## THE AVAILABILITY OF COMPONENTS ACCOUNTING RESPONSIBILITY IN INDUSTRIAL COMPANIES IN AQABA CITY

## Muneer Mohamad Falah Jaradat

Al- Balqa' Applied University

## Farouq Ahmad ALazzam

Al- Balqa' Applied University

## Mohammed Abu Rumman, PhD

Al- Balqa' Applied University

## Ata E. M. AL Shra'ah, PhD

Al- Balqa' Applied University

#### Abstract:

The purpose of this study is to identify the availability of components accounting responsibility in industrial companies in Aqaba. The data was collected by distributing the questionnaires to the employees of these companies. These questionnaires were analyzed statistically to test hypotheses and analyze the results. The present study have many main positive findings such as that the industrial companies in Al-Aqaba city accurately determine positions of responsibility, the findings also indicate that industrial companies in Aqaba city are preparing budgets efficiently, they make cost analysis on the basis of ability or inability to control, and there is integration in performance reports system. The study also found several negative results such as the design makers in these companies do not give the sufficient authorities to the managers consistent to the responsibilities that assigned to them, there is no sufficient capability to measure the targets of designated centres, there is insufficiency in the general budgets detail, and the budget does not linked to the administrative regulation accurately, and the cost level is affected by more than manager, and performance reports are not issued at any time the user needs.

The study recommended that industrial companies in Aqaba should grant the managers sufficient authorities to the managers consistent to the responsibilities that assigned to them, and find adequate tendency to measure the targets designated centres. The study also recommended that to develop the budgets through provide sufficient in the general budgets details, link the budgets of the industrial companies in Aqaba with the administrative organization accurately, and issue of performance reports at any time the user needs them.

#### Keywords: Accounting, responsibility, industrial companies

#### Introduction:

Long ago the administration's interest was devoted on the protection of the property of establishment. This stems from the owner's interest in protecting assets from theft, steal and fraud. The accounting profession is the foundation for the implementation of this function. After that the role of the accounting has developed, in addition to the function to protect assets from loss. The role of accounting profession is exceeded to investigate with those who responsible for the efficiency in the management and utilization of available assets.

The administration needs a lot of information produced by the various information systems. The most important of these management accounting systems, which provides a lot of information that, are useful for making administrative decisions, assessing performance and raise production efficiency. The function of accounting responsibility considered the most important management methods to achieve production efficiencies and performance evaluation. The intensive competition and a rarity of resources have increased the importance of accounting responsibility. Therefore, the extent of the development of accounting responsibility is measured by the availability of some of the components and the bases for the application of accounting responsibility.

#### **Problem of the Study**

There is a great need for the use of accounting responsibility as an integrated manner because of the rarity of resources and competition faced by industrial companies in Aqaba. The question arise here is what are the availability of components accounting responsibility in these companies, which means that the problem of the study is the lack of clarity of the degree of implementation accounting responsibility to increase the operational efficiency and development of performance.

#### **Importance of the study**

The significance of the present study rises because of the role of the industrial sector in the Aqaba Special Economic Zone for growth and development and the intense competition facing the sector. This study is important because of the importance of accounting responsibility as a means of raising operational efficiency. This study also considers as one of the recent studies that focuses at the application this method in the industrial sector in Aqaba city.

#### **Objectives of the Study**

This study aims to:

- 1. To identify the extent of the industrial companies in Aqaba city in selecting proper positions of responsibility.
- 2. To identify the efficiency in preparation of industrial companies budgets in Aqaba city.
- 3. To determine the degree of cost analysis on the basis of ability or inability to control in the industrial companies in Aqaba city.
- 4. To identify the integration of the reporting performance system in industrial companies in Aqaba city.

#### Hypotheses

Based on the study aim and objectives, the following hypotheses can be formulated:

H1: The industrial companies in Aqaba city select proper positions of responsibility.

H2: The industrial companies in Aqaba city prepare budgets efficiently.

H3: Cost Analysis achieved on the basis of ability or inability of control in the industrial companies in Aqaba city.

H4: There is integration in the reporting performance system in industrial companies in Aqaba city.

#### Methodology

The present study relied on descriptive analytical method, where the primary data were collected from the population of the study. The data were analyzed statistically to get to the results around axes of the study. The questionnaire was the tool to collect the primary data. The questionnaire has been designed to measure the existing reality in industrial companies in the population of the study.

#### **Population and Sample of the Study**

The population of this study consisted of industrial companies in Al Aqaba city. The sample of the study was consisted of fourteen companies which selected randomly.

#### **Instrument of the Study**

A five point Likert scale was used in order to obtain data to answer the research questions. 81 questionnaires were distributed to all companies each company got 5-6 questionnaires.77 questionnaires were restored and 5 questionnaires have been excluded from the study. Participants answered each question according to a 5-point Likert-type scale in which responses ranged from strongly agree (5), to agree (4), to neutral (3), to disagree (2) to strongly disagree (1).

#### **Procedures for Data Analysis**

Data gathered through the questionnaires was analyzed on the basis of mean, t-test Cronbach's alpha test, and standard deviation. The answers of the questions is accepted if the mean of the item is more than 3, therefore, to be the value significant the, value of t must be than the tabular value or the level of significance be less than 0.05.

#### Literature review

There are several studies related to this paper. The most important of these studies are as follows:

Judeh, Sheikh, & Sbugh (2009) conducted a study to identify the extent of the application of accounting responsibility in the Jordanian four and five stars hotels. The sample is limited study to Amman hotels only. The findings indicate that the Jordanian hotels identify clearly the positions of responsibility. The budget is made according to the actual performance chart, and there is an integrated reporting system to control and evaluate the performance. The findings also found that there is an effective incentive system. The study recommended that there should be cooperation between centres of responsibility and to clarify the work relationship among them. To activate the planning budgets, especially in the area of control and highlight the importance report and its formulation. To develop the administrative and accounting skills for employee.

Gharaibeh (2008) conducted a study to investigate the extent of the application of accounting responsibility and its impact on profitability and operational efficiency in the Jordanian industrial corporations companies. The results indicates that the organizational structure of Jordanian industrial public shareholding companies is divided to responsibility centres with a high degree of application, but there is no relationship between centres and profitability ratios and proportions operational efficiency. The authorised managers of responsibility centres with powers and the existence of incentives are linked to the results of responsibility centres and applied in highly degree and they linked to rates of profitability. The study recommended increasing the attention to divide the organizational structure to responsibility centres and identify the goals which needed to be achieved by each centre.

Ghalaa (2005) investigated the components of the application of accounting responsibility in the Libyan industrial companies. The study found that there is a clear identification of positions of responsibility, and the responsibility centres do not depend on the style of the standard costs in the preparation of budgets. The findings also indicated that the reports exists in these companies are not periodically and there was no effective incentive system. The study recommended urgent adoption of incentives system, the use of standard costs, and compare the actual performance and chart.

Khasharma & Omari (2004) conducted a study to identify the reality of the application of an accounting system of responsibility in the government agencies. The study found that there is need to pay attention to the administration control of sections and centres within the organization. The findings also focus on the use of the concepts, tools of accounting cost and management accounting in government agencies and divide the administrative unit for the cost and revenue centres. The study recommended that providing the necessary components for the application of accounting responsibility in the government sector.

Meedah study (2003) conducted a study to present the reality of the practical application of accounting responsibility in Jordanian industrial corporation's companies. The study found that 66% of companies do not apply this system fully and with scientific foundations. The study recommended that the companies should apply the accounting responsibility in scientific methods because of its great importance.

#### **Statistical Analysis:**

First: Description of the personal and functional factors to the respondents:

Table (1) below shows a description of the personal and functional factors for the sample of study in companies:

• Qualification: It is clear that 63.63% of the samples of the study are holders of a bachelor's degree, 18.18% of the samples are diploma holders, 9.09% of the samples

are Masters Holders, and 5.20 of the sample are high school holders, while only 2.6% of the samples are PhD holders.

- Experience: 36.8% of the sample experiences' range of 11 15 years, 34.2% of samples experiences' range of 6 -10 years, 21.1 of the sample experiences' over the 15 years, and 7.9% of the sample experiences' range from 1 5 years.
- Career position: 52.6% of the samples are heads of departments, 26.3% are staff, 15.8% occupy the position of deputy managers, and 5.3% are managers.

Variables		Frequencies	Percentages
Qualification	High School	4	5.20
	Diploma	14	18.18
	Bachelor	49	63.63
	Masters	7	9.09
	Phd	2	2.60
Experience	1-5	15	19.48
	6-10	27	35.06
	11-15	23	29.87
	More Than15	12	15.58
Career position	Manager	11	14.29
	Deputy Manager	14	18.18
	Heads of Departments	25	32.47
	Staff	28	36.36

Table (1): frequencies and percentages of personal variables of the respondents:

## Reliability

Cronbach's  $\alpha$  (alpha) as a coefficient of reliability was used to measure the internal consistency for all variables. Table (2) below shows that the value of alpha is grater than 0.60, which indicate the stability in the dimensions of the study. The values of alpha is grater than 0.60, which indicate the stability in the instrument of the study.

Dimension	Value of Alpha
Determine Positions of Responsibility	0.789
Preparing Budgets	0.805
Cost Analysis	0.839
Integration in Performance Reports System	0.789
Total	0.925

 Table (2): Cronbach Alpha Test Results:

#### **First Hypothesis**

H1: The industrial companies in Aqaba city select proper positions of responsibility.

Table (3) below shows that all the statements got means grater than 3.00, except the statements No (3) and (10). Their level of significance was less than 0.05.which indicates that they are statistically significant. The statement No. 8, got highest mean 4.09 which measures how each responsibility centre, prepare the goals accurately. The statement No. 2, got lowest mean 3.75 which measure the clarity of responsibility and duties for each person. Statement No. 3, which measure the extent of granting the responsible people sufficient authorities, consistent with the responsibilities assigned to them got mean greater than 3.00 but the level of significance is greater than 0.05, which means it's not statistically significant. Statement No. 10, which means it's not statistically significant. Overall means was of 3.73 and level of significance 0.00, which indicate that the first hypothesis is accepted and it is determine the exact positions of responsibility.

Table (3): mean, standard deviation, t value and level of significance regard identifying the responsibility centers:

No.	Statement     N		Standard	t-value	Sig
			Deviation		
1.	The company appoint person who is responsible				
	for the performance of responsibility centres	3.82	1.16	6.21	0.00
2.	The company clearly identifies the responsibility				
	and duties for each person.	3.75	1.09	6.06	0.00

3.	The responsible people are granted adequate				
	powers consistent with the responsibilities				
	assigned to them	3.25	1.56	1.39	0.17
4.	The company clearly identifies the				
	responsibilities of each responsibility centre				
	objectively.	4.05	0.93	9.92	0.00
5.	The application of accounting responsibility				
	system begins from low to the higher levels	3.86	0.96	7.87	0.00
6.	The relations between the centres of				
	responsibility are clear.	3.95	1.09	7.65	0.00
7.	The responsibility centres includes homogeneous				
	functions.	3.87	1.22	6.27	0.00
8.	The targets of each responsibility centre are				
	prepared accurately.	4.09	0.99	9.68	0.00
9.	The sequence of work in responsibility centres				
	are clear	3.96	1.07	7.89	0.00
10	The targets of specific centres are measurable.	2.70	1.37	-1.92	0.06
	Total	3.73	0.58	11.03	0.00

#### **Second Hypothesis**

#### H2: The industrial companies in Al-Aqaba city prepare budgets efficiently.

Table (4) below shows that all the statements got means grater than 3.00, except the statements No (12) and (13). Their level of significance was less than 0.05.which indicates that they are statistically significant. The statement No. 20, got highest mean 4.05 which measures the extent help in directing the performance of budget responsibility centres towards efficiency. The statement No. 19, got lowest mean 3.66 which measure the representation of the budget to the set of goals distributed by responsibility for its implementation.

Statement No. 12, which measures the ability to measure whether the prepared budgets are characterized by all details, got mean less than 3.00, which means it's not statistically significant.

Statement No. 13, which measure how linking the budget with administrative organization accurately, got mean greater than 3.00 but the level of significance is greater than 0.05, which means it's not statistically significant.

Overall means was of 3.67 and level of significance 0.00, which indicate that the second hypothesis is accepted and which means that the budgets are prepared efficiently.

Table (4): mean, standard deviation, t value and level of significance regard preparing the budgets:

No.	Statement	Mean	Standard	t-value	Sig
			Deviation		
11.	Budgets are prepared for every responsibility				
	centre	3.96	1.09	7.71	0.00
12.	prepared budgets are characterized in all detail.	2.90	1.65	-0.55	0.58
13.	Budget is linked to the administrative				
	organization accurately	3.13	1.58	0.72	0.47
14.	The budgets helps in analysing and identifying				
	the deviations and who is responsible for them	3.91	1.09	7.32	0.00
15.	The budgets helps in deduct the deviations				
	accurately	3.69	1.22	4.96	0.00
16.	Budgets are used as a way of communication and				
	coordination between the responsibility centres	3.81	1.05	6.72	0.00
17.	Budgets help to identify weaknesses and				
	extravagant	3.74	1.20	5.43	0.00
18.	Budgets help to identify the strengths and				
	efficiency	3.86	1.07	7.01	0.00
19.	Budget represents a set of goals distributed by the				
	responsibility for its implementation	3.66	1.24	4.68	0.00
20.	Budget helps in directing the performance of				
	responsibility centres towards efficiency	4.05	1.18	7.82	0.00
	Total	3.67	0.72	8.18	0.00

#### **Third Hypothesis**

H3: Cost Analysis achieved on the basis of ability or inability of control in the industrial companies in Aqaba city.

Table (5) below shows that all the statements got means grater than 3.00, except the statements No (23). Their level of significance was less than 0.05.which indicates that they

are statistically significant. The statement No. 24, got highest mean 4.08 which measures the possibility of determining who is responsible for the problem. The statement No. 28, got lowest mean 3.58 which related to dimensions of the impact of previous decisions taken by former manager.

Statement No. 23, which meant that the cost level has not been affected by more than official, got mean greater than 3.00 but the level of significance is greater than 0.05, which means it's not statistically significant.

Overall means was of 3.78 and level of significance 0.04, which indicate that the third hypothesis is accepted, which means that the cost analysis achieved on the basis of ability or inability of control in the industrial companies in Aqaba city.

Table (5): mean, standard deviation, t value and level of significance regard Cost Analysis achieved on the basis of ability or inability of control:

No.	Statement	Mean	Standard	t-	Sig
			Deviation	value	
21.	Budgets are prepared for every responsibility				
	centre	3.79	1.07	6.51	0.00
22.	prepared budgets are characterized in all detail.	3.95	1.10	7.57	0.00
23.	Budget is linked to the administrative				
	organization accurately	3.12	1.61	0.64	0.52
24.	The budgets helps in analysing and identifying				
	the deviations and who is responsible for them	4.08	1.06	8.92	0.00
25.	The budgets helps in deduct the deviations				
	accurately	3.95	1.18	7.05	0.00
26.	Budgets are used as a way of communication				
	and coordination between the responsibility				
	centres	3.95	1.28	6.52	0.00
27.	Budgets help to identify weaknesses and				
	extravagant	3.84	1.14	6.52	0.00
28.	Budgets help to identify the strengths and				
	efficiency	3.58	1.14	4.50	0.00
	Total	3.78	0.74	9.30	0.00

#### **Fourth Hypothesis**

# H4: There is integration in the reporting performance system in industrial companies in Aqaba city.

Table (6) below shows that all the statements got means grater than 3.00, except the statements No (34). Their level of significance was less than 0.05.which indicates that they are statistically significant. The statement No. 32, got highest mean 4.07 which measures the evaluation of employees performance in every responsibility centre on a regular basis. The statement No. 31, got lowest mean 3.64 which measure the preparation of performance reports based on scientific and clear principles so that the administration can study it easily. Statement No. 34, which measures issuing performance reports at any time, got mean less than 3.00 but the level of significance is greater than 0.05, which means it's not statistically significant.

Overall means was of 3.59 and level of significance 0.00, which indicate that the fourth hypothesis is accepted, which means that there is integration in the reporting performance system in industrial companies in Aqaba city..

<b>Table</b> (6):	mean,	standard	deviation,	t	value	and	level	of	significance	regard	Integral
report system	m:										

No.	Statement	Mean	Standard	t-	Sig
			Deviation	value	
29.	There is a static model of the performance report				
	shows the data and information should be				
	available in it.	3.80	1.17	5.70	0.00
30.	The performance reports prepared by the				
	company contain detailed information include				
	actual performance, plan and deviations				
	between each responsibility centre	3.71	1.09	5.47	0.00
31.	Performance reports being prepared on the basis				
	of scientific and clear way so that the				
	administration can be studied them easily.	3.64	1.43	3.75	0.00
32.	The evaluation of employees' performance is				
	done in every responsibility centre on a regular	4.07	0.87	10.26	0.00

	basis.				
33.	The report contains the most important				
	deviations	3.83	0.96	7.20	0.00
34.	Performance Reports are issued at any time	2.47	1.46	-3.03	0.00
	Total	3.59	0.66	7.40	0.00

#### **Findings of the Study**

The findings of the study can be summaries as follow:

1. The industrial companies in Aqaba city determine the exact positions of responsibility centres, the company appoint person who is responsible for the performance of responsibility centres, the company clearly identifies the responsibility and duties for each person, the company clearly identifies the responsibilities of each responsibility centre objectively, the application of accounting responsibility system begins from low to the higher levels, the relations between the centres of responsibility are clear, the responsibility centres includes homogeneous functions, the targets of each responsibility centre are prepared accurately, the sequence of work in responsibility centres are clear, and the targets of specific centres are measurable.

But the companies do not grant the responsible people sufficient authorities, consistent with the responsibilities assigned to them and there is no sufficient ability to measure the targets of designated centres.

2. The industrial companies in Aqaba city prepare budgets efficiency, the budgets are prepared for every responsibility centre, the budgets helps in analyzing and identifying the deviations and who is responsible for them, budgets helps in deduct the deviations accurately, budgets help to identify the strengths and efficiency, budgets help to identify weaknesses and extravagant, budgets are used as a way of communication and coordination between the responsibility centers, budget represents a set of goals distributed by the responsibility for its implementation, budget nepresents a set of goals distributed by the responsibility for its implementation, budget helps in directing the performance of responsibility centers towards efficiency, but these budgets do not characterized by comprehensive details and they are not linked to the administrative organization accurately.

3. The industrial companies in Aqaba city prepare a cost analysis on the basis of ability or inability of control, the origin of the cost is being identified, controlled and non-controlled costs are separated accurately, it may identify who is responsible for the problem, scope and domain of the administrative authority level is being studied, the time period covered by the cost is being studied, the unconfirmed external influences, is removed from the report measures the performance of the responsibility centre, and dimensions of the impact of previous decisions taken by the former manager are removed, but the level of cost is not influenced by more than official.

4. There is completely integration in the performance report system in the industrial companies in Aqaba city, hence, there is a static model of the performance report shows the data and information should be available in it, the performance reports prepared by the company contain detailed information include actual performance, plan and deviations between each responsibility centre performance reports being prepared on the basis of scientific and clear way so that the administration can be studied them easily, the evaluation of employees performance is done in every responsibility centre on a regular basis, the report contains the most important deviations performance but the reports are not issued at any time.

#### **Recommendation of the Study**

The study recommended the following:

- 1. The companies should grant the responsible people sufficient authorities, consistent with the responsibilities assigned to them.
- 2. The industrial companies in Aqaba city should find sufficient capability to measure the targets designated centres.
- 3. The industrial companies in Aqaba city should develop the budgets to include comprehensive details.
- 4. The industrial companies in Aqaba city should link the budget with administrative organization accurately.
- 5. The level of cost in the industrial companies in Aqaba city should be one and affected only by one administrator.
- 6. The industrial companies in Aqaba city need to increase the flexibility of the process of issuing performance reports, hence to be issued at any time, or in the user's needs.

#### **References:**

Abu Hashish, K,. (2005) Cost Accounting. Wael Publication House, Amman, Jordan. Abu Nassar, M,. (2010) Management Accounting. Wael Publication House, Amman, Jordan Garrison, Ray H.,(2002) Management Accounting, translation by Mohamed Essam El-Din, Mars Publishing House, Riyadh, KSA.

Basile, M, (2001) Management Accounting, Third edition, Modern Library, Cairo, Egypt.

Judeh, A,. Sheikh, I & Sbugh, S,. (2009)The application of accounting responsibility in the Jordanian hotels: a case study. *Alzarqa journal for Humanities Research.*, Vol 9, No, 9, pp. 23 -49

Meedah, I,. (2003), Responsibility accounting system in Jordanian Industrial Corporations companies: Reality and Aspirations, Damascus Journal for Economic and Legal Sciences, Vol 19, No. 2, pp. 317 – 364

Saidiya, M, & Malah, N, (1987) The role of the responsibility accounting system in raising production efficiency. No. 20.

Mari, A,. (2002), Advanced cost accounting for the purposes of planning and control, University Publishing House, Alexandria.

Rugby, M,. (2004) Management Accounting. Wael Publication House, Amman, Jordan.

Ghalaa, A,.(2005) The availability of the application of responsibility accounting in the Libyan industrial companies, unpublished Master dissertation, , Al al-Bayt University, Mafraq, Jordan.

Gharaibeh, B, (2008) The extent of the application of Jordanian Industrial Corporations companies, the responsibility accounting and its impact on profitability and operational efficiency, unpublished Master dissertation, University of Jordan, Amman, Jordan.

Khasharma, H& Ahmed,I,. (2004) Measurement the possibility of applying of responsibility accounting responsibility in the Jordanian government agencies, field study, Yarmouk Research: series of Humanities and Social Sciences, Vol .20, No. 1A, pp. 259 - 287.

Atkinson. A, et, (2001) Management Accounting, 3ed Edition, prentice – hall, international Inc.

Drury, C,. (2000) Management & cost Accounting, 5<sup>th</sup> ed, business prose and sons learning, (U.K).

Horngren, C. Foster, G & Datar. (2010) Cost Accounting: Management Emphasis . Ninth Edition . Prentice – Hall International, New jersey . INC USA.

Jambalve, J ,(2001) Management Accounting, John Wiley and sons, Inc.

Robert Kaplan S ,& Anthony Atkinson A,. (1998) Advanced Management Accounting, 3rd Edition , Prentice Hall , New Jersey, USA.