

THE HURDLE TO IMPLEMENTATION OF ABC IN AUTOMOTIVE ENGINEERING MSME UNITS IN GUJARAT

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ABSTRACT

There has been much debate over the best method of accounting for the costs incurred by India's manufacturing sector, particularly the sectors devoted to the mechanical processing of goods. However, it is widely accepted that many small and medium-sized enterprises (SMEs) in the Automotive Engineering industry continue to use outdated costing methods because they lack access to modern resources and training. In their review of the existing literature, the authors identified a need for further investigation into the challenges faced by the small and medium-sized enterprises (SMEs) in India's Automotive Engineering Industry when adopting the ABC costing approach. The ubiquity of SMEs, especially those involved in the automotive engineering industry, gives this study great importance for offering practical advice.

Key words: ABC, Costing, SME, Industry

I. INTRODUCTION

Accounting for management purposes is an integral part of running any business. It is the branch of management concerned with making firms more valuable through efficiently deploying human capital in a highly competitive environment. It necessitates unique ways of thinking and doing things.

Management accounting is collecting and analysing data regarding an organisation's financial activities. Decisions on the company's operations and investments should be driven by this process, which should be ambitious in light of the informational demands of individuals inside the company. Strong criticism was levied at the management accounting techniques of the time by (Robert Kaplan, 1980) in his assessment of *The Evolution of Management Accounting* and by (Johnson, 1991) in *Relevance Lost: The Rise and Fall of Management Accounting*. However, many new management accounting

approaches have been created and widely disseminated since then, benefiting businesses of all sizes and various sectors.

The most significant developments include, among other things, Activity Based Techniques (including activity-based costing, activity-based budgeting and activity-based management). In addition, total quality management, just-in-time production systems, and the pursuit of competitive advantage are just a few examples of how this method can help businesses thrive in today's fast-paced, globally competitive market. To keep up with these changes in technology and management, businesses need to create a management accounting system that can keep up with their needs (Gerdin, 2005).

Some have contended that introducing these new methods has altered every step of management accounting, from planning and controlling to decision making and disseminating findings. Ittner and Larcker (2001), Kaplan and Atkinson (1998, 2001), Otley (1995), Fullerton and McWatters (2002), and Hoque and Mia (2001) are only a few of the sources cited in this section. These methods' primary function has evolved from traditional cost accounting to the more complex task of value creation via better resource allocation.

Activity-based costing was initially created in the middle of the 1980s. Researchers Robert Kaplan and Robin Cooper, as well as the research and development firm Computer-Aided Manufacturing, International, were instrumental in the invention of the ABC process (Jones, Dugdale, 2002).

Cost Accounting Management – International is a field of study that emphasises activity management boost customer satisfaction and profitability. Activity-Based costing streamlines the accounting process by isolating certain tasks as the primary cost drivers. The actions that go into making a product or providing a service are what the ABC system uses to determine how much it will cost to make or provide that product or service. Activity-based costing comprises cost drivers analysis, activity analysis, and performance assessments, is a key component of Activity-Based Management (Berliner & Brimson, 1988) and is used to educate and enhance decision-making. This necessitates an ongoing process of looking for ways to enhance performance, which necessitates a thorough analysis of current procedures (Kaplan, 1984). Therefore, Activity-

Based Costing is a method of allocating expenses for services and activities based on how much of them the customer uses. It's a useful tool for budget managers because it establishes a connection between spending and the outcomes that matter most to an organisation (Balalaie Some Saraye et al., 2013)

II. LITERATURE REVIEW

(Geneva and anisic 2006) conducted research on the application of activity-based costing in small and medium businesses that were moving from traditional costing systems. In their study on the function of accounting services and their impact on the performance of small and medium-sized enterprises, Husin and Ibrahim (2014) concluded that there is a connection between service quality and the performance of SMEs accounting services. (Manriquez et al., 2014) investigated the activity-based pricing system for small and medium-sized enterprises in Mexico. The study found that ABC has a low penetration rate, and SMEs continue to use old methods due to a lack of understanding regarding ABC. (Carnes, 2010) states Because of the difficulties that many businesses that have adopted ABC have encountered when attempting to maintain the system, a modified version of ABC that is known as Time-Driven ABC, was developed and put into practice (Kaplan, 2007). According to Ayvez (2011) and Sherratt (2005), the benefits of TDABC over regular ABC include decreased processing costs, higher system flexibility, improved accuracy, and enhanced simplicity. This is of utmost importance to small and medium-sized businesses because they have fewer resources and smaller margins of error. (Cardinaels, 2004)

III. METHODOLOGY

Research Objectives

The following are the objectives of this research paper

- To study the concept of Activity Based Costing
- To identify the factors influencing the Non-implementation of Activity Based Costing.

Methodology

Companies involved in the manufacture, designing, or production of vehicle components and assemblies were included in the study. The researchers

managed to meet with 165 companies in four periods of scheduled/unscheduled meetings. The interviews were conducted with those in charge of the firm's cost management. However, the researchers could only contact 60 per cent of the 165 people contacted, which was consistent with the literature evaluations. (Abernethy et al. 1999) finds that generalising something based merely on a single research report is necessarily constrained and untrustworthy, regardless of the research method used. Their study (Mario Joao Cardoso Vieira Machado, 2012) argues that generalising in management accounting requires a series of investigations with new samples based at different locations and at different time periods.

IV. RESULTS and DISCUSSIONS

The data analysis is based on the Likert scale, and the relationship has been studied between the factors.

In this study, Anova testing and Ranking methods have been used.

The weighted average analysis estimates and compares the mean score on factors impacting enterprises' non-implementation of activity-based costing. Three rating scores are assigned: 3 for to a large extent; 2 for good; 1 for not at all, and the results are provided in the following tables.

H₀₁: The mean scores on the factors driving the non-implementation of activity-based costing in the Automotive Engineering Industry of SMEs are not significantly different.

The null hypothesis is rejected since the F is significant, implying a significant difference in implementing ABC between organisations.

The mean score ranged from 1.51 to 2.99 for the sixteen factors influencing organisations' non-implementation of activity-based costing, as shown in table 2. The factor "Not a Priority for the firm at this time given the leadership style" received the highest mean score and was ranked first, followed by "Hard to assign activity cost to products or services" and then "Not Suitable for the type of production systems being used in our firm" which received the second-highest mean score and was ranked third, and finally "Non-Compatibility with existing accounting systems, ABC is just an informational tool" which received the

lowest mean score and was ranked last. As a result of the examination, it is obvious that the companies under investigation were not interested in implementing activity-based costing. This study's findings match those of Manriquez et al. (2014), Magdey Abdel-Kader & Robert Luther (2006), and Adelegan, Olatundun Janet (2006). (1998). As a result, the study concludes that activity-based costing is still a work in progress among SMEs in this portion of the region. To remain competitive, SMEs must be more modern and open to new strategic cost management strategies. Government, Small Industries Associations, and Professional Accounting authorities should take up these difficulties to educate and teach such entrepreneurs in the Automotive Engineering Industry of SMEs on the benefits of using activity-based costing techniques.

V CONCLUSION

This research is a preliminary study to understand the awareness and knowledge of using activity-based costing as a strategic tool among automotive engineering SMEs. However, the data demonstrate that "none of the firms under study have any knowledge of ABC, which is confirmed by the fact that none of the firms uses ABC." The decision to apply the ABC technique is heavily influenced by factors such as the nature of the business, competitiveness, turnover, and the firm's size. As a result of this study, the author concludes that automotive engineering SMEs should rise to the challenge of modern costing techniques such as ABC and maximise the benefits of the technique, which will enable them to identify, accumulate, and manage the costs of their activities, resulting in accuracy in decision making and business excellence and customer satisfaction.

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List of Tables**Table 1 : Relationship on the Factors Influencing Non – Implementation of Activity-Based Costing**

SOURCE	DF	S S	M S	F
Between groups	15	343.614	22.907	96.45**
Within groups	1584	376.210	0.237	

Table 2 : Drivers Influencing Non – Implementation of Activity-Based Costing Among Automotive Engineering Industry of SMEs

S.No	Drivers Influencing Non – Implementation of ABC	Mean score	Rank
1	Lack of Knowledge by Staff in understanding the ABC model	2.60	10
2	No Top Management Support	2.65	9
3	Resources Constraint	2.75	8
4	Complexity in the identification and Selection of Activities	2.78	7
5	Not Suitable for the type of production systems being used in our firm	2.84	3.5
6	Hard to assign activity cost to products or services	2.85	2
7	Difficulty in identifying cost drivers	2.83	5
8	Difficult to embed with information and Communication Technology	2.84	3.5
9	High Implementation Costs, than the benefits ABC provides	2.81	6
10	Non-Compatibility with existing accounting systems, ABC is just an informational tool	1.51	16
11	More Efficient solutions are available than ABC	2.13	12
12	Not Needed now, already my firm is in profit zone	2.19	11
13	No idea of immediate expansion of business	1.99	14
14	Viewed as ABC will do more harm than good	1.60	15
15	Obtaining Data is Complex and Cumbersome, No MIS in our firm	2.05	13
16	Not a Priority for the firm at present given the leadership style	2.99	1

Authors Profile

<p>Suresh Prajapati is pursuing PhD in ‘Utility of Activity Based Costing for the resort in the state of Gujarat’ and Master’s in commerce from Gujarat university. His areas of interest are cost of management accounts. He participated in a two-day virtual international colloquium “Recent advances in accounting, management, communication and technology” from GLS university. He participated in the 14th international conference on emerging management practices on transforming business in ESG (Environment, Social, Governance) from Ganpat university. He has teaching experience for 2 years.</p>	
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