

Target Costing: A Tool for Effective Economic Reforms in Global Scenario

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INTRODUCTION

India was committed to a highly protective industrial and foreign trade regime since 1951 due to socialistic policy of governance. The protective regime controlled not only entry into industry and capacity expansion but also technology, output mix and import content. Import control and tariff provided high protection to the domestic industry. Industry suffered the ills of low productivity, obsolete technology and processes. Long lead times and high inventories lead to inefficiencies, and high cost which was passed on to the customers by way of price increases. Shortage, scarcity and premium ruled the roost ushering virtually no or little investment in technology and in upgrading processes, which resulted in inferior quality in all sectors.

THE EFFECT OF ECONOMIC REFORMS

The economic reforms brought a sea change in the industrial environment with intense domestic competitive pressures and entry of global players. This forced the organisations to rethink their competitive strategies as inefficiencies could not be passed on as price increases to customers as in the past. The immediate need was to focus on inefficiencies in all areas and cut costs to retain / reduce selling price (which was often the case) to maintain market share and healthy bottom line. The competition both from domestic and global players became cut throat, with quality driven up and costs pushed down. All this supported with the latest technology products and performance. The customer cry was 'Value for Money' and the investors focused for leap in 'Shareholder Wealth'. Industry was pushed to the wall, which compelled them to intensify all over the cost cutting effort and also to critically focus on managing costs effectively. To implement market - driven management policies across the organisation, measurement and cost control systems must be designed to motivate the desired consumer - oriented behavior. Thus strategies that determine the direction of product innovation have become more crucial to corporate management today than ever before. In this situation therefore, target - costing system (**Japanese**) **has been identified as the system, which helps managers to push forward this badly needed strategy.** The increasing popularity of the system as opposed to "cost plus" (Western), has influenced my study in this subject.

OBJECTIVES

To study the usefulness of Target Costing technique in profit planning in competitive market.

Sample Design

Researcher has selected sample of 56 manufacturing companies for study representing 23 different types of industries consisting of Pharmaceuticals, Chemicals, Metals, FMCG, Automobiles, Electronics, Textiles, and Paints etc.

Statement of Hypotheses

Profit planning can be made effective with Target Costing.

LITERATURE REVIEW

Cooper and Slagmulder (1999), Kato Y. et al (1995) state that Target Costing is not just a cost reduction technique or control framework, but part of a comprehensive strategic profit management system. Important techniques in designing cost out of the product include value engineering, design for manufacture and assembly and quality function deployment. Lee, J.Y (1994) considers achievement of profit margin to be an important Target Costing goal. He states the traditional idea of "How much will the product cost?" is replaced with "How much can the product cost?" Butscher and Laker (2000) state, to guarantee achievement of target margins, it is important to position these products within the market's acceptable price range and within the manufacturer's acceptable cost range. This could mean the decision of not to launch the product if the target cost is not achieved. Cooper and Chew (1996) state target costing is primarily a technique to strategically manage a company's future profits. It achieves this objective by determining the life-cycle cost at which a company must produce a proposed product with specified functionality and quality if the product is to be profitable at its anticipated selling price. Thus it should include any costs that are driven by the number of units sold. If a company accepts responsibility for disposing off a product at the end of its useful life, these costs are included in the target cost. Gagne and Discenze (1993) : Generating higher profit margins is one of the company's goals, and cost reduction is one way to achieve this goal. The Japanese through Target Costing have provided guidance on how management accounting can play a significant role in creating sustainable competitive advantages for a firm. Old ways of product costing blunt a firm's ability to compete effectively and hinder their ability to focus on world class performance. Dutton and Anderson (1998) consider target costing an important tool in multi-year product and service, profit, and cost planning. The best practice firms such as Caterpillar aggregate their profit and cost plans to manage profits at the enterprise and product family level. According to Khandwalla (1972) the total amount of resources dedicated to cost management is high for any company in an intensely competitive environment. To survive, companies must look for ways to reduce costs year after year and at the same time become experts at developing products that deliver the quality and functionality that customers demand, while generating the desired profits. A unique strategy of ensuring that products are sufficiently profitable when they are launched is to subject them to target costing. The target profit for a specific product is based on long-term profit strategies for the company as well as short term market share strategies for the product. According to Cooper and Slagmulder (1997) Target profit is typically based on historical returns on sales and return on assets as well as profit planning goals. Helms et al (2005)

further states, the desired profit margin will always be greater than the cost of capital but is influenced by macro environmental forces as well as shareholder goals. Monden Y. and Hamada K.(1991) state some auto companies use the payback period method as an aid in assessing profitability. The payback period should normally cover no more than two model lives; i.e., eight years. In the case of a specific facility used exclusively by a certain model, the payback period is usually no more than four years. For a minor model change the period is two years. According to Cooper, 1995; Horvath, 1993; Yoshikawa et al., (1993) Target Cost Management has emerged to meet the need for product-specific value measurements. The goal of Target Cost Management is to build profit and performance requirements from the market by controlling the relationship between cost and revenue. When the actual product cost exceeds the target cost, the cost planning process is used to question the reasons for the profitability gap and to identify ways to eliminate the discrepancy.

PRODUCT DEVELOPMENT STRATEGY

The greatest value of target costing lies in its ability to bring the challenge of the marketplace back through the chain of production to product designers. Target costing ensures that development teams will bring profitable products to market not only with the right level of quality and functionality but also with, appropriate prices for the targeted customer segments. It is discipline that harmonizes the labour of disparate participants in the development effort, from designers and manufacturing engineers to market researchers and suppliers. Target costing ensures that success with the customers will yield economic success for the company. Target costing is not a mere costing technique it is a comprehensive strategic profit management system since it

provides opportunities for substantial growth in profits when applied throughout the value chain.

TARGET COSTING USED GLOBALLY

Target costing, was developed in Japan in 1965. Japanese firms including Toyota, Nissan, Sony, Matsushita, Daihatsu, Canon, Olympus Optical, Komatsu, Topcon, and Isuzu, have adopted target costing to achieve global economic success. Tani et al (1994) in their study found that 60.6% from the sample of 180 listed Japanese manufacturing companies use target costing to compete globally. In United States Boeing, Caterpillar, Rockwell, Eastman Kodak, Texas Instruments, Mercedes Benz, Daimler Chrysler, and Continental Teves (an automotive brake supplier) are leaders in implementing the target costing process. The study by Chenball and Langfield-Smith (1998) found that among 78 large Australian manufacturing companies, 38% claim to use target costing to gain competitive advantage. Dekker & Smidt survey study among Dutch listed manufacturing companies found 22 of the 32 responding companies using target costing practice to launch profitable products. Thus target costing technique has been successfully used by companies all over the world for cost reduction and profit planning.

Of the fifty six companies surveyed, fifty one companies responded 'yes' to the question do you recognise the need for target costing. Amongst these fifty one companies, forty seven companies responded that they had actually used this technique

Concentrating on these forty seven companies, that have adopted target costing technique, responses to the question 'How has target costing benefited your company? Please rank in order of preference where 1= Extremely Important was analysed.

Table-1 Bivariate table showing preference for "Decrease in Cost" and "Increase in Profit"

X/Y	1	2	3	4	5	6	7	Total
1		*32	2					34
2	9							9
3				1				1
4	2							2
5								
6			1					1
7								
Total	11	32	3	1				47

X=Preference for adoption in Target Costing for Decrease in Cost

Y = Preference for adoption in Target Costing for Increase in Profit

*32 in cell (X=1,Y=2) indicates thirty two of the forty seven companies adopting Target Costing gave 1st Preference to decrease in cost and 2nd preference to increase in profit.

Table 2 Marginal Table for Preference in Increase in Profit (Y)

Preference for Increase in Profit (Y)	Number of Companies	Percentage Frequency	Cumulative Percent
1	11	23.40	23.40
2	32	68.09	91.49
3	3	6.38	97.87
4	1	2.13	100.00
5	-	-	100.00
6	-	-	100.00
7	-	-	100.00
Total	47	100.00	

Almost 23.40% of the companies using target costing stated that the purpose was for increase in profit which by

implementing the technique was achieved. As there is very little difference between the first and second preference, as

decrease in cost leads to increase in profits the cumulative preference is 91.49%, shows that target costing is an effective tool for increase in profit and therefore profit planning.

To find the association between X and Y Karl Pearson Co-efficient of Mean Square Contingency {C} is used

Computation of C

$$C = \sqrt{\frac{\text{CHI-SQUARE}}{N + \text{CJ-JJ-SQUARE}}}$$

Where CHI-SQUARE = $u^2/E-N$
 Maximum permissible value of C is 0.9258.

Table 3 Tables of 'O' (Observed Frequencies)

X/Y	1	2	3	4	5	6	7	Total
1		*32	2					34
2	9							9
3				1				1
4	2							2
5								
6			1					1
7								
Total	11	32	3	1				47

Table 4 Table of E (Expected Frequencies)

X/Y	1	2	3	4	5	6	7
1		23.15	2.17				
2	2.11						
3				0.02			
4	0.47						
5							
6			0.06				
7							

E for {i,j}th cell = [(ith Row total) x (jth Column total)] / Grand Total
 CHI - SQUARE = 112.6425
 C = 0.8399

The calculated value is closer to Theoretical C, this shows strong positive association between two attributes X and Y

Thus it proves the hypotheses that target costing is a technique for cost reduction and profit planning.

CONCLUSION

Although target costing in its simplest form is merely a calculation - target price minus margin, today's competitive environment makes target costing an indispensable, strategic management technique. It can be successfully integrated into new product development and portfolio management process to provide the firm with economic and strategic benefits. A key element to consider is the benefit of abandoning projects which will not be economically viable in today's competitive markets and focusing typically limited resources on those opportunities which will provide adequate returns to the company. Target Costing provides guidance on how to create sustainable competitive advantage for a firm. Old ways of costing blunt a firm's ability to compete effectively and hinder their ability to focus on world class performance. The effort has its cost, but the cost of not making the effort is greater.

REFERENCES

[1] Cooper, R. (1995).When lean enterprises collide - competing through confrontation, Boston M. A.: Harvard business school press.
 [2] Cooper, R. and Slagmulder, R. (1997).Target costing and Value Engineering, Portland, OR: Productivity press.

[3] Horvath P. (1993).Target Costing State of the Art Report Arlington T X: CAM - 1.
 [4] Banham, R. (May, 2000). 'Off Target?', CFO, Vol. 16, Issue 6.
 [5] Chenball, R. and Langfield-S. K. (1998). 'Adoption and benefits of management accounting practices an Australian study', Management accounting research, Vol. 9.
 [6] Cooper, R. and Chew, W. B. (Jan-Feb.,1996). 'Control tomorrows cost through today's designs', Harvard business review, Vol. 74, Issue 1.
 [7] Cooper, R. and Slagmulder, R. (March, 1999). 'Supply chain management for lean enterprises: interorganizational cost management', Strategic finance, Vol. 80, Issue 10.
 [8] Dekker, H. and Smidt, P. (2003). 'A survey of the adoption and use of target costing in Dutch firms', International journal of production economics, Vol. 84, Issue 3.
 [9] Helms, M. M. et al., (2005). 'Managerial implications of target costing', Competitiveness review, Vol .15, Issue 1.
 [10] KatoY, etal (Spring, 1995). 'Target costing: anintergrative management process ', Journal of cost management.
 [11] Khandwalla, P.N. (Autumn, 1972). 'The effects of different types of competition on the use of management controls', Journal of accounting research, Vol .10.
 [12] Lee, J. Y. (January, 1994). 'Use target costing to improve your Bottom-Line' Journal CPA, Vol .64, Issue I.
 [13] Monden, Y. and Lee, J. (August,1993). 'How a Japanese auto maker reduces costs', Management Accounting.

- [14] Tani, T. et al., (1994). 'Target cost management in Japanese companies: current state of the art', Management accounting research, Vol .4.
- [15] Yoshikawa, T. et al., (1993). 'Contemporary cost management, CIMA London.
- [16] Dutton, John J. and Anderson, Arthur (July, 1998). Target Costing: A Strategic Business Methodology Product Development & Management Association [online], Vision e Magazine.
- [17] Gagne, M. and Discenza, R. (May, 1993). New Product Costing, Japanese style [online], The CPA Journal Online.