

Impact of Activity-based Costing (ABC) on Competitive Advantage in the Jordanian Telecommunication

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Abstract

This study aimed at exploring the impact of Activity-based costing (ABC) on Competitive Advantage in the Jordanian Telecommunication, by conducting an analysis of the gaps between the scientific development of the activity-based costing (ABC) system and the reality of its application in practice is necessary to determine the applicability and applicability of the business organizations in the light of the continued dominance of traditional techniques. The researcher adopted the descriptive statistics methodology by applying the questionnaire (the study tool) to a sample of a size of (222). The study results found that there is a statistically significant differences at the level of significance ($\alpha = 0.05$) of the impact of applying activity-based costing (ABC) on the competitive advantage in the Jordanian telecommunications.

1.1 Introduction

The old cost systems under constant scrutiny because of their poor understanding of cost behavior systematically complicate cost estimates for production and development of products, providing some information required by senior management to develop strategic plans needed to increase profits. By maintaining existing customers and attracting new customers. (Kraakhmal, V. 2005) .

In the era of globalization, the focus has been on enhancing the competitiveness of local companies resulting from the accession of the Hashemite Kingdom of Jordan to the World Trade Organization where the international companies have the skilled and skilled workers and the constant work to raise their scientific efficiency and investment scientific research which provides their competitive position locally, regionally and internationally, the organization (Rompho, N. 2006)

Competition might be credited to business developments, progression in innovation and the changing interest of clients. Competition amongst business organizations might constrain the management to create business systems and techniques that would control an organization towards the maximization of benefits. This might be accomplished through expanded deals and decreased expense of creation. The improvement of benefits and minimization of expenses might empower an organization to make an upper hand in its industry. Therefore, Competition amongst business organisations may compel the management to develop business techniques and strategies that would guide an organisation towards the maximisation of profits. Certain management accounting practices give methodologies that can impact countless to have an enduring inclination for an organisation's products. Thus, the adoption of modern management accounting techniques may provide an organisation with a sustainable competitive advantage over its rivals (Benton & Negm, 2010).

1.2 Problem Statements and Study Questions

An analysis of the gaps between the scientific development of the activity-based costing (ABC) system and the reality of its application in practice is necessary to determine the applicability and applicability of the business organizations in the light of the continued dominance of traditional techniques.

The Jordanian telecom sector is an important and vital sector in supporting the Jordanian economy, and because of its links with other sectors, including the Activity-based costing (ABC), which will have a positive impact on increasing market share and meeting the needs of companies in this sector, Specifically. Thus, the study problem can be analyzed in an attempt to answer the following question: What is the impact of applying activity-based costing (ABC) on the competitive advantage in the Jordanian telecommunications?

1.3 Objectives of the Study

To determine the levels of knowledge in the Activity-based costing (ABC), across the telecommunications sector in Jordan and how this affects the growth of the sector by these companies in order to assess the factors that limit and / or promote practices based on Activity-based costing (ABC), in the telecommunications sector in Jordan. Based on the importance of the study, the objectives are as follows:

1. To review and evaluate the impact of the use of activity-based costing (ABC) .
2. To explore the challenges encountered in the use of applying activity-based costing (ABC) .
3. To analyzing the impact of the use of applying activity-based costing (ABC).

1.4 literature Review

Local studies show that there is a lack of ideas and clarity for the development and application of the principle and a unified vision for the development of projects due to the difference between views and differences theories derived from the intellectual multiplicity of mental resulting from the different scientific schools that intend to study a joint venture. (Li, H. 2006).

In an age of technology-based globalization, managers are under more pressure than ever to invent new ways to maintain the competitive advantage of their organizations. In order to achieve competitive advantage, managers should consider internal processes in their organizations in an attempt to make them more effective or cost-effective. These measures are particularly important in the banking sector where efficiency and cost-effectiveness can be used as a competitive tool for growth and profitability. Thomson et al. (2009) reported that management accounting provided ideas for both manufacturing and service organizations. Here, management accounting practices may provide cost-effective and cost-effective strategies that can be used as a competitive tool for growth in different sectors.

1.4.1 Activity-based costing (ABC)

Competition in the business environment, created by globalization and innovation and increased technology, has led to renewed use of financial and non-financial information in organizations. The new environment requires that information and data be accurately identified and relevant to costs and performance within the organization's various activities. Leading companies typically develop their own cost systems to design products and services that meet the needs of their customers. Can be produced and delivered in profit; a signal where continuous development is needed to raise quality, increase efficiency and save time; and work to provide the necessary conditions to help employees improve their education. Product reorientation and approval of investment plans. Competitive pricing, while maintaining and developing product features, quality, delivery and after sales service to customers; increasing the efficiency and effectiveness of marketing processes and providing specific segment services to customers within the target market (Kaplan Anderson, 2007).

However, some companies do not use modern and advanced cost systems that keep pace with global competition because they apply an old cost system based on the local competition stage. The companies produced some products and services of low quality to meet local market needs and profit. The Organization's use of systems is outdated and can not provide accurate, accurate and timely information to guide organizational improvement and development activities, as it is an obstacle to developing strategic plans for production processes, products, services and customers.

Managers need to rethink their management practices and in close relationship, however, need to develop their existing accounting systems, particularly management accounting systems. To keep up with the changes, researchers are looking at new improvements in management accounting, and at present we are seeing a reevaluation of management accounting in terms of developing new technologies and foundations (Yazidvar & Tasmani, 2005).

When the term Activity-based costing (ABC) appeared to meet the increasing need for more accurate information and clarity of cost the demand for resources by customers to provide products and services, also enabled the system to identify indirect expenses and support to be driven first and then move to activities and improve operations Finally the interior products,. In this way, senior management of companies has a clear picture of the economics of their operations and enables them to fully implement their decisions. The requirements of the era and increased interest by researchers, at the international level, have led to the development of concepts of administrative accounting as well as tools and techniques. This research paper in management accounting literature helps to illustrate the development of cost-capture methods and the relationship of management to activity over the years; how APEC received, which has been adopted and implemented by organizations over the years.

Activity-based costing (ABC) was not fully accepted as a tool to develop a competitive advantage as management accounting practices are associated with the provision of top management solutions for companies and private sector manufacturing. However, according to Kezler and Sproul (1982: 548), with the evolution of the age the concept of management accounting shifted from providing data to participate in the organization's strategic planning process. They argue that management accounting capabilities can be applied effectively in a competitive business environment where market information is examined, evaluated and analyzed, strategic plans are developed and competitive strategies are defined. These factors enable the organization to gain advantage in a highly competitive business environment that ever requires where innovative managerial accounting practices need to be employed (Etner & Larker 1997: 243). In contrast to Durand (2003: 821) he said that managerial accounting still possessed considerable unexploited capabilities as a clear approach to calculating competitive advantage. It is noted that competitive advantage, which is central to the thinking of international business, develops a strategy from broad vision to an internally consistent configuration of activities within the organization. Management accountants should be at the forefront of researchers and developers in innovative competitive strategies that can enable the organization to remain profitable and increase

its competitiveness

1.4.2 Competitive advantage

There are many differences between views on the model (s) of comparative advantage and how they apply to inter-State trade, especially as a model for the success of nations and / or companies in international markets. Resulting in the inability to apply comparative advantage models. International business experts are developing new models, or so-called frameworks, to determine the potential of companies and / or nations to succeed in international markets.

These frameworks are defined as "competitive advantage" models. In my view, the current comparative advantage model (s) is very general and undefined so that it is completely rejected in this way. While they will meet obstacles to apply in all circumstances to the international business environment, they are valid models and they can meet meaningful expectations in a different set of circumstances.

To add to that, the comparative advantage models that are used together with competitive advantage models contain the potential to offer a richer analysis of international trade / business, and are not usually available with a comparative advantage model (s) or sample (models) competition advantage alone. The main objective of this paper is to establish a link between the principles of relativity and competitive advantage, and to outline the two principles as a guiding force for measuring the success of countries and / or international markets / business.

1.5 Study Methodology

The methodology adopted by the researcher is descriptive approach to the survey. Is one of the most popular methodologies in the field of behavioural sciences (Wright, Debra et al., 2010), which apply to this study, which aims to analyze the impact of the implementation of Activity-based costing (ABC) communications activity (Zain, Umniah, Orange) Field and collect data from the study sample (222 member of the Jordanian Telecommunication three companies) through the questionnaire .

In view of the above data, it is clear that the methodology used in the research should be as relevant as possible to the issues being investigated

To match the problem rather than to address the problem.

Therefore, the research methodology needs to describe the general approach used to generate and share new knowledge based on research philosophies in order to enable the generation and exchange of this knowledge.

To this end, a data analysis was conducted to test a number of assumptions regarding the impact of application of activity-based costs in Jordanian telecom operators (Zain, Umniah and Orange) on the competitive advantage of these companies. Therefore, the researcher adopted the descriptive analytical method through the use of survey tools.

1.6 Sources of Data

Gathering the information and data considered an important key in any work, therefore it can be categorized the sources into:

1. Primary sources: questionnaire is considered a main procedure, which is used in the studies to evaluate new estimations in the Jordanian Telecommunications Sector.
2. Secondary sources have been relying on scientific books, previous studies, the research published in journals and scientific journals and websites dealing with the subject of the study.

1.7 Hypothesis of the Study

In light of the problem of the study, through his questions, the researcher adopted the following hypothesis:

H₀: There will be no statistically significant differences at the level of significance ($\alpha = 0.05$) of the impact of applying activity-based costing (ABC) on the competitive advantage in the Jordanian telecommunications

1.8 Methods and procedures

1.8.1 Questionnaire

The study relied mainly on the self-managed questionnaire designed and prepared by the researcher.

After examining the literature and theoretical studies relevant to the subject of this study; whether in periodicals, books or other references, the questionnaire was formed in three parts and as follows:

Part I: Includes information relating to the respondents and their organisations.

Part II: Includes (7) paragraph related to the measurement of Activity-based costing (ABC).

as follows:

Part III: which included (7) paragraph measuring the status of the competitive advantage.

1.8.2 Validity and Reliability Test

The questionnaire was subjected to the validity and the reliability test, in order to emphasise the capacity of the paragraphs and then to measure what it was developed for, The questionnaire also have been subjected to the reliability test aiming to ensure the same results if it was is re-applied to respondents again.

1.8.2.1 Questionnaire Validity

Ensuring the face Validity of the measurement tool was the aim; the questionnaire was reviewed by a number of faculty members of the Jordanian universities in the same field of the research, for identifying the suitability of the questionnaire for the goals to be achieved, and by retrieving all suggestions, all the necessary adjustments on the paragraphs of the questionnaires was made, by deleting, adding some paragraphs, and by rephrasing others.

1.8.2.2 Questionnaire Reliability

For ensuring the Reliability of the questionnaire, the researcher used the internal consistency coefficient (α) according to the alpha Cronbach equation, and the value of (α) 97%, which is very high when compared with the minimum acceptable of 60%.

1.9 Study results

This section aims to display and analyze the arithmetic means and the standard deviations of the respondent's answers to the questionnaire paragraphs, then testing the respondents point of view regarding the questionnaire (14) paragraphs. In order to compare the arithmetic mean of the responses of the respondents according to the scale of the questionnaire, this adopted the five-point Likert scale.

1.9.1 Activity-based costing (ABC)

The Activity-based costing (ABC) variable is measured in paragraphs (1-7), as illustrated in table (1), and that the arithmetical means for answers of the study sample that measure the information systems variable ranged between (3.69 - 4.02), and the standard deviations ranged between (0.762 - 0.803).

All of these arithmetic means shows the approval of the study sample on the paragraphs that measure the Activity-based costing (ABC) variable, since all the arithmetic means are greater than the default mean.

Also noted that the paragraph, which states "Measurement plays a very important role in the management of productivity. It helps to determine if your organization is progressing well" had the highest approval grades; as its arithmetic mean was (4.02) and its standard deviation was (0.803), while the paragraph, which states "Activity-based costing (ABC) reflect the performance of the company, thus enable to do cost effective business with competitors. In other words, it works as a yardstick of benchmark business performance" had the lowest approval grades; as its arithmetic mean was (3.68) and its standard deviation was (0.782).

Overall, the general average of the arithmetic mean for the answers of the respondents is equivalent to (3.90) and the standard deviation is equivalent to (0.763), which indicates the approval of the respondents upon the scale of these paragraphs was high, and that their attitudes were positive.

Table (1): Arithmetic means and standard deviations for the members of the study sample answers measuring the attitudes towards the Activity-based costing (ABC).

NO	Statement	A M	S D	Rank	Grade
1	ABC reveals the links between performing particular activities and the demands those activities make on the organisation's resources, so it can give managers a clear picture of how products, brands, customers, facilities, regions, or distribution channels both generate revenues and consume resources.	3.91	0.758	4	Medium
2	The profitability picture that emerges from the ABC analysis helps managers focus their attention and energy on improving activities.	3.93	0.727	3	Medium
3	Measurement plays a very important role in the management of productivity. It helps to determine if your organization is progressing well.	4.02	0.803	1	High
4	ABC is generally used as a tool for understanding product and customer cost and profitability based on the production or performing processes	3.98	0.703	2	Medium
5	ABC is predominantly used to support strategic decisions such as pricing, outsourcing, identification and measurement of process improvement initiatives	3.69	0.762	6	Medium
6	Activity Based Costing (ABC) provides more accurate cost data as compared to traditional based costing system. So provide detailed information on the value-added and non-value-added activities performed by the organisation	3.84	0.851	5	Medium
7	Activity-based costing (ABC) reflect the performance of the company, thus enable to do cost effective business with competitors. In other words, it works as a yardstick of benchmark business performance.	3.68	0.782	7	Medium
	General average	3.90	0.767	-	Medium

(AM): is the arithmetic mean, (SD) is the standard deviation

1.9.2 Competitive advantage

The competitive advantage variable is measured in paragraphs (22 - 28), as illustrated in table (4), which indicates a medium grade positive trends for the members of the study sample concerning the competitive advantage.

The general average of the arithmetic mean for the answers of the respondents is equivalent to (3.49) and the standard deviation is equivalent to (0.958), which is higher than the default arithmetic mean scale equivalent to (3).

the paragraphs, which state "The involvement of modern management accounting techniques in the competitive business environment where businesses require the creating and sustaining of a competitive advantage, may be necessary" had the highest approval grades; as its arithmetic means were (3.60) and the standard deviations were (1.026), while the paragraph, which states "The telecommunication companies manages interest rates in such a way that it reduces risks and creates a competitive advantage with the help of the modern management accounting techniques" had the lowest approval grades; as its arithmetic mean was (3.22) and its standard deviation was (0.994).

Table (4): Arithmetic means and standard deviations for the members of the study sample answers measuring the attitudes towards the competitive advantage

NO	Statement	A M	S D	Rank	Grade
8	The competitive advantage is the superiority of the company to competitors, resulting from the exploiting of the essential competences of the company in creating greater values in the form of low prices or unique advantages that satisfy the customers' needs	3.57	0.982	2	Medium
9	The enhancing process of the competitive advantage is by prolonging the usefulness of the application of a unique strategy to maximize the value, through acquiring competitive advantages which are difficult for competitors to be imitated	3.53	0.890	3	Medium
10	the role of modern management accounting techniques have moved from the traditional confines of planning, control, organisation, communication and motivation and now focuses more on the external business environment: competition, opportunities, threats and changing circumstances.	3.44	0.915	4	Medium
11	the involvement of modern management accounting techniques in the competitive business environment where businesses require the creating and sustaining of a competitive advantage, may be necessary	3.60	1.026	1	Medium
12	The management accountants, especially those in the telecommunication sector, should therefore be at the forefront in the search and development of innovative competitive strategies that may enable an organization to remain profitable and competitive	3.39	1.009	5	Medium
13	The management accounting function develops strategies that enable the telecommunication companies to exploit financial innovations in creating a sustainable competitive advantage	3.39	0.927	5	Medium
14	The telecommunication companies manages interest rates in such a way that it reduces risks and creates a competitive advantage with the help of the modern management accounting techniques	3.22	0.994	6	
	General average	3.49	0.958	-	Medium

1.10 Testing the Study Hypothesis

In order to test the hypotheses of the study, of statistical methods were used with the appropriate tests to the nature of the variables and assumptions, using the simple linear regression and the multiple linear regression analysis so as to put the base of acceptances or rejections the hypothesis as follows:

1. If the calculated value of (T) is higher than the tabulated (T) value at the level of ($\alpha = 0.05$), the result will be rejection for the null or the zero hypothesis (H0) and the alternative hypothesis (H1) will be accepted, which indicates the statistically significant relationship effect.
2. If the calculated value of (T) is less than the tabulated (T) value at the level of ($\alpha = 0.05$), the result will be accepted for the null or the zero hypothesis (H0) and the alternative hypothesis (H1) will be rejected, which indicates no statistically significant relationship effect.
3. If the calculated value of (F) is higher than the tabulated (F) value at the level of ($\alpha = 0.05$), the result will be rejection for the null or the zero hypothesis (H0) and the alternative hypothesis (H1) will be accepted, which indicates the statistically significant relationship effect.
4. If the calculated value of (F) is less than the tabulated (F) value at the level of ($\alpha = 0.05$), the result will be accepted for the null or the zero hypothesis (H0) and the alternative hypothesis (H1) will be rejected, which indicates no statistically significant relationship effect.

1.10.1 Testing the study Hypothesis

H0: There will be no statistically significant differences at the level of significance ($\alpha = 0.05$) of the impact of applying activity-based costing (ABC) on the competitive advantage in the Jordanian telecommunications.

It is noted from simple regression analysis results described in table (6) that there is an impact of applying

activity-based costing (ABC) on the competitive advantage in the Jordanian telecommunications.

This statistically significant effect at the statistically significant level ($\alpha = 0.05$), as the calculated (T) value is (7.841), which is higher than tabulated (T) value, is in line with the simple regression analysis results that explain the (0.197%) variance.

According to that the null hypothesis (H0) will be rejected and the alternative hypothesis will be accepted.

Table (6): testing results of the first sub hypothesis

Significant (T)	Calculated (T)	Tabulated (T)	(R) Square	(R)
0.000	7.841	1.960	0.197	0.444

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