

# Factors Influencing Non-Adoption of Activity Based Costing in Small and Medium Enterprises in the Technological Era: An Empirical Investigation among Indian Firms

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**Abstract:** *Small and Medium Enterprises (SME's) continue to be under increasing pressure to remain in a highly competitive environment. In spite of that, there has been a strong criticism in the recent past that the Small and Medium Enterprises have not been able to adapt newer management accounting practices to changing business scenario. There are significant number of strategies that could be taken up by SME's to achieve world class, efficiency which can help them in smooth transition from efficiency to effectiveness. To be effective in its operations and enhance its profitability SME's need to embrace proven management accounting tools and techniques. In this research, the author's review the existing cost management practices, overall awareness about the knowledge of ABC among SME's in India and to report the driving forces influencing the adoption or non-adoption of ABC in SME's.*

**Keywords:-** *To be effective in its operations and enhance its profitability SME's need to embrace proven management accounting tools and techniques.*

## I. INTRODUCTION

Activity Based Costing (ABC) can be traced back from the mid of 1980's. Robert Kaplan and Robin Cooper as well as an R&D organization called Computer –Aided Manufacturing, International significantly contributed for the development of ABC process (Jones, Dugdale, 2002). ABC is a technique that aims on the management of activities as the pathways for improving the value received by the customer and the profit achieved by providing this value (Cost Accounting Management – International (CAM – I). Activity Based Costing hoovers around individual activities as the fundamental cost objects. ABC system, identifies the cost of individual activities and assign such costs to products or services on the basis of the activities undertaken to produce each product or service. It embraces cost drivers analysis, activity analysis and performance measurements,

to improve the decision-making processes. This involves continual search for opportunities to improve which in turn involves a careful and methodical study of activities (Kaplan, 1984)

Therefore, ABC is a technique that assigns costs to activities and service. It helps administrators manage costs, a tool for linking costs and results, action required for the production and delivery of specific results (Balalaie Somee Saraye et al., 2013)

## II. RATIONALE OF THE STUDY

SME's in the Indian context predominantly use traditional costing methods (Joseph & Samuel, 2017). Under Traditional Cost Accounting the organization could not evaluate the internal efficiency, quality and profitability per product or service line (Narong, 2009). Since 20 years when ABC was first introduced a majority of firm still employ traditional accounting methods (Fei, 2010; Maelah, 2007; Hughes.S., 2003).

In SME's ABC and its adoption has been even slower (Carenzo, 2010; Hughes, A, 2005). SME's have to implement desirable growth paths through management practices that utilize appropriate intra and inter organizational capabilities (Jin, 2007). Therefore, ABC could help SME's in improving efficiency. Further, this study assumes significance as it focuses on Coimbatore District, in the State of Tamil Nadu (located in the down South –Western region in the Indian Map) due to high prevalence of SME's.

## III. CONCEPTUAL MODEL

A Conceptual model is evolved to highlight to optimize the full benefits of ABC/ABM. Fig .1

## IV. Literature Review

*4.1 Reviews on Use of Traditional Costing*  
(Lyll, 1990) found that of the 423 companies that they surveyed 76 percent claimed that they used traditional costing. (Joshi, 2001) specified that in India, 68 percent of the 60 firms surveyed still use traditional costing techniques. (Drury, 1993) reported 73 percent of the respondents using traditional costing.

**Revised Manuscript Received on 30 May 2019.**

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(Ghosh, 1987) found that 47 percent of the companies surveyed used the traditional costing system in Singapore. (Asquer, 2003) explains that “many firms are far from adopting most of these innovations.” (Mann et al. 1999) concluded that the industry needs to be more progressive and more willing to learn and apply new methods. (Magdy Abdel-Kader and Robert Luther, 2006)

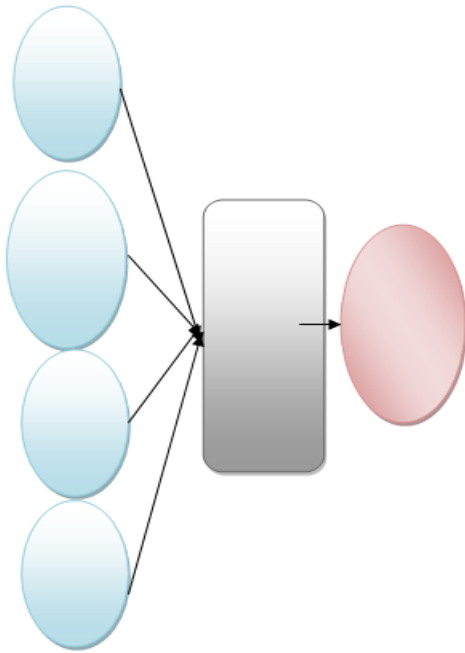


Fig.1 Conceptual Model for ABC/ABM

had investigated and reported on the management accounting practices in the British food and Drinks Industry, concludes that direct costing is widely practiced. (Adelegan, Olatundun Janet, 1998) in her study concludes that management accounting in Nigeria is still evolving and will continue to do so in the future.

## 4.2 Reviews on Use of Strategic Cost Management Techniques

Activity based costing helps business in understanding its business processes, cost of process failures, the relationship of processes to customers, and the profitability. (Andrew Hughes, 2011). Gunasekaran, *et al.* (1999) have suggested to shift for ABC under the following criteria i.e timing, implementation, the factors and conditions favouring its applications. Curtis Walker *et al.* (2000) concludes that, the book manufacturing industry can try cost to activities for each individual job as a direct cost. Studies on Activity Based costing methodology for SME's in different sectors has been published on firms such as printing firms (Mendiola and Peralta, 1999), Metal Aluminium and ironwork structures (Flores, 2002), polyvinyl chloride industry (Ruiz, 2003), Mexican logistics sector (Prieto et.al 2007).

To compete in a highly competitive market, companies must implement a costing system strong to respond to any changes in the products and activities (Kazempour, 2011). New costing methods for improving

cost management systems have been created, these methods are not only used for accounting, but also for management as a decision- making (Bogdanoiu, 2009)

## 4.3 Reviews on Small and Medium Enterprises

Gecevska and anisic (2006) investigated the use of small and medium enterprises engaged in the activity based costing transitioning from traditional costing system. Husin and Ibrahim, (2014) examined the role of accounting services and its impact on the performance of SME's and concludes that there is a relationship between service quality with performance of SME's accounting services. Manriquez et al., (2014) examined the activity based pricing system for SME's in Mexico and the results indicate low penetration of ABC and SME's are still using traditional systems because of lack of knowledge.

Many firms that have adopted ABC have found it challenging to maintain the system (Carnes, 2010), to overcome these challenges a modified ABC approach called Time Driven ABC (TDABC) was introduced (Kaplan, 2007). Lower processing costs, increased system flexibility, improved accuracy and enhanced simplicity are few of the merits of time driven ABC (Ayvez, 2011; Sherratt, 2005). This is especially important to SME's with their more limited resource base and margins of decision errors (Cardinaels, 2004)

## V. RESEARCH PLAN

### 5.1 Research Objectives

1. To Study the Significant differences among Small and Medium Enterprises on the usage of existing cost management practice.
2. To Investigate the driving forces that influences the adoption or non-adoption of activity - based costing among SME's
3. To analyze the strength of the factors that contributes to the non - implementation of activity-based costing on priority basis by grouping into challenges, constraints, predictions and priority dimensions

### 5.2 Research Methodology

#### 5.2.1 Type of Research

This research study is a descriptive and analytical one and quantifies the behavior of SME's in Coimbatore district, in the State of Tamil Nadu in South India with the help of Interview Schedule as the data collection instrument.

#### 5.2.3 Sample Determination

The Survey is based on the source list with reference to the SME's registered with Coimbatore District Small Scale Industries Association (CODISSIA) an official organ of the SME's in Coimbatore District.

These SME's are into Manufacturing, Textiles, Foundry IT and vary in size, employees, total investment made, nature of products,

and sales turnover etc., Invitation to participate was sent to 165 SME's out of which 100 only could be found with complete answers which has been carried forwarded for further analysis.

**VI. RESULTS AND DISCUSSIONS**

The authors have applied percentage analysis to understand the demography of Small and Medium Scale firms, on the following variables, firm's years of existence, annual turnover, degree of competition, employment structure, business classification, nature of the product line.

**Table No. 6.1**

**Demographic, Socio-Economic Profile of the Small and Medium Enterprises in Coimbatore District**

S.NO	Profile factors	Details	Respondents	
			No	percent
1	Existence of company	1-5 years	23	23
		6-10 years	33	33
		More than 10 years	44	44
2	Annual turnover	Less than Rs.50 lakhs	46	46
		Rs.50-100 lakhs	38	38
		Rs.100-150 lakhs	15	15
		Rs.150-200 lakhs	1	1
3	Business classification	Small scale	23	23
		Medium scale	43	43
		Micro scale	34	34
4	No of persons employed	1-100	73	73
		101-500	24	24
		501-1000	3	3
5	Degree of competition	To great extent	27	27
		To some extent	55	55
		Not at all	18	18
6	Level of production	Large & complex	20	20
		Medium	60	60
		Low & non-complex	20	20
7	Nature of product	FMCG	16	16
		Textile & Garments	16	16
		Wet grinders	9	9
		Automotive spare parts	38	38
		Pumps & Motors	14	14
		Others	7	7
8	Range of product & services	Large	25	25
		Medium	53	53
		Low	22	22
9	Use of ABC	Yes	0	0
		No	100	100

Source: Computed

Table 6.1, shows 43 percent of the SME's are in the range of 6-10 years of existence. 32 percent of industries in 1-5 years of existence and the rest 25 percent are having more than 10 years of existence. It shows that 46 percent of the SME's fall in an annual turnover of less than 50 Lakhs. 38 percent of the MSME's fall in the range of 50-100 Lakhs annual turnover and 15 per cent in the 100-150 Lakh range and balance 1 percent at the range of 150-200 lakhs. The business classification shows 23 percent of the industries fall in the small - scale classification. While 43 percent fall in the medium scale classification and rest 34 percent in the micro classification. The number of employees which constitute workforce reflects, 73 percent of the industries are having majority of 1-100 employees range. 23 percent of the companies are having employees in the 101-500 range and the rest 3 percent of the firms has an employee structure between 501-1000 range. 27 percent of the firms say that they are facing competition to a great extent. 55 percent say, to a some extent and 18 percent state that there is no degree of competition for them.

The types of products that the SME's were engaged in are those business in Textiles, Garments and FMCG accounts for 16 percent. 14 percent in Pumps & Motors, 38 percent engage in Automotive spare parts, 9 percent among wet grinder manufacturing and the rest 7 percent are into miscellaneous business. It's found that none of the business firms under study had implemented activity-based costing technique in their regular course of its managing their business.

**6.1 WEIGHTED MEAN SCORE AND ANOVA OF COST MANAGEMENT PRACTICES USED IN SME'S**

To compare the mean score on cost management practices, three rating score were used, by assigning score '3' for 'to great extent', '2' for 'Good', '1' for 'not at all' and the results are tabulated below.

**Null Hypothesis:**

H<sub>0</sub>: There is no significant difference in the mean scores on the current costing practices used in the organizations.

**Table No. 6.2**  
**Analysis Of Variance (Anova) of Cost Management Practices among SME's**

Source	Degree of Freedom	Sum of Squares	Mean of Squares	F
Between groups	8	105.789	13.223	104.07**
Within groups	891	113.210	0.127	

\*\*-. Significant at 1 percent level



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Since the F is significant, there is a significant difference in the mean scores on the current cost management practices among SME's. The mean scores are provided as below,

**Table 6.3**

**Mean Score and Ranking of Cost Management Practices of Small and Medium Enterprise Firms in Coimbatore District**

S.No	Cost Management Practices	Mean score	Rank
1	Cost Classification as per CAS – I	1.84	6
2	Preparation of Cost Sheet/Unit Costing	2.03	1
3	Inventory Costing & Valuation	2.03	2
4	Labour costing	2.02	3
5	Overheads costing	2.02	4
6	Cost reduction & Cost control	1.75	7
7	Budgeting & Variance Analysis	1.94	5
8	Activity Based Costing	1.00	9
9	Waste/scrap/spoilage management mechanism in place	1.36	8

The above table 6.3 shows that among the nine costing practices the mean score ranged from 1.00 to an upper limit of 2.03. 'Preparation of Cost Sheet/Unit Costing,' 'Inventory Costing & Valuation' 'Labour costing' are the most frequently used cost management practices among SME's. 'Activity Based Costing' is the least preferred practice.

Thus, it is inferred clear that the firms under study resort to adaptation of traditional costing systems, which confirms the earlier studies done by Ghosh 1987, Lyall 1990, Drury 1993, Mann et.al 1999, Joshi 2001, Joseph & Samuel (2017). Therefore, the authors conclude that the Small and Medium Enterprises (SME's) need to be more progressive and more willing to learn and apply new methods such as activity-based costing to move in the ladder of business excellence and achieve competitive advantage.

## 6.2 Mean and ANOVA Analysis on Factors Influencing Non – Implementation of Activity Based Costing among SME'S

To compare the mean score on factors influencing non – implementation of activity-based costing by the firms, using three rating score by assigning 3 for to great extent; 2 for Good; 1 for not at all and the results are as below.

### Null Hypothesis:

$H_0$  : There is no significant difference in the mean scores on the factors influencing non-implementation of ABC in SME's.

**Table No. 6.4**

**Analysis of Relationship (ANOVA) On the Factors Influencing Non – Implementation of Activity Based Costing**

SOURCE	DF	SS	MS	F
Between groups	15	343.614	22.907	96.45**
Within groups	1584	376.210	0.237	

\*\* - Significant at 1 percent level

Since the F is significant it's inferred that there is significant difference in the mean scores on the factors influencing non implementation of activity based costing among organizations. The mean scores are:

**Table 6.5**

**Drivers Influencing Non – Implementation of Activity Based Costing among SME's With Its Mean Score and Ranking**

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

Obtaining Data is Complex and Cumbersome, No MIS in our firm	2.05	13
Not a Priority for the firm at present given the leadership style	2.99	1

From the above table 6.5, sixteen factors that influence non-adoption of activity - based costing by firms, shows the mean score that ranged from 1.51 to 2.99. The Factor “*Not a Priority for the firm at present given the leadership style*”, secured higher mean score and was ranked first, followed by “*Hard to assign activity cost to products or services*” with rank two. Similarly, “*Not Suitable for the type of production systems being used in our firm*” was third in the row. ‘*Non - Compatibility with existing accounting systems, ABC is just an informational tool*’ were insignificant. Therefore, from the analysis, firms under study were not at all interested to go for implementing activity - based costing technique. This, findings perfectly conform to the earlier studies by Manriquez et.al (2014), Magdey Abdel-Kader & Robert Luther, (2006) and Adelegan, Olatundun Janet (1998). Therefore, the authors conclude that activity-based costing is yet to evolve among SME’s in this part of region. For SME’s to be competitive they need to be more progressive and adoptive to new strategic cost management techniques. Government, Small Industries Associations and Professional Accounting bodies should take on these challenges to educate and train such entrepreneurs in SME’s on the benefits of implementing activity - based costing technique.

**VII. FACTOR ANALYSIS**

To understand the driving forces that contributes to the non - implementation of activity based costing namely, a<sub>1</sub>, a<sub>2</sub>, a<sub>3</sub>,.....a<sub>16</sub> factor analysis is applied to facilitate to group such statements on priority basis based on the strength of inter-correlation called ‘Factors’ and grouped these statements, the results are presented

**RELIABILITY STATISTICS**

The reliability of scales used in this study was calculated by Cronbach’s coefficient alpha,

**Table 7.1**

**KMO and Bartlett’s Test**

Kaiser-Meyer-Olkin	Measure of sample adequacy	0.74
Bartlett’s test of Sphericity	Approx. Chi-square	1104.93
	DF	120.00
	Sig	0.00

**Table 7.2**

**Reliability statistics**

<b>Cronbach’s Alpha</b>	<b>N of items</b>	<b>N of variables</b>
.719	100	16

All constructs obtained an acceptable level of a coefficient alpha above .7, indicating the scales used in this study were reliable.

**TABLE 7.3**

**Factor Loadings on Drivers Influencing Non-Implementation of Activity Based Costing in SME’s In Coimbatore District**

S.N O	FACTORS	FACTORS				COMM UNAL ITY
		1	2	3	4	
1	Lack of Knowledge by Staff in understanding the ABC model	0.46	<b>0.69</b>	-0.05	0.15	0.71
2	No Top Management Support	0.46	<b>0.67</b>	0.12	0.12	0.70
3	Resources Constraint	<b>0.62</b>	0.49	0.03	0.02	0.63
4	Difficulty in identification and Selection of Activities	<b>0.76</b>	0.29	0.13	- 0.17	0.71
5	Not Suitable for the type of production systems being used in our firm	<b>0.82</b>	0.14	0.00	- 0.15	0.71
6	Hard to assign activity cost to products or services	<b>0.75</b>	0.20	0.00	- 0.19	0.64
7	Difficulty in identifying cost drivers	<b>0.89</b>	-0.01	-0.11	0.02	0.80
8	Difficult to embed with information and Communication Technology	<b>0.83</b>	-0.01	-0.09	0.31	0.80
9	High Implementation Costs, than the benefits ABC provides	<b>0.86</b>	-0.02	-0.11	0.26	0.82
10	Non Compatibility with existing accounting systems, ABC is just an informational tool	-0.09	<b>-0.77</b>	0.35	0.12	0.74
11	More Efficient solutions are available than ABC	0.36	<b>-0.69</b>	0.35	0.13	0.75
12	Not Needed now, already my firm is in profit zone	0.11	0.04	<b>0.76</b>	0.01	0.60
13	No idea of immediate expansion of business	-0.13	-0.10	<b>0.86</b>	0.01	0.77
14	Viewed as ABC will do more harm than good	-0.15	-0.43	<b>0.73</b>	0.05	0.74
15	Obtaining Data is Complex and Cumbersome, No MIS in our firm	-0.04	-0.27	0.47	<b>0.56</b>	0.61
16	Not a Priority for the firm at present given the leadership style	0.02	0.12	-0.03	<b>0.90</b>	0.82
	Eigen value	5.05	2.66	2.39	1.44	11.55
	percent Variance explained	31.54	16.65	14.96	9.03	72.18
	Cum percent Variance explained	31.54	48.19	63.15	72.18	

From the Table 7.3 out of the 16 factors influencing for non-implementation of ABC, four clusters has emerged and grouped.



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The clusters explain the total variance of these statements to the extent of 72.18 percent. In order to reduce the number of factors and enhance the interpretability, the factors are rotated and the results are given in table 7.4.

**TABLE 7.4**  
**FACTORS INFLUENCING FOR NON-IMPLEMENTATION OF ACTIVITY BASED COSTING AND THEIR FACTOR LOADINGS**

Factor	Variables	Rotated factor loadings
<b>CHALLENGES</b> (31.54 percent)	Resources Constraint	<b>0.62</b>
	Difficulty in identification and Selection of Activities	<b>0.76</b>
	Not Suitable to the type of production systems being used in our firm	<b>0.82</b>
	Hard to assign activity cost to products or services	<b>0.75</b>
	Difficulty in identifying cost drivers	<b>0.89</b>
	Difficult to embed with information and Communication Technology	<b>0.83</b>
	High Implementation Costs, than the benefits ABC provides	<b>0.86</b>
<b>CONSTRAINTS</b> (16.65 percent)	Lack of Knowledge by Staff /Management Accountant in understanding the ABC model	<b>0.69</b>
	No Top Management Support	<b>0.67</b>
	Non- Compatibility with existing accounting systems, ABC is just an informational tool	<b>-0.77</b>
	More Efficient solutions are available than ABC	<b>-0.69</b>
<b>PREDICTIONS</b> (14.96 percent)	Not Needed now, already my firm is in profit zone	<b>0.76</b>
	No idea of immediate expansion of business	<b>0.86</b>
	Viewed as ABC will do more harm than good	<b>0.73</b>
<b>PRIORITY</b> (9.03 percent)	Obtaining Data is Complex and Cumbersome, No MIS in our firm	<b>0.56</b>
	Not a Priority for the firm at present given the leadership style	<b>0.90</b>

Out of Sixteen factors resource constraints, difficulty in identification and selection of activities, not suitable to the type of production systems being used in our firm, hard to assign activity cost to products or services, difficulty in identifying cost drivers, difficult to embed with information and communication technology, high implementation costs, were grouped together as **“Challenging”** factors that counts for 31.54 per cent. The other four factors namely, Lack of Knowledge by Staff /Management Accountant in understanding the ABC model, No top management support, Non- Compatibility with existing accounting systems, ABC is just an informational tool, More Efficient solutions are available than ABC were such factors classified as **“Constraint”** factor which accounts for 16.65 per cent. The next three factors namely, Not needed now, our firm is already in profit zone, No idea

of immediate expansion of business, Viewed as ABC will do more harm than good constitute as **“Predictions”** Factor accounts for 14.96 percent. Final variables, Obtaining Data is Complex and Cumbersome, No MIS in our firm, not a priority for the firm at present given the leadership style were clustered as **“Priority”** factors which accounts for 9.03 per cent. Thus, the above analysis together explains 72.18 per cent of the variability of all the sixteen factors.

## VIII. SUMMARY OF FINDINGS

This piece of research work was carried out with an intention to know the extent of knowledge of Activity Based Costing is understood by the SME’s and its accountants or entrepreneurs. Analysis reveals that 100 percent of firms understudy do have limited knowledge on ABC but do not practice activity based costing in their firms. There is a significant difference in the mean scores among SME’s (vide table no.6.2). Preparation of Cost Sheet/Unit Costing, ‘Inventory Costing & Valuation, ‘Labour costing’ were the most frequently used cost management practices by the SME’s in this region. ‘Activity Based Costing’ is given least importance and has not been the priority of SME’s. Significant difference is also noticed in the mean scores on the factors influencing non - implementation of activity based costing among organizations (vide table no.6.4) Analysis reveals that, firms under study were not at all interested to go for implementing activity - based costing technique. This, findings perfectly conform to the past studies by Manriquez et.al (2014), Magdey Abdel-Kader & Robert Luther, (2006) and Adelegan, Olatundun Janet (1998). Therefore, the authors conclude that activity-based costing is yet to evolve among SME’s in this part of region.(table 6.5) Thus, the above analysis together explains 72.18 per cent of the variability of all the sixteen factors.

## IX. MANAGERIAL IMPLICATIONS

The Entrepreneurs of SME’s should study the research findings by authors which is concluded by saying Competition, Annual Turnover, Business classification and Nature of product and services engaged by the firms contribute substantially for active consideration and subsequent implementation of activity based costing.

## X. SCOPE FOR FUTURE STUDIES

Our piece of work has an influence on the future research on Activity Based Costing in Small and Medium Enterprises. The sample used in this work is confined to SME’s in South-Western region of India. In addition, further research is encouraged to extend to other regions as India, is poised to see a growth trajectory. Further studies can also be done on firms that are using ABC technique across Coimbatore region and the extent of problems encountered among them.

## XI. CONCLUSION

The authors conclude that Knowledge on ABC among the firms under study was below average, and adoption of traditional costing practices by the firms significantly dominates the decision towards adoption of the ABC technique. The author conclude that the SME's and its officers should be equipped with the knowledge and benefits of the technique which will help them manage the costs of their activities to ensure accuracy in their decision making which will make them reach competitive advantage both in domestic and international business.

## REFERENCES

1. Abdel-Kader, M and Luther, R (2006). Management Accounting practices in the British Food and Drinks Industry. *British Food Journal*, 108 (5), 336-357.
2. Adelegan,OJ (2001) Management Accounting Practices in Nigerian Companies. Retrieved from <https://www.scribd.com/document/43873767/Preview>
3. Annual report 2014-2015, Government of India, on Micro, small and medium Enterprises. (2014).
4. Berliner C., and Brimson., J.A (1988), *Cost Management for Today's Advanced Manufacturing*. The CAM – I Conceptual Design, Harvard Business School Press,
5. Balalaie Somee Sarai, Fahimeh, Bani Khedmat, Somayeh, Navid Talemi, Mostafa, (2013) “ Factors affecting the establishment and development of quality costing in companies producing consumer goods in the Tehran Stock Exchange, Conference Manager, Challenges and strategies, Shiraz.
6. Carengo and Turolla (2010), “The diffusion of Management Accounting systems in manufacturing companies: an empirical analysis of Italian firms. *Studies in Managerial and Financial Accounting*, 20 457-499.
7. Curtis Walker and Nesa L'abbe Wu. (2000). Systematic approach to activity based costing of the production planning activity in book manufacturing industry. *international journal of operations & production management*, 20(1).
8. Dugdale, Jones, TC.,(2002) “The ABC bandwagon and the juggernaut of modernity” *Accounting, Organizations and Society*, 27(1-2), 121-163.
9. Fleischman, & Tyson. (1998). Traditional costing system that is designed to monitor labour cost may not be as useful today as it was in the past”.
10. Fie,Z & Ise, C. (2010). Factors influencing activity-based costing success: A research framework. *International Journal of Trade, Economics and Finance* 1(2),144.
11. Gerdin, (2005)“Management Accounting system design in manufacturing departments: an empirical investigation using a multiple contingencies approach.” *Accounting Organizations and Society*, 30, 99 -126.
12. Gunasekaran, A., Marri, H. B., & Yusuf, Y. Y. (1999). Application of Activity Based Costing with some case studies. *Managerial Auditing*, 14(6).
13. Ghosh B.C., Chan, Y (1997) *Management Accounting in Singapore – well in place?*, *Managerial Auditing Journal*, 12(1) pg.16-18.
14. Hamid Reza Vakilifard., Ramin Jafari Alamdari. (2005) “Investigate the Use of Activity Based Costing in Small and Medium Enterprises” *International Journal of Review in Life Sciences* 5(5), 2015817-829.
15. Hughes S & Gjerde K., (2003). Do different cost systems make a difference? *Management Accounting Quarterly* 5(1), 22.
16. Hughes A. (2005) ABC/ABM- activity based costing and activity based management: A profitability model for SME's manufacturing clothing and textiles in the UK. *Journal of Fashion marketing and Management*, 9(1), 8.
17. Ittner and Larcker (2001). “ Assessing Empirical Research in Managerial Accounting: A Value Based Management Perspective” *SSRN Electronic Journal* 32(1), 349-410.
18. John C. Lere. (2000). Activity based costing is a powerful tool for pricing. *the journal of Business & Industrial marketing*, 15(1).
19. Joseph & Samuel (2017), “Antecedents of Cost Management and Operational Dimensions: A Perspective Study Among select MSME's in Coimbatore District, Tamil Nadu” *Asian Journal of Research in Business Economics and Management* 7(4), 14-24.
20. Jin,Y & Hong.P (2007). “Coordinating global inter-firm product development. *Journal of Enterprise Information Mangement*, 20(5), 544.
21. Kaplan and Johnson, 1987, Monden and Lee 1993, & Ferrara, 1995. (n.d.). Since the mid-1980s, traditional costing has come under intense criticism”.
22. Lavanya Latha, K., & B.E.V.V.N Murthy:. (2009). Problems of Small entrepreneurs in Nellore district. *Journal of Chinese Entrepreneurship*, 1(3).
23. Lucas. (1997). cost may lead to dysfunctional behaviour”.
24. Mario Joao Cardoso Vieira Machado. (2012), *Activity Based Costing Knowledge: Empirical study on small and medium size enterprises*, *Contemporary Journal of Accounting*, 9(18) pg167-186.
25. Maelah. R & Ibrahim D. (2007). Factors influencing activity -based costing adoption in Manufacturing industry. *Investment Management and Financial Innovations*, 4(2), 113-148.
26. Narong D.(2009), *Activity Based Costing and management solutions to traditional short comings of cost accounting*. *Cost Engineering*, 51(8), 11.
27. Robert Luther, & Imad Issa Sartawi. (2011). Managerial practices of quality costing an evidence-based framework.. *international journal of quality & reliability management*,28(7).
28. Siu Y. Chan and Dominica Suk-Yee lee. (2003). An empirical investigation of symptoms of obsolete costing systems and overhead cost structure”. *Managerial Auditing*, 18(2).
29. Owen P. Hall, Jr. Charles J.McPeak, (2011) “Are SME's ready for ABC?” *Journal of Accounting and Finance* 11(4), 11-22.
30. Wien Hsien Tsaiin. (1998). Quality cost management under Activity Based Costing. *international journal of quality and reliability management*, 15(7).

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