on some appropriate cost driver. ABC is shown to be more accurate as an alternative costing method, as it takes into account the differences in resource usage between products, when compared to traditional costing. ABC allocates higher overheads to products that need a lot more set up or quality checks, resulting in better price accuracy and profitability analysis.

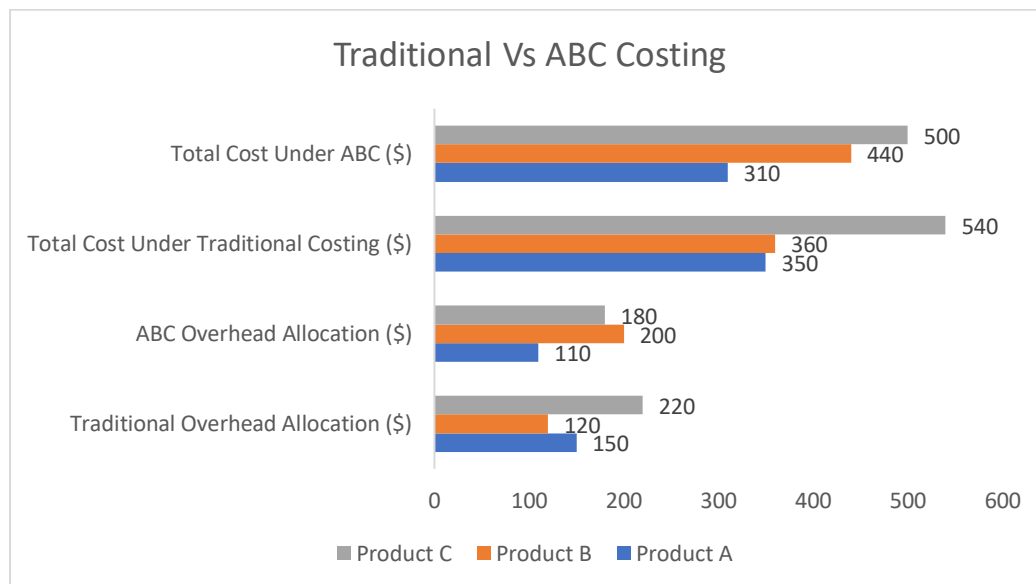


Figure 1: Traditional Vs ABC

ABC has a number of strategic benefits for organisations. First of all, it helps to enhance pricing decisions with accurate product cost data. Secondly, it helps managers to find non-value adding activities that add to operating expenses but not to the value of the customer. Third, ABC helps to increase operational efficiency by fostering process improvement and cost reduction projects.

Although these are beneficial, there are also some drawbacks to ABC. ABC systems can be costly and time-consuming to implement because the amount of data that is gathered is extensive and used to identify activities and cost drivers. Further, workers can object to the implementation due to more monitoring and the more complicated procedures. Smaller companies may also not have the technological systems and know-how to implement complex ABC system effectively.

2.3 *Target Costing*

Target Costing is a strategic cost management approach which emphasizes on reaching a predetermined product cost with a consideration for market conditions and customer expectations (Masadeh et al. 2023). The target costing approach is different from the traditional costing systems that are used, which calculate the production cost then add on the selling price. The desired profit is deducted from the estimated market price to get the target cost. The method allows for products to be designed and produced at an acceptable cost, and yet remain profitable and of value to the customer.

The target costing came into existence mostly in the strongly competitive industries in which companies do not have much control over market price because of the fierce competition and the varied requirements of the consumers. It is a very customer-oriented technique since the

customer's expectations for the product features, quality and price are taken into account in the product design phase.

The following are the common steps in the target costing process: market research, competitor analysis, customer needs analysis, product design review, and involving multiple functional teams such as engineering, production, marketing, and accounting in the process. By combining these two methods, one can get rid of the functions that are present in the product but are not necessary, increase the efficiency of production, and reduce the amount of waste during production without reducing the quality of the product.

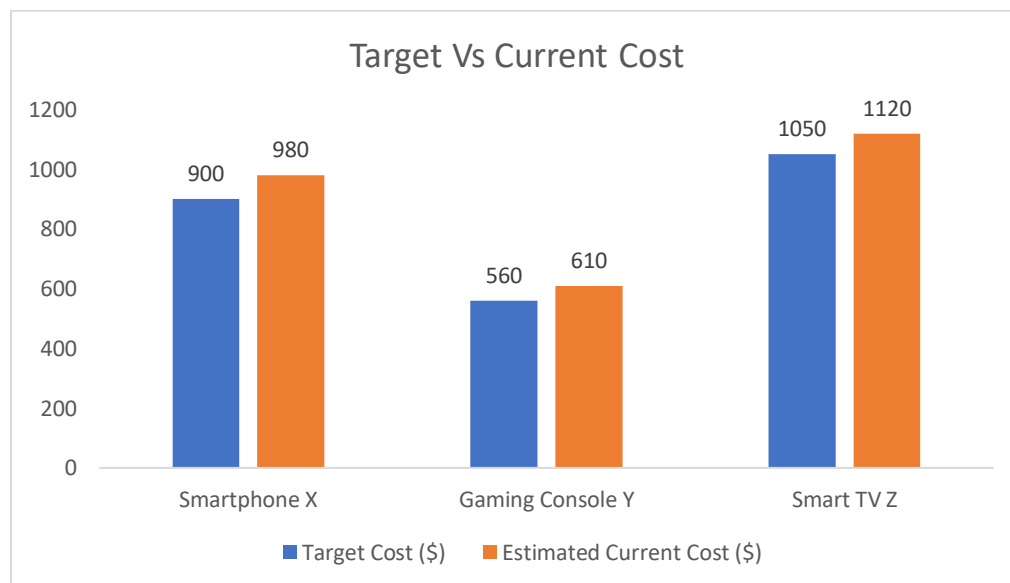


Figure 2: Target Costing Model

The target costing model provides a way to see how an organization figures out the difference between the estimated cost of the product and the allowable target cost. The analysis shows the significance of cost reduction measures in the product development process that can be used to meet the desired level of profitability. If managers recognise that there are cost reductions

to be made then they can make process improvements, negotiate with suppliers and product changes before going into large-scale production.

The biggest benefit of the target costing is its capacity to synchronise organisation operations with the cognitions of the market (Bhimani et al. 2023). The market-driven nature of the technique makes it more likely that businesses will produce goods that are wanted by the customers and can be sold at competitive prices. Besides, target costing also encourages innovation and inter-departmental collaboration to improve the operational efficiency and product quality.

Another aspect of target costing that helps long-term strategic planning is that it helps organisations to think about customer value, their positioning in competition, and the profitability of the product in the long-term during the development process. This is especially beneficial for companies in industries with short product cycles like electronics and manufacturing of automobiles. Target costing is an approach which Sony has used widely in the consumer electronics market to compete competitively whilst still maintaining their levels of profitability and innovation. Likewise, in the process of designing and developing a vehicle, Nissan uses the principles of target costing to optimise the production costs (Benslimane & Benjelloun, 2025).

Target costing has many advantages, but also has some problems to put it into practice. To set right objective price and margin of profit, market forecasting is needed, which is required to be accurate. Wrong assumptions in the market could lead to an unrealistic reduction of costs that could impact the quality or performance of the product. In addition, target costing can be a complex process that involves many departments, making it difficult to implement and potentially leading to resistance to change.

Another constraint is the possible pressure that suppliers and employees may be subjected to for cost-cutting continuously. If not managed properly, excessive cost reduction efforts can have

a negative impact on supplier relations, employee morale or product quality. Hence, organisations need to make a compromise between cost efficiency, long term sustainability and customer satisfaction.

2.4 *Life-Cycle Costing*

A more recent costing method is called Life-Cycle Costing (LCC) which can be used to estimate a product's total cost over the entire product life cycle, from early product development through to disposal or recycling. While conventional costing systems tend to look at manufacturing costs, life-cycle costing takes a broader view and includes all costs involved in a product's design, manufacture, distribution, maintenance, customer service and disposal. This approach will allow organisations to make strategic decisions where pricing, investment, product development and profitability management are involved, with more informed decisions.

Organisations are growing increasingly interested in sustainability, technology and the environment, making life-cycle costing more relevant (França et al. 2021). In today's business environment, businesses are aware of the high costs that are incurred before and after the manufacturing process, especially in the sectors where they have products that require research and advanced technology. Managers need costing systems that can assess all the products' financial implications over their use life.

There are a number of strategic advantages to organisations when conducting life-cycle costing. First, it will help in better long term profitability analysis by recognising hidden costs which may not be evident in the initial production phase. Secondly it can assist in making better investment decisions: managers can assess the overall economic viability of products and projects. Third, life-cycle costing can be used as a tool to motivate organisations to consider the costs of

disposal and recycling in total product costs and thus make sustainability and environmental management more important.

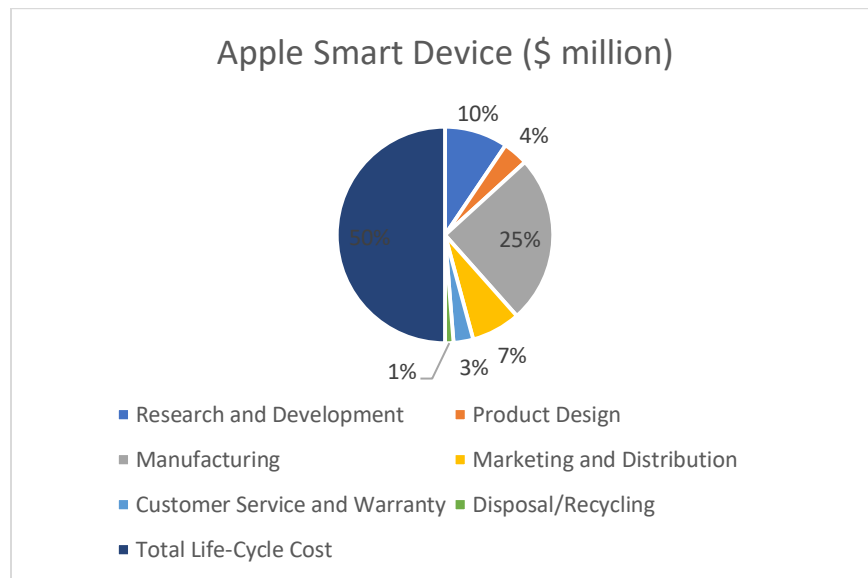


Figure 3: Product Lifecycle Cost

The life cycle costing analysis is a graphical representation of the distribution of costs by the various stages of a product's life cycle (Rush & Roy, 2023). The results reveal that the manufacturing cost may not be the only cost involved to a company in the total product cost, other activities such as research and development, marketing, customer service and disposal activities can also significantly add to the total product cost.

Life-cycle costing is often used by organisations with products that have a high technology content to effectively control product profitability. For instance, Apple uses the principle of life-cycle costing in the development of products and in the management of the product supply chain to assess long-term profitability of products like smartphones, tablets and computers. In a like manner, Boeing employs life-cycle costing to determine the full operational and maintenance expenses of an aircraft product over the life of the product.

Life-cycle costing also plays a role in strategic decision making with its contribution towards pricing strategies and resource allocation. Life-cycle information can be used by managers to decide whether or not products will provide long-term return, which they can afford to invest in their initial costs. Further, organisations can determine the points at which cost reduction actions can be most successful, thus increasing the overall operational efficiency.

But there are some obstacles to the use of life cycle costing. A major drawback is the ability to predict the cost accurately enough, especially for products with long life spans. Future costs are subject to considerable volatility that can be influenced by inflation, technological advances, market uncertainties and changing customer tastes. In addition, it may be tedious and cumbersome to gather detailed cost data at several product phases.

Another hurdle is to incorporate life cycle costing into existing accounting systems and organisational structures. Financial performance remains the focus of many companies, rather than long-term cost management, which hinders the application of life-cycle analysis in practice (Erokhin et al. 2025). Also, smaller organisations might not have the technological expertise and analytical tools needed to carry out extensive life-cycle costing assessments.

2.5 *Kaizen Costing*

Kaizen Costing is a continuous improvement costing method which emphasizes on making regular and continuous cost reduction in a product's production and operating stage. The Kaizen concept is an integral part of Japanese Management Philosophy and it means continuous improvement by small incremental changes with participation of everyone in the organisation (Okpala et al. 2024). Kaizen costing is different from target costing because the target costing because it is used to achieving operational efficiency and reduction of waste in the production process.

Lean manufacturing principles and continuous process improvement strategies are closely linked to kaizen costing. The technique is meant to put into place an ongoing challenge for organisations to continually reduce costs without compromising product quality, efficiency, and customer satisfaction. Staff are involved in co-operative problem solving and working together to find inefficiencies, reduce waste and increase productivity.

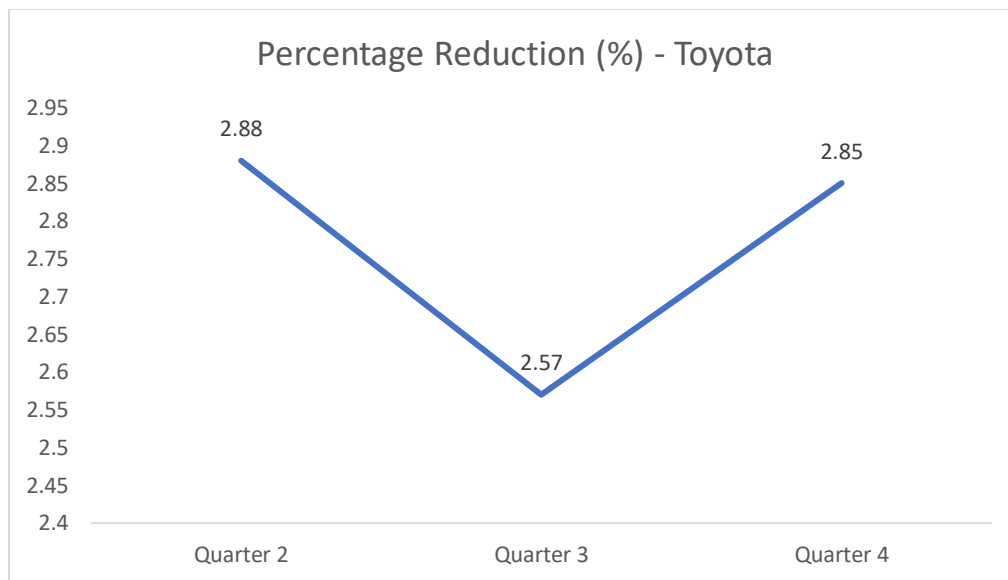


Figure 4: Declining Unit Production Cost

The Kaizen costing analysis can be observed in reducing the unit production cost with the passing time due to the implementation of continuous improvement initiatives (Yiğit, 2022). As the production costs begin to drop over time, it's clear that small improvements in their business operations can have significant long-term cost reductions and efficiencies.

Many companies like Toyota have successfully introduced Kaizen costing principles in lean manufacturing to enhance its operational performance and cut down the waste. Toyota's production system focuses on employee involvement, standardization and continuous improvement, allowing Toyota to achieve high productivity and quality and, at the same time, to

keep operational costs under control. Likewise, Canon uses the Kaizen in manufacturing and operational management to improve efficiency and competitiveness.

Kaizen costing offers a number of strategic benefits to organisations. First, it fosters a culture of continuous improvement and employee involvement, leading to better organisation learning and innovation. Secondly, the technique boosts operability with the elimination of wastage and optimisation of resources. Third, additionally, Kaizen costing is useful in maximising profitability in the long term by reducing costs continuously and improving productivity.

Though beneficial, Kaizen costing has some drawbacks. To implement successfully, it is necessary to have a strong organizational commitment, training of employees and effective communication systems. Resistance to change can happen if the employees think that continuous improvement activities are an added burden on their tasks or putting them under pressure. Moreover, sustaining a culture of continuous improvement for extended periods of time is difficult for companies in volatile economic times.

2.6 Modern Costing and Strategic Decision Making

In today's business environment, costing methods have a strong utility in supporting strategic decision making within the organisation, as accurate, timely and relevant cost information is provided. With today's growing competitive landscape as a backdrop, managers need to use complex costing systems to aid them in making decisions about pricing, product development, operational efficiency, profitability analysis, and resource allocation. In industries that are highly technological, innovative and automated, the traditional costing systems often do not give adequate information of complex operations. So, the present-day costing has become a vital part of strategic management accounting.

One of the greatest benefits that modern costing systems have brought is that they have helped to make costs more accurate. Having precise cost information enables managers to make informed pricing decisions, remove products that don't make a profit and streamline manufacturing.

Modern costing systems also are able to assist in strategic planning and performance management (Ordynskaya et al. 2021). By adopting the concept of target costing, organisations are more likely to consider customer expectations, market conditions and profitability goals when developing a product. When businesses take a proactive approach in designing for cost reduction, they can avoid any inefficiencies from occurring, thus impacting overall long-term financial results. Ongoing improvement plans help reduce waste, boost productivity, and facilitate flexibility in operations. In industries such as manufacturing, where efficiency can impact profitability and competitiveness, these benefits are especially crucial.

A modern costing system also helps managers to allocate resources effectively at a strategic level by identifying those activities that create the most value for customers and the organisation. Comprehensive cost analysis can help businesses to make better use of their resources, prioritize profitable activities, and enhance overall organisational performance. This strategic approach integrates cost management into the overall company goals, such as innovation, quality enhancement, customer satisfaction and sustainability.

Modern costing systems are also more important in managerial decision making due to technology integration. With the help of ERP systems, data analytics and automation tools, businesses can harness significant amounts of operational information more efficiently. As such, managers will have real time cost data to help with quicker and better business decisions. High-

end technologies also help in the better implementation of ABC, life cycle costing and continuous improvement systems, providing greater accuracy of data and transparency of operations.

3 Methodology

This report follows the qualitative secondary research approach to discuss the role of modern costing techniques for enhancing the efficiency of the business and to equip competitive. Secondary research is gathering and analyzing of information that is already available from other sources such as academic journals, industry magazines, corporate reports, professional accounting publications and published research reports. Secondary data is suitable for this research to measure the theories of costing, managerial accounting practice as well as Organisational applications of modern costing system which already have been developed.

The sources used for the research are mainly peer-reviewed journal articles, management accounting books, company cases and publications of the professional accounting institutions. The sources offer a theoretical background and practical information on ABC, Target Costing, Life-Cycle Costing and Kaizen Costing. Real-life examples are also included from companies like Toyota, Sony and Apple to illustrate how modern costing techniques are employed within operational and strategic management processes in the real world.

There are a number of limitations to the methodology selected. Firstly, the study is dependent on secondary data and this can restrict the availability of private information within an organisation about its costing systems and performance. Second, some case examples relate to publicly available information, not all of which may be current, and not all of which will be directly from the organisation, thus limiting the depth of analysis. Third, the conclusions drawn from the implementation of modern costing may not be applicable to all environments as the implementation varies from industry to industry and from one organizational structure to another.

However, secondary qualitative research is still fit for purpose to meet the aims of this report given the limitations. The methodology demonstrates academically and practically the ability to critically discuss modern costing techniques and its role in business efficiency, strategic decision making and competitive advantage.

3.1 Findings

The analysis shows that using ABC in conjunction with Target Costing, Life-Cycle Costing and Kaizen Costing give an organization a more realistic cost information and better operating control than a traditional costing system. In addition, the results show that organisations that have introduced modern costing systems are more capable of operating in a complex production system, allocating resources optimally and meeting market competition.

One of the major findings is about the effectiveness of using Activity Based Costing in the accuracy of cost allocation. Many of the traditional costing systems are based on broad allocation bases such as machine hours or labour hours. The comparative costing analysis, however, shows that ABC can provide a more accurate product costing since it can identify which activities are causing overhead costs.

Product (\$)	Traditional Overhead Allocation	ABC Overhead Allocation	Total Cost Under Traditional Costing	Total Cost Under ABC
Product A	150	110	350	310
Product B	120	200	360	440
Product C	220	180	540	500

Figure 5: ABC Vs Traditional

The analysis shows that the overhead allocations of products using greater operational resources are higher under ABC, which helps to give better pricing decisions and profitability analysis. This result confirms the current management accounting research that states that ABC

enhances managerial awareness of operational inefficiencies, and helps to understand resource consumption patterns.

The results also show that organisation that embrace ABC are getting better operational transparency and process control. In the case of Toyota, they use activity-based principles to keep track of manufacturing processes, minimise waste, and improve production efficiency. Procter & Gamble, on the other hand, also uses activity-based analysis to enhance product profitability and supply chain management (Chowdhury, 2021). The findings indicate that ABC is especially useful in companies where there are highly complex operations and high indirect costs.

The second major conclusion is on the value of target costing in industries that are competitive. The analysis shows that target costing can be used to make product development processes more in line with market expectations and more profitable. Estimating the acceptable cost of the product prior to manufacturing allows companies to take action to reduce costs at the design stage instead of once inefficiencies are discovered.

Product	Target Cost (\$)	Estimated Current Cost (\$)	Cost Reduction Required (\$)
Smartphone X	900	980	80
Gaming Console Y	560	610	50
Smart TV Z	1050	1120	70

Figure 6: Target Costing and Projection

The results indicated that it is possible to identify required cost reduction early in the product development process which can be used to better manage the product's operational control and strategic planning. Target costing is used by companies like Sony and Nissan to keep the prices competitive in the ever-evolving market (Dzienis & McCaleb, 2025). Incorporating market requirements into cost management processes, as the evidence suggests, helps with innovation, customer satisfaction and profitability in the long-term.

The findings also demonstrate that life cycle costing offers an organisation a broader life cycle costing perspective on the profitability of a product. Life-cycle costing is a method that considers the costs of activities in research and development, manufacturing, marketing, distribution, customer service, maintenance and disposal, unlike traditional costing systems that focus mainly on manufacturing costs.

Cost Stage	Apple Smart Device (\$ million)
Research and Development	450
Product Design	180
Manufacturing	1200
Marketing and Distribution	350
Customer Service and Warranty	140
Disposal/Recycling	60
Total Life-Cycle Cost	2380

Figure 7: Lifecycle Cost

The analysis suggests that significant costs may be incurred in other stages of production, such as in industries with high-tech and product development. Apple has a strong focus on R&D, product design and post-sales service to ensure the quality of its products and stay at the forefront of the market. Likewise, Boeing employs life-cycle costing to assess long-term operational and maintenance cost of the aircraft products.

The results indicate that life-cycle costing helps in strategic investment decisions by making managers aware of the overall cost of the products throughout their life. Furthermore, the technique helps sustainability and environmental management as it involves a consideration of disposal and recycling costs in overall profitability analysis. Organizations that employ life-cycle costing can thus have a greater ability to control long-term risk, manage the product development process and plan more efficiently.

Production Period	Unit Production Cost (\$)	Reduction from Previous Period (\$)	Percentage Reduction (%)
Quarter 1	5200		
Quarter 2	5050	150	2.88
Quarter 3	4920	130	2.57
Quarter 4	4780	140	2.85

Figure 8: Kaizan Costing

The results show that it is possible to achieve great long-term cost savings through ongoing improvement programs without compromising on product quality or on the stability of the operation. One of the more popular examples of Toyota successfully implementing Kaizen is in their lean manufacturing and continuous improvement systems. The company's focus on employee engagement, waste minimisation and process optimisation has helped to make it a global competitor and efficient operator. Likewise, Canon applies the Kaizen method to boost their productivity in manufacturing and minimize inefficiencies in their operations.

The findings also underline the success of employee's participation in the success of Kaizen costing system. Companies which support their staffs' participation in process enhancement efforts generally perform better in their operations and are more flexible in their organizations. All this indicates that technology is not sufficient to implement modern costing system; there is need for supporting organization culture and effective leadership.

Moreover, the results show that contemporary costing systems make a direct impact in strategic decision making and in the competitive advantage. Using the sophisticated costing tools helps organisations to enhance pricing, identify unprofitable activities, optimise resource utilisation and have a better customer value proposition. Modern costing systems also facilitate innovation through introducing a cost management part in the product development and operational planning process (Quesado & Silva, 2021).

4 Discussion

The study of modern costing techniques shows that the use of high-level cost management systems is growing in importance in today's business world, where technology, globalisation and fierce competition dominate the market. For organisations with varied production environments, the traditional costing systems may be inadequate as they are not able to allocate the overhead costs accurately and offer minimal strategic information.

The results of the study bring to the fore one of the most important problems, which is the correlation between correct cost information and management decisions. Modern costing systems help to increase the accuracy of costing by identifying the real use of resources and activities in the process of operations of the products and services produced. This helps managers to make better pricing decisions, product profitability decisions, budgeting decisions, and resource allocation decisions.

The discussion also shows that contemporary costing systems are also important to competitive advantage, both as a means of continuous improvement and through strategic cost management. Kaizen costing and other techniques help organisations to think in long-term terms by making small, incremental changes and eliminating waste. Likewise, target costing helps companies consider the needs and desires of customers and the market in the production process, which can lead to better market responsiveness and profitability (Szczerbak, 2022).

The second one is related to the integration of modern costing systems and technological innovation and digital transformation. The development of Enterprise Resource Planning (ERP) systems, automation, Artificial Intelligence, and data analytics has enhanced the capacity of the organisation to gather and analyse a vast amount of operational data. Consequently, businesses can

more effectively adopt advanced costing systems and get useful managerial information at real time that is used for decision making.

Costing Technique	Main Objective	Strategic Benefit	Major Limitation	Example Company
Activity-Based Costing	Accurate overhead allocation	Improved pricing decisions	Complex implementation	Toyota
Target Costing	Market-based cost management	Competitive pricing	Design constraints	Sony
Life-Cycle Costing	Long-term profitability analysis	Better strategic planning	Extensive data requirement	Apple
Kaizen Costing	Continuous cost reduction	Operational efficiency	Employee resistance	Toyota

Figure 9: Comparison

From the comparative analysis made it is possible to recognize the strategic potentialities of the new costing methods and their respective drawbacks. Activity Based Costing is a costing technique that increases the accuracy of costs but can be complex to implement. Target costing is a method that facilitates a market-oriented product development process, and relies heavily on the ability to accurately forecast and coordinate between different departments. Life-cycle costing improves the profitability analysis by the long-term, but in turn, it involves a massive estimate of future costs. Kaizen costing creates opportunities for continuous improvement, but can only yield incremental financial results.

The overall conclusion from these discussions is that today's costing systems are key strategic management tools for organisations that want to be focused on efficiency, profitability and competitive advantage. The long-term benefits of using advanced costing techniques are generally greater than the cost of implementing them, provided the technique is led with good management, technological systems and an organization's commitment to continual improvement.

5 Conclusion

The modern costing systems are vital tools for strategic management accounting in today's competitive, technologically advanced and customer-rich business world. This report critically

reviewed the significance of Activity Based Costing, Target Costing, Life-Cycle Costing, Kaizen Costing in improving the business efficiency, Cost control and competitive advantage. The analysis also showed that modern costing systems offer more accurate and relevant cost information than the traditional costing systems, helping the management to make better decisions and improve their operational performance.

The results of the report showed that Activity Based Costing (ABC) was able to improve the accuracy of cost allocation by identifying the relationship between overhead costs and the activities of operations and the use of resources. Target costing was identified as a tool that can aid the competitiveness of the product development process by embedding customer desires and profitability measures early in the design process and thereby lower costs prior to manufacturing. Life-cycle costing also helps in long term monetary planning by calculating the cost of products over their life cycle, which involves researching, manufacturing, maintenance and product disposal costs. Kaizen costing further aids operational excellence by continuous improvement, employee participation and cost reduction initiatives over time.

The report also pointed out the role of modern costing systems in assisting the organisation in becoming competitive. The different methods of applying modern costing systems were illustrated through examples from companies like Toyota, Sony and Apple, where they have helped in the long term profitability of business and strategic management in very competitive industries.

The report also noted a number of implementation issues with the modern costing techniques. However, if not managed properly, the following issues can negatively affect the effectiveness of advanced costing systems are expensive to implement, complex, and often cause employee resistance, and they require a lot of data. An organisation is thus in need of effective

leadership, employee training, technology and good communication systems to successfully adopt modern costing systems.

6 References

- Abbood, S. K., & Faisal, G. M. (2025). Modern Cost Management Techniques and Future Trends: Literature Review. *Kerbala International Journal of Management and Economics*, 13(48), 1-12.
- Azzi, F. M. (2025). Target Costing Pricing System: Adoption Mechanisms and Success Factors- A Case Study of Toyota Japanese Automotive Industry-. *المالية والاقتصاد مجلة*, 11(1), 241-260.
- Benslimane, I., & Benjelloun, S. (2025). Target costing: what do we know, and what do we still need to know?. *Contemporary Research Analysis Journal*, 2(1), 55-68.
- Bhimani, A., Datar, S. M., Horngren, C., & Rajan, M. V. (2023). Management and cost accounting. BoD–Books on Demand.
- Chowdhury, R. H. (2021). Supply chain accounting and cost management during global disruptions. *Journal of Frontiers in Multidisciplinary Research*, 2(1), 79-86.
- Dzienis, A. M., & McCaleb, A. (2025). Digital and green transitions and automotive industry reconfiguration: evidence from Japan and China. *Journal of Contemporary Asia*, 55(4), 618-644.
- Erokhin, V., Bobryshev, A., Manzhosova, I., Frolov, A., Shamrina, S., & Agafonova, N. (2025). Adaptation of life cycle costing practices to financial performance analysis in transitional economies: the experience of Russian manufacturing firms. *Journal of the Knowledge Economy*, 16(1), 1129-1152.
- França, W. T., Barros, M. V., Salvador, R., de Francisco, A. C., Moreira, M. T., & Piekarski, C. M. (2021). Integrating life cycle assessment and life cycle cost: A review of environmental-economic studies. *The International Journal of Life Cycle Assessment*, 26(2), 244-274.
- Masadeh, A., Jrairah, T., & Almasria, N. (2023). The impact of applying the target cost approach on products' structure (products pricing, development and quality). *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, 8(6), 18.

- Okpala, C., Nwamekwe, C. O., & Ezeanyim, O. C. (2024). The Implementation of Kaizen Principles in Manufacturing Processes: A Pathway to Continuous Improvement. *International Journal of Engineering Inventions*, 13(7), 116-124.
- Ordynskaya, M. E., Silina, T. A., Divina, L. E., Tausova, I. F., & Bagova, S. A. (2021). Functions of cost management systems in modern organizational management. *Universal Journal of Accounting and Finance*, 9(3), 498-505.
- Quesado, P., & Silva, R. (2021). Activity-based costing (ABC) and its implication for open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 41.
- Rush, C., & Roy, R. (2023, June). Analysis of cost estimating processes used within a concurrent engineering environment throughout a product life cycle. In *Advances in Concurrent Engineering* (pp. 58-67). CRC Press.
- Susilowati, E. (2023). Cost Management and Strategic Decision Making: The Role of Managerial Accounting. *Atestasi: Jurnal Ilmiah Akuntansi*, 6(1), 457-473.
- Szczerbak, M. (2022). The impact of target costing on the competitiveness and financial security of enterprises. *Inżynieria Bezpieczeństwa Obiektów Antropogenicznych*, (1), 28-38.
- Yiğit, A. M. (2022). Kaizen Approach to Reducing Production Costs and a Case Study. *İşletme Araştırmaları Dergisi*, 14(2), 1267-1277.