

Impact of Management Accounting Techniques on Achieve Competitive Advantage

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Abstract

Presently, economic and technological developments are growing faster in an unparalleled way. In that regard, it has made intense competitive and significant role in supporting the economy. Also, it is considered as the most affected one by technological developments such information technology. The study covers seven Iraqi for soft drink firms a survey was conducted using a quantitative approach where the researchers distributed 64 questionnaires to select respondents. The response rate was 78 percent out of the total questionnaires distributed. Management accounting techniques is an independent variable which consists of six tools, namely, **TQM** ⁽¹⁾**BPR** ⁽²⁾**ABM** ⁽³⁾**ABC** ⁽⁴⁾**TC** ⁽⁵⁾**JIT** ⁽⁶⁾ and was examined in relation to competitive advantage factors as a dependent variable which comprises cost leadership, differentiation and focus. The value of the study is that it points out the influence of Management Accounting Techniques on competitive advantage factors in Iraqi soft drink firms in order to improve firm performance and efficiency. The second aim of this study is to address this gap between the theory and practice of management accounting by exploring the extent of the application of managerial accounting techniques and influence on strategic competitive advantage factor in (ISDFs). The aim of study is to determining the influential role of information systems upon the competitive strategies, in (ISDFs) that follows the competitive advantage which they seek to achieve. The entropy maximum general method has been used to analyze the questionnaire survey. The findings reveal that there is a significant positive relationship between Management Accounting Techniques and competitive advantage.

Keywords: Management Accounting Techniques, Competitive Advantage, entropy, Iraqi Soft Drinks Firms.

1. Introduction

During the past two decades, the concept "management accounting" is concerned with collecting and presenting internal financial information in order to facilitate decision-making process. The fact that management accounting is not needed to obey the national accounting standard, it permits business to customize the methods of management accounting as per company's demand. As a step of this customization, some advanced quantitative and many qualitative approaches in conjunction with the traditional approach have been realized/developed/initiated to take care of the information need in the process of decision making.

The concept "management accounting is a novel discipline which is still in the evolution process/age/stage. Therefore, it undergoes the same impediments as a relatively new discipline has to face, sharpening of analytical tools and techniques advancement bringing uncertainties about their usage/application.

There is always a temptation to make an easy course of arriving at decisions by intuition rather than taking the difficulty of scientific decision making. It derives its information from financial accounting, cost accounting and other records. Management accounting will not replace the management and administration. It is only a tool of management Of course, i will prevent the management from being immersed in accounting routine, process the data and put before the management the facts contradicting standard for the management to take

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- (1) Total Quality Management
 - (2) Business Process Reengineering
 - (3) Activity Based Management
 - (4) Activity basic cost
 - (5) Target Costing
 - (6) Just in Time

decision by the rule of exception (Yeshmin and Hossan, 2011).

The subject of the study has a special importance in making the firms businesses succeed in general and the industrial firms especially:

In that regard (Anthony, 1993) agrees the conventional approach to management accounting discloses an opposition among the processes of strategic management, management control and operational control.

One of the goals of this study has provide of managerial accounting information systems in the firm will help increase the firm's desire to use the managerial accounting instruments to achieve competitive advantage.

Many organisations formally or informally combine their strategic concerns and priorities with management accounting information in controlling their operational activities and engaging in longer-term decision making. While the concept "strategic management accounting is peculiar to the level that it denotes the integration of external with internal financial and non-financial information, it is also used as an umbrella term to include cost management approaches such as activity based management (ABM), business process reengineering (BPR), total quality management (TQM), activity-based costing (ABC), target costing (TC), just in time (JIT) among others. Given that these approaches to managing costs have very particular roots where they are found to be present, it should not come as a surprise that SMA is deployed in some organisations in ways that are highly enterprise specific. Diverse notions of SMA exist. Although management accounting techniques such as standard costing, cost-volume-profit analysis, responsibility accounting and activity based accounting can be accorded quite precise definitions, their deployment and the roles they play within organisations tend to be contextually determined. SMA should likewise not be expected to evidence a level of operational rigor that is standard across systems or organisations since it represents a variety of different management possibilities.

The study by the Ainikkal (1993) and Hawkes et al. (2003) studies, but inconsistent with respect to individual techniques.

The active managerial accounting information systems in the company will help increasing the firm's desire to use the managerial accounting instruments to achieving competitive advantage. And/or The Managerial accounting information systems (strategic information) is considered components of managerial accounting instruments to achieving competitive advantage.

Despite the need for a tool by Iraq managers to deal with the effect of local and global competition, and the need to be educated about cost management practices as a strategic instrument; little has been done about these issues. The fact that many Iraqi firms that there is increasing competition at home suggests there is a need to make a study on target costing and competitive advantage in the Iraq environment.

When reviewing some previous studies observed that is necessary to interest in flow of information from inside and outside to the company through the company's relationship with the each of the customers and suppliers on consideration, supports the decision makers. Furthermore, it is necessary to integration of the causes of cost, especially with regard to the customers and the suppliers within the total cost of production. Simultaneously, it is Necessary to coordinate with customers to identify the appropriate technology and to understand the new technology and providing an appropriate environment for application in productions future.

The main objective of this study is to highlight the importance of cost management techniques from a strategic perspective adopted as the basis for continuous improvement of competitive advantage to support competitiveness through the implementation of strategies of cost leadership or differentiation or focus. The Pursuit should to knowledge of the effect of using these managerial accounting techniques in the factors of strategic competitive advantage that desires to implement by soft drinks companies in Iraq in an environment of the New World Order.

Tillema (2005) study is one of the published studies using a case method in contingency framework. By using another method than the postal survey method, it is possible to get a more in-depth view of the variables and their relations. Also, there is an interest in the more general issue of whether management accounting practices in Europe are becoming part of global management accounting practices and whether the same management accounting practices are being used in a variety of countries (Brierley et al. 2001, Granlund and Lukka, 1998).

A comprehensive literature study of secondary data from books, journals, the internet and electronic data bases will be conducted to provide a conceptual framework for this study. This activity will be useful in preparing the questionnaire. The study covers seven Iraqi for soft drink firms a survey was conducted using a quantitative approach where the researchers distributed 64 questionnaires to selected respondents. The response rate was %78 percent out of the total questionnaires distributed. The management accounting techniques is an independent variable which consists of six tools, namely, TQM, BPR, ABM, ABC, TC, JIT and was examined in relation to competitive advantage factors as a dependent variable which comprises cost leadership, differentiation and focus.

Observed that the increased scope of new technology has not only provided organizations with enablers for change but also prompted companies to reassess the way they evaluate, manage, and exploit technology.

In line with the latest technological advancements and behavioral changes, the function of the professionals in data processing and respective users has rapidly changed. The users often developed more systems or were being developed in close cooperation with the users (Galliers and Leidner, 2003) Our daily lives have been improved and work becomes a lot easier. In this study, I'm going to discuss the things where modern technology becomes useful for many years; science has introduced newer equipments and gadgets that make our lives easier and more manageable. It has improved a lot of aspects of our lives. Even the developing countries can get the advantages of it. Today's technology not only offers us easy to use equipments but with low cost as well.

Thus, a company would ideally adopt a new technique only if the perceived benefits from usage outweigh the costs of implementation, although in practice, such has not always been the case.

The benefits of managerial accounting instruments and its positive impact on firm's performance motivated a numerous studies which examined various aspects of managerial accounting instruments.

More precisely, cost management information (both financial and non financial information) is a critical type of information to the success of the company. For this reason, the role of cost accounting and management has expanded. Obviously the Accountants are now participants on multifunctional management teams.

Many believe, in competitive industries, that the companies would not be able to survive, unless they give effort to create two corporate strategies, of which are:

- 1) Cost strategy which is to process the value chain in most efficient way, in order to produce products or services with the lowest price without jeopardizing the quality.
- 2) Differentiation strategy which is to produce a unique products or services, compare to its competitors, such as better quality, simpler way to operate, better look, in other words the company should have the ability to be creative and innovative.
- 3) The focus strategy is also known as a 'niche' strategy.

The focus strategy is also refers to as "niche strategy", this focus strategy consist of two main variants namely:

- (1) Cost focus where a firm seeks a cost advantage in its target segment.
- (2) Differentiation focus which a firm seeks differentiation in its target segment.

Where an organization is not able to afford neither a wide scope cost leader ship nor a wide scope differentiation strategy, a niche strategy could be more efficient. A niche strategy is often used by smaller firms. A company could use either a cost focus or a differentiation focus.

With regards to the cost focus, a firm aims at being the lowest cost producer in either niche or segment. Similarly with respect to the differentiation focus, a firm establishes competitive advantage through differentiation within either the niche or segment.

This interest was originally developed by a known gap between the theoretical and practical aspect of management accounting and particularly the global belief that the traditional wisdom of management accounting textbooks is not largely being applicable for practice purposes.

Most of the study in relation to management accounting techniques and strategic factors conducted in world is on manufacturing firm as the concept of cost and management accounting and strategic factors has emerged in manufacturing organizations. Researchers and academicians are trying to pay attention on the manufacturing business firms concerned personnel attitude towards the use of management accounting techniques with in strategic factors as they play the critical role in creating a competitive advantage for the organizations.

Interestingly, the instruments used for this study consist of six techniques (independent variables), namely, Activity-Based Costing (ABC), Target Costing (TC), Total Quality Management (TQM), Activity Based Management (ABM), Business Process Reengineering (BPR) and Just in Time (JIT). As for the Factors of Strategic Competitive Advantage are involve the cost leadership strategic (CLS), differentiation strategic (DS) and focus strategic (FS) are taken as a Dependent Variable.

The industrial sector (ISDFs) has been chosen because of the recent growing competition from new companies in Iraq. In that regard, it has made intense competitive and significant role in supporting the economy. Also, it is considered as the most affected one by technological developments such information technology.

The entropy maximum general method has been used to analyze the questionnaire survey. This research provides value added in accounting literature given the scarcity of works dealing with the relationship between the application and use of strategic information and competitive advance indicators in Iraq soft drinks firms.

The research design for the study was descriptive in nature. The Researchers depended heavily on primary data. The required data was collected from the high management responsibilities in Iraqi soft drink firm through a structured survey questions. The study was conducted during the period between October and December, 2012.

2. Managerial Accounting Instrument

In recent years in the competitive market global, certain industries have very significant role through having very heavy competitive rivalry among the company players. The coverage of the industries could be domestic, international, or global of which are depending upon products or services to be provided in market. Most of the study in relation to management accounting techniques and strategic factors conducted in world is on manufacturing firm as the concept of cost and management accounting and strategic factors have emerged in manufacturing organizations. Researchers and academicians are trying to pay attention on the manufacturing business firms concerned personnel attitude towards the use of management accounting techniques with in strategic factors as they play the critical role in creating a competitive advantage for the organizations.

Authors describe that Prior researches is constrained to develop and evaluate different tools to accomplish strategic cost management. There is no integrated framework to combine those tools and could be accepted by interested researcher in cost / management accounting and strategic management.

		Lower cost	Differentiation
Competitive Scope	Broad Target	1-Cost-Leadership	2-Differentiation
	Narrow Target	3a-Cost focuses	3b-Differentiation Focus

Source: Porter, 1985 “Competitive Advantage” 11-59, the Free Press. New York

A firm's relative position within its industry determines whether a firm's profitability is above or below the industry average. The fundamental basis of above average profitability in the long run is sustainable competitive advantage. Figure 1 exhibits that there are two basic types of competitive advantage a firm can possess: low cost or differentiation. The two basic types of competitive advantage combined with the scope of activities for which a firm seeks to achieve them, lead to three generic strategies for achieving above average performance in an industry: cost leadership, differentiation, and focus. The focus strategy has two variants, cost focus and differentiation focus.

With the advent of product differentiation and niche and direct marketing, that reality has changed. While now there are niche markets in which both individual and wholesale buyers are looking for products with very specific characteristics or special services. These characteristics often use strategies that don't focus on costs and volumes exclusively; rather the product or service may be of premium quality, be differentiated from other products and services available in the market, or have a value-added component.

3. Sampling Size and Procedure

In order to collect the required information from the responsibilities administrative in Iraqi soft drink firm, the sampling design was carefully decided and properly chosen for the study. The sample size covered 50.

The main objective of this study is to highlight the importance of cost management techniques from a strategic perspective adopted as the basis for continuous improvement of competitive advantage to support competitiveness through the implementation of strategies of cost leadership or differentiation or focus. The pursuit should knowledge the effect of using these managerial accounting techniques in the Factors of Strategic Competitive Advantage that desires to implement by soft drinks companies in Iraq in an environment of the New World Order.

4. Description Sample of the Study:

The table 1 is display the relative frequency of individual sample in terms of the personal specification and professional which include age, qualifications, and experience. I'm observed the largest proportion of the sample was in age at Level 2 is 58% in between the age of 41 to 50 years. The greater proportion of the sample was bachelor's degree 68% (Level 1).

Table 1 Detail of First Stage of Questions and Levels Distribution.

Detail	Level 1	Level 2	Level 3	Level 4
Age	31-40	41-50	51-60	More than 61
Certificate	Bachelor	High deplume	Master	PHD
Specialty	Management & Economics	Computer sciences	Engineers	Lawyers
Jobs and posts	Members of the Board Directors	Manager's assistant of Sections Administrative	Manager's assistant of Sections service sections	Manager's assistant of Sections productivity
Years of service at the current site	1-4	5-8	9-12	More than 12
Total service in company	1-4	5-8	9-12	More than 12
Years of service at the current post	1-4	5-8	9-12	More than 12

The greater proportion specialty of the sample is management & economics at level 1 it's 62%. On regard the jobs and posts the largest proportion of the sample was at level (1) it's 46%. Moreover, I'm observed the higher proportion in years of service at the current site at level 2 its 40% .While the higher proportion in total service in company at level 2 it's 42%. The last question at this stage is years of service at the current post and the large proportion showing 64% at level 2.

5. Testing Validity and Reliability

In order to test the validity of motivation level, an instrument comprising 9 item questions, with the number of sample of 50 directors general, deputy director general, assistant director-general, executive directors were considered. The instrument questionnaire had four choices:

- 1) Completely Agree.
- 2) Agree.
- 3) Disagree.
- 4) Completely Disagree.

The test results were compiled and enumerated using SPSS and tabulated in Table 2

Reliability Test: Cronbach's coefficient alpha (Cronbach, 1951) is a statistic used to test reliability in questionnaire development across various fields (Cortina, 1993; Nunnally, 1978). The alpha coefficient for the four items is 0.885, suggesting that the items have relatively high internal consistency. (Note that a reliability coefficient of 0.70 or higher is considered "acceptable" in most social science research situations. On the other hand, Table 1 shows the value of reliability (Alpha) test for all factors. Hence, all the constructs are considered to be very good as the alpha value of each construct was more than 0.5. All values of coefficient alpha exceeded 0.80.

Table 2 Coefficient Alpha Values for Each Factor and all Items

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ABM	16.4760	48.176	0.864	0.986
BRP	16.3040	44.972	0.922	0.984
TQM	16.4520	46.494	0.908	0.984
ABC	16.3720	45.239	0.955	0.983
TC	16.3720	44.885	0.973	0.982
JIT	16.4560	46.157	0.934	0.983
CLS ⁽¹⁾	16.3720	45.280	0.957	0.982
DS ⁽²⁾	16.3360	45.132	0.948	0.983
FS ⁽³⁾	16.2840	44.844	0.936	0.983

Once the survey had been prepared, it was revised and validated at the conceptual level, by some of the experts specialized in this area and compared by having personal interviews with seven managers belonging to sample

- (1) Cost Leadership Strategic
- (2) Differentiation Strategic
- (3) Focus Strategic

firms.

The study's analysis was based on usable responses collected from different manager's types. A questionnaire was distributed to all members of the sample and the number of questionnaires retrieved was 50 out of a total of 64 which represent 78%. The soft drink firm's industry has been chosen because of highest competitive and significant role in supporting the Iraqi economy; and also because it is considered one of the most affected sectors by technological developments.

The significance of this study resides in handling the severe competitive environment situation in which the soft drink firms in the Kurdistan Region and in Iraq are working and how far it reflects on the competitive position of the (ISDFs). In addition, the (ISDFs) industry sector is regarded as one of the most significant sectors interested in modern information systems through the possession of advanced information technology.

Accordingly, the authors have founded the significance of doing such a study to show the roles that can be performed with the strategic information to investigate the factors of an excellent competitive position in the (ISDF) industry sectors. The study sample consists of the top managers in the departments of (ISDFs). The total samples are (64) positions of Director (Director General, Deputy Director General, assistant Director-General, executive directors) who retrieved Survey forms. Top management is the center of strategic decision-making, and achieving competitive advantage is one of the things in the life of the strategy of (ISDFs). This class was chosen because of the authority top managers enjoy and the experience they have obtained during their long services in the (ISDFs) industry sector. Furthermore, their position enables them to have an idea on almost all information and planning so as to take strategic decisions in view of the information available in this regard. The purpose behind that is to improve the financial situation and proceed with (ISDFs) activity under the product and severe competition between the firms.

The tool that is used in the study is as in the following: The form of the survey was the kind of disclosing target. This was obvious from the nature of the questions presented in the questionnaire form. In that regard, the survey consists of three parts in terms of the distribution of questions. The first part of the question is concerned with the private identifiable member's data regarding the age, academic achievements, and educational attainments according to the certificate in Table 1 which shows the details of first stage questions and levels distribution. The second part of the question deals with information on professional qualifications and practical experience. The third part of the question is designed to measure the impact of independent variables on the dependent variables, which are offered according to lockets pentagon scale, (Completely Agree, Agree, Disagree, and Completely Disagree). The last part of the question is presented in the order of relative importance priority.

Here, we propose the deployment of this approach is to provide better visibility to the evaluation of strategic IS alignment in leader Iraqi firms in the field of soft drink firms.

- 1) Examine the usage level of management accounting technique in ISDFs.
- 2) Examine the usage level of strategies one of three differentiating, cost leadership and focus in ISDFs.
- 3) What impact does this management accounting technique have on those strategies are used in ISDFs?

Despite having problems relating to natural data and unable to the achievement hypothesis of ordinary least squares use method entropy maximum general due to the efficiency of this way and the flexibility to data analysis use the SAS.9.2. In the questionnaire, surveys are analyzed by Ordinary least squares is ill-posed or under-determined from the observed data. For the general linear model, this can imply that high degrees of collinearity exist among the explanatory variables or that there are more parameters to estimate than observations available to estimate them. These conditions lead to high variances or non-suitability for traditional generalized least squares (GLS) estimates. Under these situations, it's best to consider a nontraditional technique for model fitting. The principle of maximum entropy is the foundation for an estimation methodology that is characterized by its robustness to ill-conditioned designs and its ability to fit over-parameterize models.

Golan et al., (1996) , for a discussion of Shannon's maximum entropy measure and the related Kullback-Leibler information.

Hence we will try to examine desire usage level of management accounting technique and the strategic policies in ISDFs. More specifically, through the asking five questions relating for each technique, it is possible to application the Managerial Accounting techniques the following (ABM, BPR, TQM, ABC, TC and JIT) each separately as well as policy implementation strategy (CLS, DS, F S).

In order to determine the level of desires that managers wishing to implementation, this policy and strategy techniques in (ISDFs) are thereby achieved in competitive advantage.

6. Usage Level of Management Accounting Technique in ISDFS.

6.1 Application of Activity Based Management (ABM) in ISDFS to Achieve Competitive Advantage

When checking in response for the effect of the (ABM) in (ISDFS) to achieve competitive advantage, we identify five questions. We can find the results of the average and standard deviation for each question as shown

in Table (3) As shown in the overall average responses in questions, they get a high degree of completely agree.

Table 3 the Role of Application ABM in ISDFs to Achieve Competitive Advantage

	Completely Agree	Agree	Disagree	Completely Disagree	Average	SD
Activity-based management can be applied to different types of companies.	18	22	7	3	3.1	0.86307
The approach is trying to investigate maximize the value adding activities to achieve competitive advantage.	17	21	7	5	3	0.94761
ABM can provide cost information about any area of operations in a business	19	18	8	5	3.02	0.97917
It's Focuses on reducing costs and creating performance measures.	19	16	9	6	2.96	1.02936
The ABM is to improve efficiencies and effectiveness of an organization in securing its markets.	20	21	6	3	3.16	0.86567
Average					3.048	

The average value is 3.048, which indicates that the contribution of using (ABM) in (ISDFs) is to improve the appropriate with the needs and wishes of the customers thereby achieve competitive advantage.

Regarding the standard deviation value, it is between 0.86307-1.02936, which indicates the differences are good. The results indicate the concern of the (ISDFs) management to achieve competitive advantage through use (ABM).

6.2 Application of Business Process Reengineering (BPR) in ISDFs to Achieve Competitive Advantage

Table 4 is show the average, and approval of the questions which indicate the contribution of (BPR) in (ISDFs) to achieve competitive advantage. The value of the average of question is 2.92, 2.92, 2.82, 2.82, and 2.9 respectively.

The General average for the five questions is 2.876, and also the standard deviation is between 1.04667-1.10083, which shows the medium degree to approval of.

Table 4 the Effects of Application BPR in ISDFs to Achieve Competitive Advantage

	Completely Agree	Agree	Disagree	Completely Disagree	Average	SD
Business process re-engineering is a business management strategy.	19	15	9	7	2.92	1.06599
Identify all the processes in an organization and prioritize them in order of redesign urgency and Achieve Competitive Advantage.	18	17	8	7	2.92	1.04667
Should focus on processes and not be limited to thinking about the organizations to Achieve Competitive Advantage.	17	16	8	9	2.82	1.10083
It's Focuses on Redesign of processes.	16	17	9	8	2.82	1.06311
It's Focuses on Cycle time reduction.	18	17	7	8	2.9	1.07381
Average					2.876	

6.3 Application of Total Quality Management (TQM) in ISDFs to Achieve Competitive Advantage

When the observation of the result of approvals that shows in table 5, the total average value as for five questions is 3.024. Regarding to the standard deviation value was between 0.92229-1.06904, which indicates the differences are good.

Table 5 Application of (TQM) in ISDFs to Achieve Competitive Advantage

	Completely Agree	Agree	Disagree	Completely Disagree	Average	SD
It's Focuses on improve the quality of products.	19	20	7	4	3.08	0.92229
Used to enhance quality and productivity in business organizations to Achieve Competitive Advantage.	20	18	6	6	3.04	1.00934
Improves the efficiency of indirect activities.	18	17	8	7	2.92	1.04667
Forces companies to specify their product development goals very precisely	21	15	7	7	3	1.06904
It's an effective goals tool to reduce direct and overhead costs.	19	20	7	4	3.08	0.92229

The results indicate the concern of the ISDFs management willing to achieve competitive advantage through using approach.

6.4 Application of Activity-Based Costing (ABC) in ISDFs to Achieve Competitive Advantage

Table 6 show the average, and approval of the questions which indicate the effect of (ABC) in (ISDFs) to achieve competitive advantage. The value of the average of question is 3.02, 3, 2.84, 2.82, and 3.04 respectively.

Table 6 Application of (ABC) in ISDFs to Achieve Competitive Advantage

	Completely Agree	Agree	Disagree	Completely Disagree	Average	SD
ABC helps to identify inefficient products, departments and activities.	18	20	7	5	3.02	0.9581
ABC helps to find unnecessary costs that may be eliminated.	21	15	7	7	3	1.06904
ABC helps fixing the price of a product or service with any desired analytical resolution.	17	16	9	8	2.84	1.0759
ABC focuses on cost allocation in operational management	17	16	8	9	2.82	1.10083
Do you regard this technique to have drawbacks	20	17	8	5	3.04	0.98892
					2.944	

The General averages for the five questions are 2.944, and also the standard deviation is between 0.9581-1.10083, which shows the medium degree to approval of.

6.5 Application of Target Costing (TC) in ISDFs to Achieve Competitive Advantage

For checking in the effect of the (TC) on achieve competitive advantage, we identify five questions, the result of the average and standard deviation for each question as shown in Table 7 As shown in the table, the first questions get a high degree of acceptance, and the average value is 3.02, which indicates that the contribution of using of (TC) to improve the advantage appropriate with the needs and wishes of the customers.

The average value of the second question is 2.84 which indicates the importance of the study of the strengths and weaknesses of the competitors continually by comparison with the output of information systems, which lead to knowledge of market position of competitors and the pursuit of expanding the market share of the company The average value of the residuals question is 2.92, 2.9, and 3.04, which is a mediums degree value and shows the importance of accessibility for the company website for the customer desires to achieve outcomes through information systems used.

The general average for these questions is 2.944. Regarding the standard deviation value, it is between 1.02-1.09265, which indicates the differences are good. The results indicate the concern of the company's management to achieve advantage through use (TC).

Table 7 Application of (TC) in ISDFs to Achieve Competitive Advantage

	Completely Agree	Agree	Disagree	Completely Disagree	Average	SD
TC Reduces cost over the entire life cycle of a product	22	18	5	5	3.14	0.96911
TC Focuses on getting costs out of the product during planning and design	18	17	8	7	2.92	1.04667
the company must deliver products to the market	19	18	7	6	3	1.01015
use of target costing as a strategic cost management technique to achieve competitive advantage	20	16	7	7	2.98	1.05926
Do you regard this technique to have drawbacks	21	18	6	5	3.1	0.97416
					3.028	

6.6 Application of Just in Time (JIT) in ISDFs to Achieve Competitive Advantage

Table 8 elucidates the results of response averages of 3.14, 2.92, 3, 2.98, and 3.1. The general average is 3.028. The (JIT) in our five questions has got through the investigate advantage. And the standard deviation is between 0.96911-1.04667. It is clear that there is agreement mediums on the contribution of JIT for achieve competitive advantage by the ISDFs managements. This means that ISDFs are supporting use JIT to avoid unjustified investment on inventory.

Table 8 Application of (JIT) in ISDFs to achieve competitive advantage

	Completely Agree	Agree	Disagree	Completely Disagree	Average	SD
In case to apply JIT in the ISDF led reducing waste and improving services is relevant.	20	17	7	6	3.02	1.02
Using JIT will cause to set-up time in ISDFs	17	16	9	8	2.84	1.0759
The supplier relationship is considered to achieve good share in market.	18	17	8	7	2.92	1.04667
Do you expect your company to use JIT more or less in future	19	15	8	8	2.9	1.09265
Do you regard this technique JIT to have drawbacks?	21	16	7	6	3.04	1.02936
					2.944	

The author argues that the neglect of company's management to application of cost management tools and not to take their methods as internal strategic target. This will lead to opportunity increase for incurring the company for weak of market share in the face sharp competition in the market. So the researcher believes that the main problem faced by the company's management, which serves as the objectives of the Company's management, that the work and the pursuit of cost management techniques developed recently motive for the study is the lack of putting of concepts. Methods and cost management tools are considered in the first priority of goals Management Company and studying them and choice the best that supporting of them will lead to activation of differentiation and avoid the company of many of the problems that you may encounter in the future.

6.7 Implementation of Cost Leadership Strategic (CLS) in ISDFs to Achieve Competitive Advantage

The results introduced in Table 9 shows the approval degree for answers as follows: 3.04, 2.84, 3, 2.84, and 3 while the general average is 2.944 and standard deviation values between 0.96806-1.0759. There is a good result from the approval degrees in the statistical point of view. In which, our calculation process is considered a four measuring degree rank, when, the increasing of the average value will effectively contribute to achieve advantage on cost leadership.

However, the standard deviation shows the answer's convergence and this guide the use of efficient and powerful cost leader strategic to keep pace with the changes and reduce the costs of the ISDFs operations and increase sales and achieve higher productivity and increase profits of the ISDFs.

Table 9 Application of (CLS) in ISDFs to Achieve Competitive Advantage

	Completely Agree	Agree	Disagree	Completely Disagree	Average	SD
In case to apply CLS in the ISDF led achieve competitive advantage	19	19	7	5	3.04	0.96806
Strategy used by businesses to create a low cost of operation within their ISDFs.	17	16	9	8	2.84	1.0759
The use of this strategy is primarily to gain an advantage over competitors	20	17	6	7	3	1.04978
Used Strategy caused reducing operation costs below that of others in the ISDFs.	17	16	9	8	2.84	1.0759
Do you regard this strategy to have drawbacks?	19	18	7	6	3	1.01015
					2.944	

The author argues that, in the overall cost leadership strategy, policies aimed at becoming and remaining the lowest-cost producer in the industry are developed by firms. Cost controlling strategies include efficient-scale facilities, tight control of costs and overheads, avoidance of marginal customer accounts, minimization of operating expenses, reduction of input costs, tight control of labor costs, and lower distribution costs. Therefore by getting its costs of production or distribution lower than those of its competitors, the low-cost leader gains competitive advantage.

6.8 Implementation of Differentiation Strategic (DS) in ISDFs to Achieve Competitive Advantage

For checking the Implementation of Differentiation Strategic (DS) in ISDFs to achieve competitive advantage, we identify five questions, the result of the average and standard deviation for each question as shown in Table 10.

As shown in the table, the overall average value is 2.856, which indicates that the Implementation of (DS) in ISDFs. It can be appropriated with the needs and wishes of the customers. Regarding the standard deviation value that was between 1.0351-1.12504, it indicates the differences are good.

Table 10 Implementation of (DS) in ISDFs to Achieve Competitive Advantage

	Completely Agree	Agree	Disagree	Completely Disagree	Average	SD
In case to apply DS in the ISDF led achieve competitive advantage	17	18	8	7	2.9	1.0351
The use of strategic DS will lead to Corporate reputation for quality and innovation in ISDFs.	16	15	10	9	2.76	1.09842
The use of this strategy is primarily to gain an advantage over competitors	18	16	7	9	2.86	1.10675
Do you expect the ISDFs use DS more or less to achieve competitive advantage	19	14	8	9	2.86	1.12504
Do you regard this strategy to have drawbacks?	18	17	7	8	2.9	1.07381
					2.856	

The results show management's desire to implementation of this policy, which relies on creating and improving customer value through effective integration with the customer value chain. It can be argued that if any company which follows strategic differentiation policy, it must require reliable information about the environment in which they operate, including: information on customers and offers provided by competitors, and is considered obvious source to obtaining on such information at management of marketing and sales. Moreover, it cannot expect those who exercise cost management activities that provide this information provided to exercise its role in determining the position competitive position of the company in light of the information obtained by from customers and competitors, and therefore must be worked in coordination with the marketing management to achieve this goal.

6.9 Implementation of Focus Strategic (FS) in ISDFs to Achieve Competitive Advantage

Table 11 elucidates the results of response averages of 2.9, 2.84, 2.96, 2.9, and 2.94. The general average 2.908

is in five questions about implementation strategic focus policy with ISDFs and the standard deviation is between 1.0351-1.0738. It is clear that there is an agreement medium on the contribution of information systems for innovation and creativity by the ISDFs managements.

Table 11 Implementation of (FS) in ISDFs to Achieve Competitive Advantage

	Completely Agree	Agree	Disagree	Completely Disagree	Average	SD
In case to apply FS in the ISDF led achieve competitive advantage	17	18	8	7	2.9	1.0351
The use of strategic FS will lead to Corporate reputation for quality and innovation in ISDFs.	17	16	9	8	2.84	1.0759
The use of this strategy is primarily to gain an advantage over competitors	19	17	7	7	2.96	1.049
Do you expect the ISDFs use FS more or less in future.	18	17	7	8	2.9	1.07381
Do you regard this strategy to have drawbacks?	19	16	8	7	2.94	1.05772
					2.908	

In the light of the above, and taking into account the fact that the company does not usually have the ability to achieve long-term competitive advantages through cost reduction or follow any other distinct strategy, because any advantages achieved in short term will pay its competitors to move quickly to introduce a new product at competitive prices, and support their products with advantages other additional. Which will be paid to move to take counter-measures, and so will be included in confrontation strategy and then it is unavoidable resort to budget strategy.

7. 7 Impact of Management Accounting Technique on Those Strategies Are Use in ISDFs

7.1 Null hypothesis of Chapter Four

H1 there is no relation between desires use managerial accounting techniques and Iraqi soft rink firms. The study reveals that the null hypothesis may be rejected if the computed T value of each tools managerial accounting techniques is greater than the critical value obtained from the distribution table at 5% level of significance and with 49 degrees of freedom. The computed T value applies through method One Sample T-Test discern result of (ABM, PBR, TQM, ABC, TC, JIT) is (5.174, 2.778, 4.368, 3.461, 3.414, 4.375) respectively which is greater than the critical T value of 2.312 when compared with all the tools and therefore falls within the rejection region. Thus, we reject the null hypothesis. . The response to the questionnaire and the relevant computations are shown in Table 12 the Result Test Independent One Sample T-Test to Managerial Instruments and Strategies.

Table 12 Result Test Independent One Sample T-Test to Managerial Instruments and Strategies

Factor	General Average	Mean	T test	T table	Sig.
ABM	3.048	9.760	5.174	2.312	HS
BRP	2.876	10.620	2.778	2.312	HS
TQM	3.024	9.880	4.368	2.312	HS
ABC	2.944	10.280	3.461	2.312	HS
TC	2.944	10.280	3.414	2.312	HS
JIT	3.028	9.860	4.375	2.312	HS
CLS	2.944	10.280	3.478	2.312	HS
FS	2.856	10.720	2.637	2.312	S
DS	2.908	10.460	3.130	2.312	HS

Table 13 Test the Correlation between Cost Leadership Strategic and Managerial Accounting Instruments by Entropy maximum general method.

GME-NM Variable Estimates						
Depend variable	In depend Variable	Rank	Estimate	Approx Std Err	t Value	Approx Pr > t
Cost Leadership Strategic	ABM	Sixth	0.024897	0.000477	52.17	<.0001
	BRP	Fifth	0.092906	0.00169	54.93	<.0001
	TQM	Third	0.19751	0.00356	55.56	<.0001
	ABC	Second	0.226669	0.00395	57.35	<.0001
	TC	First	0.269643	0.00464	58.10	<.0001
	JIT	Fourth	0.191061	0.00336	56.85	<.0001
	Intercept		0.014213	0.000316	44.94	<.0001

Following the outcome of the statistical test, we conclude that the uses of managerial accounting techniques are significantly dependent by Iraqi soft drink firms. Thereby the alternative hypothesis would be: There is a relation between desires to use managerial accounting techniques and the Iraqi soft drink firms. This decision is graphically depicted in table 13. In this regard, the authors note the depending on the response approve many elements and techniques of strategic managerial accounting are existent within organisations, its applicability is not visible as the information may not be framed in accounting figures, or not collected and used by management accountants. For example, many firms adopt politics produce according to requirements from competitive markets a specific in terms of quantity, quality and price.

H2 There is no relation between use strategic competitive advantage factors and Iraqi soft drink firms. The null hypothesis may be rejected if the computed T value for each use strategic competitive advantage factors of this greater than the critical value obtained from the distribution table at 5% level of significance and with 49 degrees of freedom.

The computed T value applies through method One Sample T-Test discern result of (CLS, FS, DS) is (3.478, 2.637, 3.130) respectively which is greater than the critical T value of 2.312 when compared with all the tools and therefore falls within the rejection region. Thus, we reject the null hypothesis. (See table 12)

Following the outcome of the statistical test, we conclude that the desires use strategic competitive advantage factors are significantly dependent by Iraqi soft drink firms. Thereby, the alternative hypothesis would be:

Ha: There is a relation between using strategic competitive advantage factor and the Iraqi soft drink firms.

Table 14 GME-NM Summary of Residual Errors

Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj RSq
Cost Leadership strategic	7	43	3.7587	0.0752	0.2742	0.9059	0.8927

7.2 The Rest Hypothesis of Chapter Four

H 3 The degree of implementation of practices managerial accounting techniques will be positively associated with cost leadership strategic. It is tested by the entropy maximum general method which was used to test the relation between the Cost Leadership Strategic and the (ABM, BRP, TQM, ABC, TC, JIT). The relation between the direction degree and the positive value link ranged between (0.269643 – 0.024897). Table 13 shows this relationship.

The results indicate that the degree of (ABM, BRP, TQM, ABC, TC, JIT) implemented are positively associated with Cost Leadership Strategic (0.0005), and indeed the addition of the Cost Leadership Strategic variable increases the R2 is 0.9059 (see table 14). Therefore, the data supports H3 the highest estimate relationship of this analysis between CLS and TC is (0. 0.269643). It considered as one of the strongest relations between the six variables and CLS. Figure 2 and table 13 display this relationship.

Table 13 exhibits that there exists a positive correlation between the (ABM, BRP, TQM, ABC, TC and JIT) and Cost Leadership strategic (r=0.2742), CLS and Managerial Accounting Techniques (r=0.2742), and (R-Square=0.9059). The correlation coefficient between the entire six variables namely ABM, BRP, TQM, ABC, TC and JIT and Cost Leadership strategic were positively significant at 0.01 per cent level.

H4 the degree of implementation of practices managerial accounting techniques will be positively associated with focus strategic.

Was tested in table 15 by the entropy maximum general method, it is used to test the relation between the focus Strategic and the (ABM, BRP, TQM, ABC, TC, JIT). The relation between the direction degree and the positive value link ranged between (0.630049–0.035162).

The results indicate that the degree of (ABM, BRP, TQM, ABC, TC, JIT) implemented is positively associated with Focus Strategic (0.0005), and indeed the addition of the Focus Strategic variable increases the R2 is 0.9061 (see table 16). Therefore, the data supports H3 the highest estimate relationships of this analysis between (FS) and (TC) is (0.630049). It considered as one of the strongest relations between the six variables and (FS) In addition; this estimate is the largest between three analyses. Figure 2 are displays this relationship.

Table 15 Test the Correlation between Focus Strategic and Managerial Accounting Instruments by Entropy maximum general method

GME-NM Variable Estimates						
	Variable	Rank	Estimate	Approx Std Err	T Value	Approx Pr > t
Focus Strategic	ABM	Fifth	0.036032	0.000783	45.99	<.0001
	BRP	Sixth	0.035162	0.000701	50.15	<.0001
	TQM	Fourth	0.059616	0.00118	50.51	<.0001
	ABC	Third	0.118811	0.00219	54.18	<.0001
	TC	First	0.630049	0.0108	58.54	<.0001
	JIT	Second	0.131217	0.00243	54.07	<.0001
	Intercept			0.019209	0.000553	34.72

H5 the range of implementation of practices managerial accounting techniques will be positively associated with differentiation strategic.

Was tested by the entropy maximum general method, it is used to test the relation between the differentiations Strategic and the (ABM, BRP, TQM, ABC, TC, JIT). The relation between the direction degree and the positive value link ranged between (0.324189– 0.040295).Table 17 shows this relationship.

Table 16 GME-NM Summary of Residual Errors

Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj RSq
Focus Strategic	7	43	3.9075	0.0782	0.2796	0.9061	0.8930

The results indicate that the degree of (ABM, BRP, TQM, ABC, TC, JIT) implemented is positively associated with differentiations Strategic (DS) (0.0005), and indeed, the addition of the differentiations Strategic (DS) variable increases the R2 is 0.8387 (see table 18). Therefore, the data supports H5. The highest estimate relationships of this analysis are between (D S) and (ABC) is (0.324189). Hence , The major motivations for introduction of activity based costing are accurate cost information for product/service pricing and profits analysis, improved insight into cost drivers, accurate customer profitability analysis, cost reduction, process improvements, product mix strategy, performance measurement & improvement, and cost modeling. This considered one of the strongest relations between the six variables and (D S) the figure 2 displays this relationship.

Table 17 Test the Correlation between Differentiations Strategic and Managerial Accounting Instruments by Entropy maximum general method.

GME-NM Variable Estimates						
	Variable	Rank	Estimate	Approx Std Err	T Value	Approx Pr > t
Differentiations Strategic	ABM	Sixth	0.040295	0.00114	35.36	<.0001
	BRP	Fifth	0.09248	0.00233	39.66	<.0001
	TQM	Second	0.234271	0.00577	40.57	<.0001
	ABC	First	0.324189	0.00752	43.14	<.0001
	TC	Third	0.204509	0.00477	42.87	<.0001
	JIT	Fourth	0.147455	0.00359	41.05	<.0001
	Intercept			0.018886	0.000751	25.14

The findings reveal that there is a significant positive relationship between TC and each one of CLS, F S and D S. show figure 2. Consequently, depending on the results above to prove one of the main questions of study that is (What is the most tool of managerial accounting can be derived from firm that will affect the three competitive forces and thereby bring a competitive advantage to ISDFs?), the authors conclude that TC practices significantly influence the intensity of the factors of strategic competitive advantage.

Table 18 GME-NM Summary of Residual Errors

Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj RSq
Differentiations Strategic	7	43	7.2015	0.1440	0.3795	0.8387	0.8162

Thereby, the result finding is expected to be powerful information for future research directions especially as an indicator for the development of a suitable TC framework for the Iraqi soft drink firms.

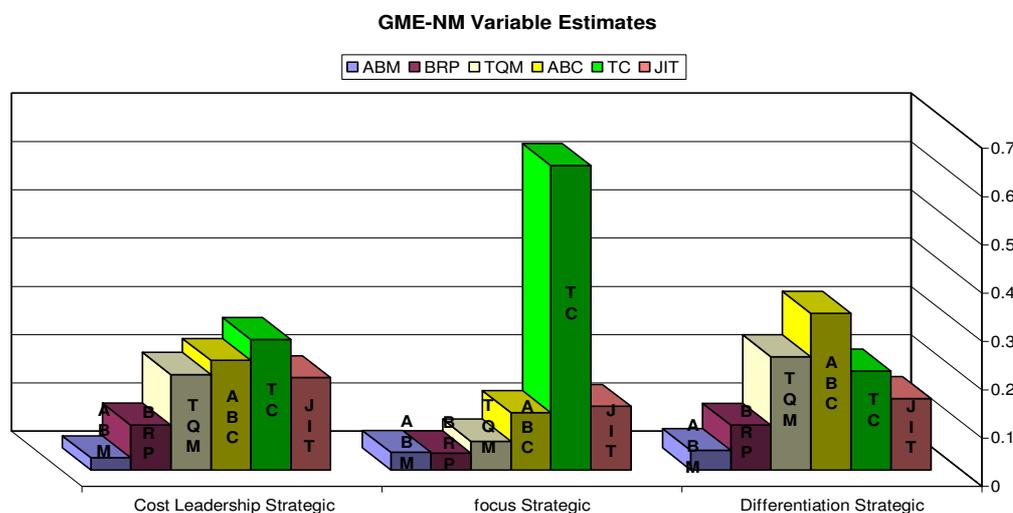


Figure 2 Result Entropy Maximum General Method to Test the Relationship

Thus, the results suggest to possibly using target costing approach because it appears the higher ranges for correlation significant positive between (TC) being a managerial accounting instrument and both CLS and FS, that is in the first rank of relations, as for relationship between (TC) and (DS) it is at third rank. The business management tool requires inclusiveness, confidence and seriousness. And all the variables have to be taken into consideration concentrate on the cost accounting information systems so that Target Costing Approach makes achieving its purpose possible efficiently and professionally.

Trust and confidence should be put on the target costing with providing appropriate supports for it. The company should not selectively apply Target Costing Approach then claim it has applied because the process will be an inadequate one. The approach has to be applied to all its companies.

8. Conclusion

The findings reveal that there is a significant positive relationship between management accounting techniques and competitive advantage factors. The authors conclude that management accounting techniques practices significantly influence the intensity of competitive advantage factors in Iraqi soft drink firms.

The above findings indicate that the managerial accounting techniques seems to be most favoured among the Iraqi soft drink firms managers that participated in the research. There are two reasons that explain this favoured attitude of managers Iraqi soft drink firms. The first is that managerial accounting techniques have been an indirect way entered the organizational agenda in Iraqi soft drink firms and become a fashionable management accounting concept. Also, the educational background seems to be the second reason. The majority of managers that are in favour of managerial accounting techniques are postgraduate degree holders and they have been graduated mainly from universities.

Consideration, the firms should pay necessary concerns to the internal and external variables of its competitive situation so that the strategies adopted are succeeded and to ensure its continuity and existence in the

market.

The findings reveal that there is a significant positive relationship between management accounting techniques and competitive advantage factors. The authors conclude that management accounting techniques practices significantly influence the intensity of competitive advantage factors in Iraqi soft drinks firms.

Addition, it can be concluded that despite more of authors and academicians are trying to pay attention on the Iraqi soft drinks firms' concerned personnel attitude towards the use of management accounting techniques in achieving competitive, still Iraqi soft drink firms use various management accounting techniques and practices in narrow scale.

The authors conclude that management accounting techniques practices significantly influence the intensity of competitive advantage factors in Iraqi soft drink firms.

Reference:

- Gallier, R.D. and D.E. Leidner, 2003. *Strategic Information Management: Challenges and Strategies in Managing Information Systems*. 3rd Edn., Butterworth-Heinemann, UK.
- Tillema, S., 2005. Towards an integrated contingency framework for mas sophistication: Case studies on the scope of accounting instruments in dutch power and gas companies. *Manage Account Res.*, 16: 101-129.
- Brierley, J.A., C.J. Cowton and C. Druru, 2001. Research into product costing practice: European perspective. *Eur. Account. Rev.*, 10: 215-256.
- Granlund, M. and K. Lukka, 1998. Towards increasing business orientation: Finnish management accountants in a changing cultural context. *Manage. Accounting Res.*, 9: 185 -211.
- Porter, M.E., 1985. *Competitive Advantage: Creating and Sustaining Superior Performance*. The Free Press, New York, pp: 11-59.
- Anthony, R.N., 1993. *La Fonction Controle De Gestion [The Management Accounting Function]*. Paris: Publi-Union.
- Yeshmin, F. and A. Hossan, 2011. Significance of management accounting techniques in decision-making: An empirical study on manufacturing organizations in Bangladesh. *World J. Soc. Sci.*, 1: 148 -164.
- Ainikkal, J., 1993. Exploring the New Zealand manufacturing environment. *Accountants J.*, pp: 28-31.
- Cronbach, L.J., 1951. Coefficient alpha and the internal structure of tests. *Psychometrika*, 16: 297 -334.
- Cortina, J.M., 1993. What is coefficient alpha? An examination of theory and applications. *J. Applied Psychol. Aging*, 78: 98 -104.
- Nunnally, J.C., 1978. *Psychometric Theory*. 2nd Edn., McGraw-Hill, New York.
- Golan, A., G. Judge and D. Miller, 1996. *A Maximum Entropy Econometrics: Robust Estimation with Limited Data*. Wiley, New York.
- Hawkes, L.C., Fowler, M., & Tan, L. M. 2003. "Management Accounting Education: Is There A Gap Between Academia And Practitioner Perceptions?" School of accountancy, Discussion paper series 215.

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