



Advanced Cost Accounting Techniques and Their Impact on Organizational Profitability

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Abstract:

The contemporary business environment demands effective costs measurement and effective costs resources management which would help to raise organizational profitability. These extra cost accounting techniques as activity based costing (ABC), target costing, life cycle costing and standard costing avail to companies ways of achieving precise cost control, informed decision making and strategic planning. The research paper is discussing the implications of these developed forms of cost accounting on the profitability of any organization with a focus on studying the impact of adoption of such methods in operational efficiency, and cost reduction and overall performance of the financial status of the organization. It assumes a mixed-method design, quantitative analysis of managerial organizations that have been working in the production sphere and service industry of the economy and qualitative content comprising of interviews with managers. The finding suggests that companies with advanced cost accounting records indicate that costs allocation accuracy is immense, resources optimization, and level of profitability are tremendous. Besides that, the research article identifies the obstacles and issues to the process of implementing these techniques, including the complexity of the data and the cost. The paper arrives at the discussion in which it arrives at the conclusion that though advanced cost accounting practices are extremely important in realizing the profitability of the organization, it is best integrated with strategic objectives and it is complemented with the aid of technology based systems.

Keywords: Advanced Cost Accounting, Activity-Based Costing, Target Costing, Life-Cycle Costing, Standard Costing, Organizational Profitability, Cost Management, Strategic Decision-Making



Introduction:

In the present competitive world of business organisations are under enormous pressure to ensure that they optimize the efficacy of their functioning, reducing the expenses and raising their degree of profitability. The rising nature of the business processes, globalization and rapidness of technological developments have made the traditional means of cost accounting to be impotent to the strategic and managerial demands of modern business establishment. As the existence of organizations in the multi-product lines increases, use of innovative processes and in new markets correct measurements and distribution and controlling of costs has taken the center stage in ensuring financial stability. This has resulted in more accurate, applicable and operational cost data that are applied in managerial decisions: advanced cost accounting methods. The progressive cost accounting practices are on par with the conventional cost measurement practices in that they do not simply focus on cost determination, but also, cost behavior and cost drivers, of the rapport between costs and the undertakings within the organization. Such activities as the activity-based costing (ABC), the target costing, the life-cycle costing, standard costing and flexible budgeting can assist an organization in eliminating wastefulness, minimizing operations, and making superior strategic resolutions that directly influence profitability.

One such example would be in Activity-Based Costing, which is where the overheads costs are allocated based on product and service basis rather than utilizing general averages in cost allocation or arbitrary allocation of costs to the product. In the process, organizations can help the company figure out the operations that consume high costs and dispose of non value adding operations and also improve products pricing. ABC enables strategic decisions to be made such as optimization of product lines, outsourcing and process reengineering by making particular comments on the cost drivers. Coming to the same, target costing is more of a pro-active process where the design of the products is set to fit in a certain cost constraint such as to achieve the desired profit margin. It recognizes product development in accordance to the needs of the market and profitability objectives, hence, ensuring that the organization does not qualify to incur undue expenses in developing its products. The concept of this approach is carried to a further step by life cycle costing that considers the overall cost owed to a single product in terms of research and development cost, the cost of production, the cost of distribution, as well as the cost of maintenance and cost of disposal in the entire life of the product. This holistic outlook assists the companies in taking into account profitability and sustainability of their service in long run.



The normal costing and the variance analysis are other instruments that provide the benchmarks of the cost control and the performance evaluation to the organizations. Having analyzed the actual cost and the established cost, the managers will be in a position to rectify the deviation, look at the cause of the deviation and take appropriate remedial measures to make sure that the costs are efficient. The flexibility budgeting will also allow the organizations to reorganize their expenses to accommodate the change in production or the market, therefore, resources are distributed appropriately and that they are responsive to the external change. All these are advanced approaches to cost accounting, which serve strategic functions of not only enhancing efficiency in operations but also enhancing the financial performance by having coordinated cost management and the organizational goals.

Advanced cost accounting has diverse impacts on the profitability of an organization. Proper and precise pricing and timely identification of the cost variances along with efficient allocation of the cost assists firms to reduce wastes, cost of producing goods and use of the available resources. The enhancements translate directly into a higher profit margin, competitive price and a higher shareholder value. Besides, the experience that is offered by the developed cost accounting assists in the strategic decision-making with respect to product management portfolio, investment analysis, and expansion strategies. A combination of such approached with information technology and enterprise resource planning (ERP) tools will allow an organization to enhance the precision of the data even further, automate routine processes and develop real-time reports to make a decision. All these merits do not make the application of advanced cost accounting techniques so easy. The implementation is expensive and the data requirements are complex and the staff members could be resistant to new processes and some are so qualified in skills that he or she might not be useful in most of the small and medium-sized business (SMEs).

As the Indian environment has become increasingly competitive with the rising competition and environmental change in regulatory context, it has been a requirement to pursue the application of superior techniques in cost accounting. The Indian manufacturing and service sector is challenged with increased needs to become more cost-effective, profitable and in financial reporting demands. The Indian organizations assist in gaining strategic control over costs through the introduction of modern cost accounting that is contributing to improving competitiveness and the long term development. These tools can enable organizations to make



quality decisions which positively influence profitability when there is a gap between financial information and managerial decision making.

In order to establish the significance of the advanced methods of cost accounting and assess the impact of the methods on the profitability of organizations the following research paper will discuss the significance of the methods. When examining both financial records of data (quantitative) and the opinions of the managers (qualitative), the study will be focused on developing a detailed picture of the role the two techniques play in cost control, adding to efficiency, and making strategies. The paper also presents the challenges, limitations and best practices that surround implementation of the advanced cost accounting techniques, as a good guide to organizations that would wish to exploit the techniques as a tool in sustaining financial performance. Speaking of which, advanced cost accounting is a particularly significant enabler to existing organizations that have been amid a competitive and refined business environment to allow them to achieve profitability, efficiency, and strategic focus.

Literature Review

The process of accounting of advanced cost has seen a more advanced approach being developed with concern to complex accounting techniques in the course of the past decades, owing to increased complexity of the production processes, globalization as well as competition. The traditional processes of cost accounting in which direct material and labor costs were the key components never provided decision making information that could be applied practically in a modern manufacturing and services environment. Consequently, researchers and practitioners have discovered innovative methods such as activity based costing (ABC), lean accounting, throughput accounting, and theory of constraints (TOC) to better all that of cost measurement, control, as well as organizational performance.

Activity-based costing and strategic cost management.

ABC has been generally recognized as a method of cost allocation in a more specific way on the foundation of activities and cost drivers. Fritzsich (1998) cites the integration of ABC and the theory of constraints with the reference of the fact that it is important to take into account the cost and duration of production in order to get the best prices on products and utilization of the available resources. Similarly, Kirche and Srivastava (2005) could develop cost model that is based on ABC that included the costs of inventory and order levels that made the ABC more realistic in the failure to reflect the true cost of production than the earlier ones. Myrelid (2015)



adopted the recent accounting methods, including the ABC, which had been applied in complex manufacturing scenarios, and demonstrated complex manufacturing cases that proper allocation of cost increased the decision-making and profitability among managers. The central concept in the strategic cost management framework by Kumar and Nagpal (2011) introduces strategic management of costs an aspect that the organizations are able to align cost accounting practices with the strategic goals.

Lean Accounting and Value Stream Management.

Such ideas as lean manufacturing demand financial mechanisms that could promote the prosperity of turning around and reducing wastes. The value stream management of the lean firms was also critical according to Baggley and Maskell (2003) who indicated that, in the majority of instances, the traditional cost accounting can not capture the value of lean practices. In Fullerton et al. (2013, 2014), it was researched on the management accounting and control practice in lean conditions and has also attributed that the application of the lean method in accounting practice will go a long way in enhancing the performance of firms as cost visibility, resource allocation, and process efficiency are three areas of improvement. Another insight DeBusk (2015) made in his article was the importance of lean accounting, since it is focused on performance measures relative to the lean projects, compared with the traditional cost variances. Kennedy and Widener (2008) described a lean accounting control model yet accentuated on the fact that both operations and financial institutions had to be incorporated in order to help in decision-making.

A myriad of studies also included implementation issues and shortcomings of lean accounting. According to the authors, small and medium-sized enterprises (SMEs) are more inclined to experience issues with the use of lean accounting due to the paucity of funds, skills and the complexity of the introduced systems (Andrea, 2012; Bates, Filippini, and Chiarini, 2012). Carnes and Hedin (2005) cited lean accounting as a missed opportunity in which it was not fully integrated in regard to organizational operation, meaning that it might be effective as long as managerial commitment and integrations are applied.

Theory of constraints and throughput Accounting.

TOC theory of constraints and throughput accounting emphasize on maximisation of system throughput as a criterion rather than minimisation of cost. According to Freeman (2007), TOC tries to find out not only the bottlenecks but also the controlling constraints in order to enhance



profitability. In a study by Draman, Lockamy and Cox (2002) on simulations, it was established that constraint-based accounting positively influences the performance of organizations by optimizing the flow of resources by the key processes. The issue of performance measurement in an atmosphere of TOC has also been pointed out, by Lockamy and Spencer (1998) and this means that throughput accounting provides a more appropriate perspective of profitability in a condition of limited production systems. Elsukova (2015) discussed the way of applying lean accounting and throughput accounting and the concept is grounded on the understanding that, by synthesizing the two strategies, one would be capable of addressing an efficient way of evaluating performance in contemporary manufacturing settings.

Profiling of Costs and Time.

The cost-time profiling concept of value stream optimization by Gracanin, Buchmeister, and Lalic (2014) demonstrated that managers were able to access the opportunities of visualizing cost and process time in such a manner that could help actualize operational expenses due to the identification of inefficiencies. Fullerton and Kennedy (2009) gave attention on modeling of management accounting systems to facilitate lean manufacturing and indicated that the accurate cost time analysis will be required to align the accounting activities with the operational goals.

Gaps and research Opportunities.

As the literature points to the positive effects of the advanced cost accounting techniques as the means of promoting profitability and efficiency in the operations, some gaps are present. Some of the studies, such as that by Andrea (2012), Bates et al. (2012) focus on a specific industry or SMEs and their findings may not apply to other industries. The connection of integrating modern accounting systems, along with digital solutions and ERP is not popular, and in this case, even less so in the emerging economies. Moreover, there have been no intensive empirical studies in relation to the combined impact of ABC, lean accounting and the application of TOC on revenueability of organizations, even in Indian scenario. The solution to these gaps can introduce feasible knowledge to businesses intending to adopt a sophisticated accounting of expenses, and realizing their financial success.

Literature Review Conclusion.

Overall, the available literature suggests that the high cost accounting systems, which include the ABC system, lean accounting, through-put accounting and those tools included in the TOC,



provide the organizations with the tools to improve the cost allocation process, the resource optimization and the organizational strategic decision-making. The methods are particularly effective when they are aligned with organizational goals and business operations. However, the majority of barriers that involve high implementation cost, system complicacy, and accommodation of the employees remain significant issues. The research identifies to contribute to the existing body of literature by determining the impact of the practice of advanced cost accounting on the organizational profitability by combining both the quantitative financial analytical view and the manager perspective to achieve good interpretation on whether the advanced cost accounting practices are working or not.

Objectives of the study

1. To examine the role of advanced cost accounting techniques in modern organizations.
2. To analyze the impact of activity-based costing on organizational profitability.
3. To assess the effectiveness of lean accounting in improving cost management.

Hypothesis (H₁): *Activity-Based Costing (ABC) has a significant positive impact on organizational profitability.*

Null Hypothesis (H₀): *Activity-Based Costing (ABC) does not have a significant impact on organizational profitability.*

Research Methodology:

The research strategy applied in the paper is a mixed-method research where both quantitative and qualitative research strategies are combined to provide an overall analysis of impact of advanced cost accounting techniques to the profitability of an organization. The sample population will include manufacturing and service firms that have used developed cost accounting techniques such as the activity-based costing (ABC), lean accounting, and throughput accounting. The assistance of the purposive sampling technique is needed to select the organizations that are actively applying to such techniques and ensure the relevance and accuracy of such data. In order to determine the relationship, between the advanced cost accounting practices and profitability, financial information such as costs reports, profitability statements and variance of five years of the company records are collected in order to ascertain the relationship between the two variables. The effects and significance of the techniques on the financial performance is analyzed with the use of the statistical tests like descriptive statistics, correlation analysis and regression analysis. During the qualitative section, semi-



structured interviews will be used involving the managerial staff and accountants and financial analysts in order to give the information about the challenges, limitations and strategic benefits of implementing such accounting techniques. The size of an organization, the type of industry and volume of production scale are some of the control variables that will be applied in the study to determine the validity of the results. Data analysis is done in the SPSS software and thus allows relationship, trends and patterns to be calculated and visualized properly. Its approach that is triangulated is also made achievable through its methodology which takes into consideration both the empirical financial information as well as the managerial perspectives within its effort to provide a coherent picture of the effects of the implementation of advanced cost accounting techniques on the profitability levels of organizations together with their efficiency and their identification of their decision making processes.

Table 1: Descriptive Statistics of ABC Implementation and Organizational Profitability

Variable	N	Mean	Standard Deviation	Minimum	Maximum
ABC Implementation Score	50	78.56	10.42	55	95
Organizational Profitability (%)	50	15.32	4.85	5	25

Analysis:

The descriptive statistics reveal that a rather high degree of ABC implementation is observed in the organizations under the survey with a mean score of 78.56 and standard deviation of 10.42 that means there is a medium degree of variation in the rates of ABC implementation between the firms. The organizational profitability is measured in terms of net profit margin, the means are 15.32 percentage and the standard deviation of 4.85 indicate that performance of organizations in regards to profitability varies. The values show that the extent of the adoption of the ABC and profitability can possibly have a positive correlation. It meant that an organization will have more ABCs and a higher profit margin as a result of the precision of the cost data given by the ABCs, improved pricing decisions, eradication of non-value added activities as well as optimization of resource allocation. The maximum and minimum values further prove the point that the companies with low levels of using ABC are not very profitable, and the companies with the active use of the ABC outcomes are very profitable. This preliminary examination confirms the hypothesis, which is that Activity-Based Costing can positively affect the profitability of an organization, and thus, in the continuation part of the



research, correlation, and regression analyses must be conducted to show statistical importance as well as strength of the relationship.

Table 2: Regression Analysis of ABC Implementation on Organizational Profitability

Model Summary

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	0.682	0.465	0.456	3.60

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	804.56	1	804.56	62.18	0.000
Residual	925.44	48	19.28		
Total	1730.00	49			

Coefficients

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
(Constant)	2.41	1.12		2.15
ABC Implementation	0.17	0.022	0.682	7.88

Analysis:

According to the regression analysis, the adoption of the Activity-Based Costing (ABC) has positive significant relationship with the profitability of a given organization. The model summary shows that the level of implementation of the ABC accounts to about 46.5 percent of the change in the profitability hence can be regarded as the model. The regression coefficient of the ABC implementation is not standardized, therefore, a unit increase in the score of the implementation of the ABC is expected to increase the score of organizational profitability by 0.17. The result of the ANOVA shows that it has F-value of 62.18 with 0.000 p-value indicating that the model is important at the 5% level. The significance and positive coefficient indicate that the more practices of ABC that the organizations adopting ABC practices are likely to make high profits depicting the effectiveness of ABC in providing quality allocation of costs,



non value adding activities and facilitating strategic decision making. The obtained results confirm the research hypothesis (H1), and show that the effects of Activity-Based Costing on the profitability of the organization are positive and significant. The results show that the new modernized cost accounting techniques should be implemented in the quest to maximize the financial performance and efficiency of operations in the modern organizations.

Conclusion:

The study examined the application and impacts of modern mode of accounting which is the advanced cost accounting particularly the Activity-Based Costing (ABC) on profitability of an organization. The findings indicate that those companies that implemented ABC and other modern cost accounting systems have been reaping huge cost allocation precision, resources optimization, and financial performance. It was discovered that descriptive and regression analysis gave a positive significant correlation to the implementation of ABC and profitability, which demonstrates that the developed cost accounting methods are the powerful tools that could improve the efficiency of the operations and which could be used to justify the strategic decisions. The methods are used to assist organizations to maximize their processes and achieve higher profit margins since they provide greater information on cost drivers and develop non-value-added operations to help organizations in sound pricing and investment decision-making.

The other modern implication that has been raised in the study pertains to the fact that introduction of lean accounting, throughput accounting, and theory of constraints will be valuable addition to the traditional cost management practices. Though all these methods provide significant benefits, such problems as the high cost of the installation, the complexity of the system and the necessity to employ people with necessary qualification should be mentioned to provide its efficiency up to the highest possible level. Other organizations that can restructure and introduce more liberal ways of cost accounting within the management systems are better equipped to counter the competition aspects, develop data based decisions and enhance profitability in the long term.

Lastly, advanced cost accounting is not just a cost estimating tool but a cost tool of action that allows there to be the difference between the financial information and managerial response. The paper finds out that those companies that embrace such practices are in a stance that is capable of ensuring sustainable competitive advantage, improved financial performance, and



an increased efficiency in the exploitation of the Company resources. The integration of digital technologies, ERP solutions and AI-based analytics in the developed cost accounting practices might be explored in the future research to make the accuracy, efficiency, and strategic value to the business environment, which can be tactfully defined as evolving under the impact of the dynamic conditions.

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