

The Extent of Using the Target Costing Technique by Jordanian Industrial Shareholding Companies

Abdul hakim Mustafa Joudeh

Faculty of Administrative Sciences and Finance, Isra University/ Amman, Jordan

Kayed Abdllah Al-Attar

Faculty of Administrative Sciences and Finance, Isra University/Amman, Jordan

Sliman S. Alsoboa

Faculty of Business Administration and Economics, Al-Hussein Bin Talal University/ Ma'an, Jordan

Abstract

The current research aims at examining whether or not the Jordanian Industrial Public Corporations use the target costing technique. For this purpose the researchers distributed around 70 questionnaires, while just 52 questionnaires of them are examined. Each questionnaire encompasses 16 questions, whereas 8 of these questions are addressed to all companies; while the remaining questions are addressed to the companies those are used the target costing system. The results reveal that 35% of companies use the target costing system, whether partly 27% or totally 8% and 65% of companies don't use this system. The study concludes that the major reasons behind not using the target costing system; are due to the lack of target costing knowledge and the management supporting is not enough in addition to the old habits in calculating value. The study recommends Jordanian companies to use the target costing, as it is deemed as an essential part of the management of total cost.

Keywords: Target Costing Technique "TCT", Shareholding Companies, Customer Satisfaction.

1. Background

The system of target costing plays a pivotal role in creating the costs' management, as it leads to decrease the costs and enhance products without compromising the quality of the products. In addition it leads to clients' satisfaction, subsequently attaining the highest possible rate of profits and sales' volumes. This system appears through studying the market and the conditions of its forces. The reason behind that is to recognize the type of products which are required by customers according to the characteristics and prices. One of the main reasons for the trend to the target costing system is the shortcomings of traditional systems or stiff competition under globalization and the free trade agreement. Indeed, there are many countries rely on this system. For instance, during the period 1960s and 1970s, Japan started to use the system of target cost (Blocher, et al., 2010). However, the case of Jordan is not clear yet, thus to define whether or not the Jordanian industrial corporations use the costing target system; this study is established.

1.1 The Study Problem

Throughout the world, there are many countries rely on the target costing system. However, the case of Jordanian companies is not obvious yet. Therefore, the question arising here is that to which extent Jordanian industrial corporations use the target costing system.

1.2 Aim and Objectives

This research aims at reviewing the use of target costing system in Jordanian industrial Companies. The following objectives are derived:

- 1- Identify the reasons that support or restrict the Jordanian companies from using the target costing system.
- 2- Identify the company's properties for employing the target costing system.
- 3- Identify the advantages of applying the target costing system.

1.3 The Study Significance

This research will contribute in providing comprehensive information regarding the concept of target costing system and the extent of using the target costing system by the Jordanian industrial companies.

1.2 Theoretical Framework and Related Studies

1.2.1 Theoretical Framework

The term "Target Costing" is defined as a long term – cost per unit of product or service that enables the company to achieve the target operating income for the unit when it is sold by target costing (Horngren, et al., 2012: 462). Authors including Blocher, et al., (2010: 553) states the there are some advantages for applying this system. Some of these advantages are described below:

- Increases the customer satisfaction because of that the product design focuses on customer's value and satisfaction of their desires and meet their preferences, cost reduction on products through more effective and efficient designs.
- Helps company to achieve desired profit margin on the products, whether new or recycled design.
- Enables the company to reduce the total time to develop each product through cooperation and coordination between design, production and marketing directors.
- Helps to secure the competitive level of the competitors at all times and particularly in times of economic recession.

The Major Challenges of Employing the Cost Target Technique

Despite of the importance and advantages of applying the TCT; there are some difficulties try to restrict the entrance of the target costing system. These difficulties are as follows¹:

- Cost target entrance requires several organizational changes across the different functional areas.
- Target costing activities require long working hours and this leads to pressure on team work.
- The commitment of managers and system routines and their adherence to traditional concepts and to fight the change and liability.
- Delete some of the products' costs and use unsuitable manners of those are supposed to allocate this system indirectly. cost allocation and downloaded products, and overheads for head of company activities at random and unjustified manner.

1.2.2 Related Studies

Abdeen (2015) aims to identify the extent of application of the entrance target costing for supporting the competitiveness of ready mix concrete factories in Gaza strip and the obstacles to its application. The study finds that the ready mix concrete factories in Gaza strip apply the entrance of target costing also use modern methods to reduce costs as it does not affect the quality.

Alkababji (2014) aimed to identify the availability of viable application of target costing and value engineering as an entrance of reducing costs in Palestinian Contribution industrial companies. The results showed that the industrial companies have viable application of target costing entrance, it also shows that companies are aware of the concepts, principles and the importance of using the entrance of cost target of management its costs and improve profitability and that companies are using value engineering entrance to decrease costs in order to reach to the target costing.

Halas and Haddad, (2012) aimed to recognize the extent of the application of the target costing entrance in worked Palestinian industrial contribution companies in Gaza strip. The results showed that industrial companies operating in Gaza strip are aware of and understand the concept of target costing and it doesn't use equivalent cost target in modern scientific method in reducing its costs.

Yazdifar and Askarany (2011) aimed to make a comparison to adopt and apply the target costing in The United kingdom; Australia and New Zealand by apply it on qualified administrative accountants who have legally administrative accountant and working in industrial and service companies in the previous countries. through testing the level of adoption and application of target costing approach; the results showed that the prevalence of using the target costing approach between industrial and service companies in the mentioned countries but there are substantial differences in the level of application between industrial and service companies.

Basheer (2010) aimed to evaluate traditional cost systems and ways to develop it and study the role of target costing system to achieve a competitive advantage in manufacturing oil and gas companies to enable them to survive in global markets. The study showed that the distribution of costs is based on unfair efforts, the application of the systems of cost based on activity indicates the presence of an appropriate environment for the application of target costing in sufficient degree, as well as supplementary industries markets and the company's transference from public ownership to participation is considered a way to implementation target costing due to increased interaction of the company with the surrounding environment circumstances.

Kocsoy, et al. (2008) aimed to find how companies can make a benefit from modern technologies in management accounting, notably the system of target costing, especially in the light of the rapid developments in technology and changes in customer expectations. The study showed that the majority of companies operating under competitive market conditions in order to reap the expected interest costs by giving greater importance to determine customer expectations before the product design and following parallel competitive strategies.

¹ Garrison, et al. (2010: 520-522); Jareera (2011: 161)

1.3 The Study's Methodology & Data Collection

- Methodology

After reviewing the study objectives, the study followed the quantitative method to attain aims and objectives. Specifically, we adopted the SPSS software to achieve aims and objectives.

- Data Collection

In this study we formulated a questionnaire as a tool for collecting data. Each questionnaire encompasses 17 items, eight of them are addressed to all companies that are using the target costing or not. The remaining nine are addressed to the companies those are using the target costing system. We distributed 70 questionnaires to all Jordanian industrial companies; those are reached the number of 70 public corporations in 2015.

1.4 Practical framework

This chapter is constructed to analyze the study data discuss the attained findings.

1. See table 1, 2, 3, 4, 5, 6 and 7 in appendix I, for descriptive analysis.
2. Using Target Costing and Target Costing Users. In this section the set of documented results are split according to the use of target costing and the users of target costing as shown below:

First: Using Target Costing Technique

This part consists of eight questions addressed to many companies which are used and do not use the target costing. We note that the companies which use the target costing are 18 companies with a percentage of 35% out of 52 companies, while the companies which do not use the target costing are 34 companies with a percentage of 65%. By the point of researchers view the using of target costing technique is considered less than the companies which don't use the target costing. See table 8 in appendix I.

The results also reveal that the main reason to not using the target costing in companies is the lack of knowing the target costing, supporting management is not enough and old habits to calculate cost. The researchers see that the main reason may be due to unfamiliarity with the concept of corporate managers of the target costing and lack of knowledge in this field, if this reason, it is appropriate to assume that the target costing will be more useful and widespread if companies got more information about it. See table 9 in appendix I. in addition, see table 10 in appendix I for the name companies which use or not use the system. Check table 11 for the level of competition in the Jordanian Industrial companies which don't apply the costing system. Table 12 in appendix I, demonstrate the number of new products in the last five years. Table number 13 shows that total scientific breakthroughs in the last five years. Table 14, describes the effect of target costing on customer tastes over the last five years.

Second: Target Costing Users

This section consists of nine questions addressed only to the companies that use the target costing. Table number 15 concerns of the applied pricing method in the company. Table 16 tries to define the forms of target profit applicable to the company. Table 17, endeavors to determine the departments which participate in the processes of target costing. Table 18 focuses on finding the methods for setting goals. Table 19 shows the main aims for using the target costing system. Table 20, explains the most comprehensive costs in the processes. Table 21 describes the benefits of using the costing target system. Table 22, explains the relationship with suppliers and customers. Finally, table 23 defines the used methods and techniques in product development.

Conclusion

Tis research aims at examining whether or not the Jordanian Industrial Shareholding Companies use the target costing. For this purpose the researcher distributed around 70 questionnaires, while just 52 questionnaires are tested. Thus by using the SPSS software, the results show that just 18 employ the target costing system, with a percentage of 35%. While, around of 34 companies don't use the target costing system. These companies don't use the system due to the lack of the target costing knowledge and the support of management is not enough also the old habits to calculate cost. The study also shows that the level of competition faced by companies these companies high compared with the companies that use the system. The companies that use target costing had provided new products in market during the last five years more than companies that do not use the target costing. Furthermore, there is an effect of the target costing on the customer's tastes over the last five years in the companies that use the target costing, but there is no effect of the target costing on the customer's tastes over the last five years in the companies that do not use the target costing. Eventually, the study recommends the Jordanian companies that to reduce the reasons for not using the target costing as well as to activate the role of universities, institutes and interested in the dissemination of information which is necessary to target costing to increase the employ of target costing in the future.

References

Abdeen, H. (2015). Target Costing Entrance to Support the Competitive Capacity for Ready Concrete Factories

- in Gaza Strip – Empirical Study” Al Aqsa University Magazine, Human Science Series, Ninth Folder, First Number, p 293.
- Basher, F. (2010). The Use of Target Costing Method for Cost Reduction in Oil and Gas Companies in the Republic of Libya Under Environmental Developments and Quality Requirements. MA Thesis in Accounting Unpublished Arab Academy for Financial and Banking Science, Faculty of Business Administration.
- Blocher E., Stout D., Cokins G. & Chen K. (2010) Cost Management - A Strategic Emphasis. (5th ed). McGraw-hill Irwin.
- Halas, S. and Al-Haddad, M. (2012). The Extent of Target Costing Application in Palestinian Industrial Companies in Gaza Strip. Islamic University Magazine for Administrative and Economic Studies, Islamic University, Gaza, Palestine, Folder 20 (2), pp. 301-330.
- Hornigren C., Datar M. S., Rajan V. M. (2012). Cost Accounting: A Managerial Emphasis. (14th ed). Pearson Education Limited.
- Garrison, R. H., Noreen, E. W., and Brewer, P. P. (2010). Management Accounting. (14th ed) The McGraw-Hill Companies Inc.
- Jareera, T. (2011). Pricing Approach Based on Target Costing and Its Applicability in Drugs Sector and Medical Industries in Jordan– An Empirical Study. Studies Magazine for Administrative Sciences, the University of Jordan, Folder 38(1), pp. 161.
- Kocsoy, M., Gurdal, K., and Karabayir, M. E. (2008). Target Costing in Turkish Manufacturing Enterprises. European Journal of Social Sciences, 7 (2), pp. 92-105.
- Al Kababji, M. (2014) The Extent of Application the Target Costing and Value Engineering as an Entrance to Reduce Costs in Public Palestinians Contribution Companies” Studies Magazine, Administrative Science, Folder 38: pp. 187.
- Yazdifar H., & Askarany D. (2011). Comparative Study of the Adoption and Implementation of Target Costing in UK, Australia and New Zealand, International Journal of Production Economic. [Online]. Available at: <http://ssrn.com/abstract=1929236>.

Appendix I

The following tables show the study data and statistics summary

Table (1): Statistics of the Distributed & Retrieved Questionnaires

Number of distributed questionnaire	Number of retrieved questionnaire	Response rate
70	52	74%

Table (2): Distribution of the Study Sample Relying on Ages

Variable	Repetition	Percentage %
Less than 30 years	6	12
30 to less than 40 years	24	46
40 to less than 50 years	10	19
50 to less than 60 years	8	15
60 years or more	4	8
Total	52	100

Table (3): Educational Qualification:

Variable	Repetition	Percentage %
Bachelor	39	75
Master	8	15
PhD	2	4
Other	3	6
Total	52	100

Table 4: Distribution of sample members by specialization

Subject	Repetition	Percentage %
Accounting	31	%60
Business Administration	8	%15
Financial and banking management	6	%12
Economic	2	%4
Other	5	9%
Total	52	100%

Table (5): Distribution the Study Sample According to their Positions.

Variable	Repetition	Percentage %
Financial manager	8	15
Assistant financial manager	8	15
Accountant	32	62
Internal auditor	3	6
Other	1	2
Total	52	100

Table (6): Experience Years in the Current Job

Variable	Repetition	Percentage %
Less than 5 years	5	10
5 to less than 10 years	21	40
10 to less than 15 years	8	15
15 to less than 20 years	10	19
20 to less than 25 years	2	4
25 years and more	6	12
Total	52	100

Table (7): The period of practicing company its activities.

Variable	Repetition	Percentage %
Less than 10 years	19	37
10 to less than 20 years	5	10
20 to less than 30 years	23	44
30 to less than 40 years	5	9
Total	52	100

Table (8): Using or not Using the Target Costing in the Company.

	Number	Percentage %
Target costing is unfamiliar and not taken into account	29	55
Trying to use the target costing but it was rejected	2	4
Will use the target costing in near future	3	6
Target costing is used at the moment but partially	14	27
Target costing is used fully at present	4	8
Total	52	100%

Table (9): Reasons of not Using the Target Costing Technique.

	Arithmetic average
Lack of knowing the target costing	4.57
Old habits to calculate cost	3.77
There is not full support for information technology	2.90
The target costing is very complicated	2.86
There are more important things to do in company	3.07
Supporting management is not enough	4.43
The target costing is not suitable in our company	2.87
The staff is not ready for change	3.21
Using target costing does not exceed the costs	2.87
Gathering information takes a lot of resources	2.76
We don't get a result of the use of target costing	2.84
Target costing puts everyone under strong pressure	3.29
Lack of education and experience	3.22
Lack of information which the target costing needs it	3.68
Lack of resources to start the use of target costing	3.44

Table (10): The Company's Industrial Sector

Sector	Total number #companies	Yes		No	
		No.	%	No.	%
Drugs and Medical Industries	5	3	17	2	6
Chemical Industries	4	2	11	2	6
Paper and Cartoon Industry	2	0	0	2	6
Printing and Packaging	0	0	0	0	0
Food and Drinks	10	3	17	7	20
Tobacco and Cigarettes	1	0	0	1	3
Extractive and Mining Industries	11	5	28	6	18
Construction and Engineering Industries	13	4	22	9	26
Electrical Industries	3	1	5	2	6
Clothes, Textile and Leather Industry	2	0	0	2	6
Glass and Ceramic Industries	1	0	0	1	3
Total	52	18	100%	34	100%

Table (11): The Competition's Level

		Yes		No	
		Number	Percentage	Number	Percentage
1	Very much level	1	6	2	6
2	Very	5	28	9	26
3	Moderate	8	44	11	32
4	little	2	11	8	24
5	Very little	2	11	4	12
Total		18	100%	34	100%
Arithmetic average		3.85		3.53	

Table (12): Number of new products during the last five years

Using the target costing	Arithmetic average
Yes	3.66
No	2.74

Schedule (13): The Total Scientific Breakthroughs in the Last Five Years.

Using target costing	Arithmetic average
Yes	2.48
No	2.21

Table (14): The effect of target costing on customer tastes over the last five years.

Using target costing	Arithmetic average
Yes	3.62
No	2.77

Table (15): Applied Pricing Method in the Company.

	Arithmetic average
Pricing according the cost	3.21
Pricing according the competition	3.89
Pricing according the Customer value	3.41
Pricing according the market price	4.23
Pricing based on price of last year based on inflation rate	2.45

Table (16): Forms of Applicable Target Profit in the Company.

	No	Percentage %
Operating profit	2	11
Earning before interests and taxes	7	39
Net margin	5	28
Return on investment	3	17
Net present value	1	5
Total	18	100%

Table (17) Departments which Participate in Target Costing Processes.

	Arithmetic average
Management accounting / controller	3.75
Finance	2.74
Management	3.66
Board of executive	2.80
Accounting	2.91
Product development	4.48
Product design	4.42
Purchasing	4.25
Product planning	3.67
Product production	3.77
Quality insurance	3.31
Personal	2.79
Marketing	4.11
Sales	4.28
After Market Service	3.13
Distribution and logistics	3.22

Table (18): Method for Setting Goals.

	Percentage	
	Yes	No
Targets for all suppliers	100	-
Suppliers to put aims	22	78
Targets for suppliers in the same group	-	100
Targets for the important suppliers	17	83

Table (19): Motivations of Setting Goals.

	Percentage %	
	Yes	No
Target costing for product groups	28	72
Target costing for products	78	22
Target costing for product functions	56	44
Target costing for departments / functions	17	83
Target costing for articles / components	72	28

Table (20): The Most Comprehensive Costs in the Processes

	Percentage
Direct materials	83
Direct labor costs	83
Manufacturing cost	72
Selling and marketing costs	17
Administration costs	17
Direct cost of machine use	44
Cost of bought services	61
Costs of material purchasing	61
Distribution and logistics costs	56
Trial production	28
Disposable / recycling costs	17
Customer costs (e.g. repairs)	17
Product development costs	44

Table (21): Benefits of Employing the Technique of Target Costing.

	Percentage %
Cost awareness	28
Focus on profitability	17
Cost reducing	44
Total view of project	11

Table (22): The Relationship of Suppliers with Customers.

	Arithmetic average
Coordination of product / process design with suppliers	3.58
Involvement of suppliers in products design	3.43
Supplier cooperation in making products customer focused	3.73
Main suppliers are dependent on us for survival	2.78
Training and support of most valuable suppliers	2.83
When supplier reduce our cost, we share profit made by the reduction	2.52
Use of inputs from customers for product design	4.04
Information gathering from customers about products (eg. Surveys)	3.78
Gathering and distribution of feedback from customers after using products	3.71

Table (23): The Used Methods and Techniques in the Product Development

	Arithmetic average
Value engineering	2.78
Benchmarking	2.66
Reverse engineering	2.66
Re –engineering	2.78
Costs tables	3.23
Activity based costing (ABC)	2.56
competitor cost analyses	3.14
Quality policy	3.47
Quality target	3.34
Quality system	3.11
Quality function development	3.44
Computer-aided design	3.84
Computer-aided manufacturing	3.56
Computer-aided engineering	3.07
Suppliers valuation	3.68
Product planning (eg. product mix for several years)	3.79
Profits planning for several years	3.55
Trial planning / production	3.25
ISO-program (e.g. 9000)	3.73
Networks planning	2.67
Design for manufacturing and assembly	3.12
Cost design	3.37