

Received on (11-05-2015) Accepted on (15-07-2015)

**Relationship between the  
Application of Activity-Based  
Costing System, and Activity-  
Based Management System in  
Palestinian Banks Profit  
Maximization  
(Field Stud)**

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**Abstract**

The study aims to examine the relationship between the implementation of activity-based costing, ABC and activity-based management, ABM systems and profit maximization in Palestinian banks which count 7 banks. It was distributing 56 questionnaires for the sample study, and then making statistical analysis using SPSS program. The study resulted that there is a relationship between cost allocation mechanisms according to ABC system; allocation of cost objects and Palestinian banks profit maximization. As well as, there is significant statistical relationship between activation of ABM and performance measure in Palestinian banks profit maximization. In addition of that, it found that the implementation of ABC system and ABM system lead to maximization profits in Palestinian banks. The study recommends for the priority of the implementation of ABC and ABM in all Palestinian institutions.

**Keywords:**

Activity-Based Costing, Activity-Based Management, Profit Maximization, Palestinian Banks.

**العلاقة بين تطبيق نظام تكاليف الأنشطة ونظام إدارة الأنشطة  
في تعظيم ربحية البنوك الفلسطينية: دراسة ميدانية**

تهدف الدراسة إلى التعرف على العلاقة بين تطبيق نظام تكاليف الأنشطة ونظام إدارة الأنشطة في تعظيم ربحية البنوك الفلسطينية والبالغ عددها (7) بنوك، ولتحقيق أهداف الدراسة تم تصميم استبانة وتوزيعها على (56) موظف في البنوك الفلسطينية. وتم استخدام الأساليب الإحصائية المناسبة لتحليل واختبار الفرضيات.

وخلصت الدراسة إلى عدة نتائج أهمها: توجد علاقة ذات دلالة إحصائية بين تخصيص التكاليف حسب نظام تكاليف الأنشطة وأهداف التكلفة في تعظيم ربحية البنوك الفلسطينية. توجد علاقة ذات دلالة إحصائية بين نظام إدارة الأنشطة ومقاييس الأداء في تعظيم ربحية البنوك الفلسطينية. يؤدي تطبيق نظام تكاليف الأنشطة ونظام إدارة الأنشطة إلى تعظيم ربحية البنوك الفلسطينية بشكل كبير جداً. وأوصت الدراسة بضرورة تطبيق نظام تكاليف الأنشطة ونظام إدارة الأنشطة في جميع القطاعات الفلسطينية.

**كلمات مفتاحية:**

نظام تكاليف الأنشطة، نظام إدارة الأنشطة، تعظيم الربحية، البنوك الفلسطينية.

## Introduction:

Activity-based costing and Activity-based management system (ABC/ABM) has attracted high levels of interested from both academics and practitioners since its emergence in the late 1980s (e. g., Cooper and Kaplan, 1988; Foster and Swenson, 1997). Braun et al. (2010) defined ABC as the Focuses on activities as the fundamental cost objects. The costs of those activities become building blocks for compiling the indirect costs of products, services, and customers. While ABM is defined as a management approach that focuses on managing activities as a way of eliminating waste and reducing delays and defects (Garrison et al., 2014).

One interest in ABC/ABM is the impact which it has had on the accounting journal. ABC is a direct method of assigning overhead costs, and ABC/ABM have been espoused as the saviors of management accounting (Calvasinam et al., 2011). ABM helps through activity and process analysis to reduce costs and improve the knowledge about product/services costs and any cost object. ABM also leads to the realization of continued progress by a reorganization of production processes (Karim and Rahmouni, 2014).

The ABC is widely recognized as a superior method for allocating overhead costs, ABC system, presently the preference among full costing methods, has been the subject of much criticism with regard to the methodology used and some users have even abandoned it. Kaplan, himself one of the main initiators of the ABC method, acknowledged this criticism and the fact that the method was being abandoned (Kaplan and Anderson, 2007; Gervais et al., 2010).

ABC system was first initiated in an organization, which was called John Deere Company in United States. Many impressive United States companies such as Hewlett-Packard, Procter and Gamble, Tektronix and Caterpillar have adopted ABC system. Rasiah (2011). And ABC provides more accurate information to managers about the cost and profitability of their business processes, products, services, and customers. ABC

provides more accurate cost information by exploiting causal relationships.

A large commercial bank in the United States recently implemented ABC in four phases over a two-year period: preparation and planning; assessing appropriateness of ABC; designing an ABC system and collecting necessary data; and implementing the system in a financial services environment (Witherite and Kim, 2006).

While ABC is simple in concept, it is complex and costly to implement and operate. An organization must identify and find information for all resources, activities, and their associated drivers, which can number into the hundreds. Consequently, although ABC provides greater accuracy, ABC systems are not as widely adopted as might be expected because of their size, complexity, and cost (Kaplan and Anderson, 2007). Early attempts to simplify ABC focused on reducing the number of activities and drivers used while attempting to minimize the loss in accuracy (Homburg, 2001). In effect, size and some complexity issues were reduced at the expense of accuracy. These simplified systems also considered 2 the costs to gather information for each activity/driver. However, these attempts required a full implementation of ABC before the simplification could occur. This meant that all activities and drivers had to be identified before the simplification could be done (after the-fact simplification). If a full implementation must take place, the value of the simplification is questionable.

## Research Problem:

The company's management should decide about the purpose of using of costing system, and measuring profitability. The latest development in technology, marketing and management created new challenges to Palestinian banks. Therefore, they have to look for new mechanisms to determine the cost of banking services in order to maximizing profits and facing competitions (Maiyaki, 2011). Hence, the main question of this study is: what is the relationship between the application of ABC system, and ABM system as a

new model for maximizing profit in Palestinian banks?

This main question can be splatted into the following Sub- main questions:

1. What is the relationship between cost allocation (fixed, variable, overhead) according to (ABC) system; and cost objects?
2. What is the relationship between operational management (O-ABM) and strategic one (S-ABM) and performance measures?
3. What is the relationship between cost objects and Palestinian banks profit maximization?
4. What is the relationship between performance measures and Palestinian banks profit maximization?

### Research Objective:

The ABC/ABM implementation methodology discussed in this paper was originally developed for Palestinian banks with the objective of effective implementation profit maximization. The main objective of the research is to examine the relationship between the application of ABC system, and ABM system in Palestinian banks profit maximization.

This main objective can be splatted into the following Sub- main objectives:

1. Describe the relationship between allocate costs on cost objects according to ABC and Palestinian banks profit maximization.
2. Find out the relationship between activation of ABM (operational and strategic) and performance measure in Palestinian banks profit maximization.

### Research Importance:

The importance of this research stems from the intention of the researcher to rang relationship between the application of ABC system, and ABM system in Palestinian banks profit maximization. The information from ABC can be used for many purposes such as determining a competitive price for a product, developing budgeting, future cost estimation, measuring performance, and implementing strict control on operational and overhead expenditures. ABC is the main

introductory step to ABM through which a value-added cost as well as a non-value added cost can be determined.

In addition that, ABC helped many organizations whether financial and non-financial to improve their competitiveness by enabling them to make better decisions based on a better understanding of their cost structure. Therefore, because of the importance of banks in Palestine which are considered as backbone of Palestinian economy, they have to provide their services cheaper and more quality. As well as, the implementation of ABC and ABM provide competitive advantages in banks through cost reducing, and then strength of customer relationship that lead to maximize profits.

### Research Hypotheses:

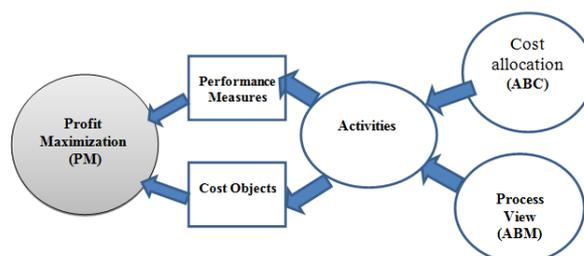
Main hypothesis: There is insignificant statistical relationship between the application of activity-based costing (ABC) system, and activity-based management (ABM) system in Palestinian banks profit maximization.

This hypothesis can be splatted into the following Sub-hypotheses:

Hypothesis (H 1): There is insignificant statistical relationship between allocate costs on cost objects according to ABC and Palestinian banks profit maximization.

Hypothesis (H 2): There is insignificant statistical relationship between activation of ABM and performance measure in Palestinian banks profit maximization.

### Research Models:



### Theory Framework:

Management accounting is a system that provides managers with full and Trustworthy

information necessary for making correct management decisions, planning, control and performance measurement. Drury (2012) ABC/ABM was developed in the mid 1980s by Kaplan and it has been applied very popular in developed countries with obvious advantages because it prevents cost distortions and provides a process view which traditional cost accounting cannot provide.

ABC was a more accurate product-costing system than traditional volume-based costing systems especially when organizations were facing higher product diversity. Qian and Ben-Arieh (2008) argued that ABC helped managers to become aware of original parameters that created demands on indirect and keep up resources which can identify and remove non-value adding activities. ABC approach had demonstrated to be more accurate than the traditional cost estimation.

ABC helps services companies identify and allocate overhead costs and quantify labor costs associated with each activity. For commercial banks, there are many benefits of ABC implementation. Where the ability to trace specific costs to bank customers and the ability to measure customer and product profitability (Wetherite and Kim, 2006).

Blocher et al. (1999) and Rasiah (2011) stated that ABC helps managers understand the relation between the firm's strategy and the activities and resources needed to put the strategy into place. As well as, it improves the firm's efforts to cut costs by tracing and controlling indirect costs. Similarly, Storey (1995) and Irshaidat (2005) pointed out that ABC provides managers with easier access to relevant costs for making business decisions. ABC techniques can also be used in a wider context to assist management to improve performance of other areas in the business through ABM and assist in estimations of future work and resources through ABB.

ABC system is used not only for maximizing profits of services and manufacturing firms. It also uses for making sound decisions which regarding to environmental effect, where Tsai et al. (2015)

develop a model for decision-making associated with the ABC system within the life-cycle assessment (LCA) aspects in order to maximize a company's profits and minimize environmental impact within limited constraints and resources. They show that the proposed model is put forward as a green management tool that provides enterprise advantages, and reaches environmental sustainability goals.

ABC leads to more cost pools being used to assign overhead costs to products, ABC leads to enhanced control over overhead costs, and ABC leads to better management decisions (Weygandt et al., 2012).

Calvasinam et al. (2011) stated that Through the use of ABC, the activities and associated costs to support either products or customers can be determined. Where the evaluator identifies the revenues associated with the product or customer.

Julijana et al. (2012) aim to design a model of ABC and management of logistics costs in a production company, and test its efficiency in the disclosure of logistics costs compared with traditional cost accounting. They found that an activity-based approach discloses more logistics costs at the level of a group of products than the traditional cost-accounting approach, and detailed information on logistics costs obtained enables their more efficient management.

Alabbadi and Areiqat (2010) aimed to identify the ability of applying the ABC system in the Jordanian Private Universities, which required the availability of the needed information as one significant condition of applying the system, and qualified employees with managerial and financial skills needed for applying the ABC system. They resulted that the applying of traditional costing system causes high cost for the students. They also pointed out that applying ABC system in the Universities is possible because of the availability of the needed information. However, the main challenges that may face the applying process are the lack for qualified employees.

Although ABC system has more advantages than traditional systems, but in today's

competitive economic environment it has not met fulfilled provision of sufficient information for decision-making. Karim and Rahmouni (2014) pointed out through examining the satisfaction of the users of ABC in Moroccan companies using Importance Performance Analysis (IPA) tool, that the ABC adopters were more efficient and more satisfied with their cost system. However, they did not fully benefit from the contributions of the ABC system such as budgeting and outsourcing decisions and customer quotes were low (Weygandt et al., 2012).

Durgham and Shagfa (2009) found that the success of the application in ABC System needs a working team that is highly experienced and extensive knowledge of the activities engaged in remedial sections of the hospital.

Evan and Ashworth (1995) claimed that although more overhead costs can be allocated straight to products via ABC's multiple activity cost pools, but, some overhead cost remained to be dispensed with the help of some arbitrary volume based cost driver like machine or labor hours.

ABC system forces on short-term strategic and ignore long-term strategic Christensen and Sharp (1993). And also, (Huynh, et al., 2013) confirm this result, where they indicated that the using of ABC alone in today's business environment has some limitations such as lack of planning and control cost. As well as, it just provides an alternative way to trace costs to products.

Durgham (2007) shows that the main factors for the application of ABC system at the Palestinian companies in Gaza Strip are: management attitudes, a diversity and the complication of the therapeutic services, the availability of accounting systems, the sharp competition degree, the diversity of supporting activities, and depression of the companies' ability to explain its profit.

Ismail (2010) demonstrated that the implementation of ABC technique can improve information of benefits to the university administrators. However, several obstacles and challenges especially those relating to supporting information systems may reduce of the success of

ABM system implementation. Which is one important alternative for public universities to consider to covert to competitive entities.

Despite its complexity and high cost than traditional systems, many firms are adopting ABC for a variety of reasons: competitive pressure that makes it imperative for companies to capture costs at the product or activity level rather than using traditional costing systems. Horngren, et al. (2014) pointed out that traditional costing systems are not helpful in this regard, where the importance of indirect costs which now account for more than 50% of total cost makes it imperative to use a more reliable and fair costing system like the ABC.

### **Activity-Based Management:**

The shift from ABC (for product profitability assessment) to ABM (for more general managerial control and decision support) has been supplemented by the broadening of ABC/ABM application to different types of business, to different functional specializations within business and to the complementarities of ABC/ABM to other new high-profile management and accounting techniques (Bjornenak and Falconer, 2002).

An ABM system is more detailed and more accurate than a functional-based cost management system. It has created a demand for strategic-based cost management. ABM is an integrated approach that focuses management's attention on activities with the objectives of improving customer value and the profit archived by providing this value.

The ABM puts emphasis on managing the activities and processes in order to enhance value added and increase the profits and customer satisfaction. The ABM tries to combine the cost stimulants, analysis of activities and processes, measurement of performance, efficiency and effectiveness within an integrated framework used for decision making (Movahedi, et al., 2010).

An ABM system is an excellent way to improve the quality of managerial decisions mostly based on information provided by the ABC system. The ABM system permits the proper allocation of the resources to activities, helping to improve

production and reduce their costs, based on analysis done through ABC system (Capusneanu and Martinescu, 2010).

According to ABM system, the managerial actions can be divided into two major categories: operational and strategic ABM. Operational ABM seeks to improve what is already in existence, where it works to increase efficiency, reach lower levels of costs and make use of assets. While strategic ABM explores various ways a company can create and sustain a competitive advantage in the marketplace. ABM attempts to alter the demand for activities to increase profitability, encompasses decisions about product design and development where the biggest opportunity for cost reduction exists, improves relationships with suppliers and customers (Cardos and Pete, 2011). Kaplan and Cooper (1998) stated that there are five basic information outputs will be found by organizations which implementing and designing ABM. The five outputs are:

- Information about the cost of activities.
- Information about non-value-added activities that will determine the activities not contribute to customer value, then make the required improvements.
- Information about the activity-based performance measures that will be useful for providing scorecards to present reports about the way of doing improvement efforts.
- Information about cost objects either product or service. This will be useful for the process of selecting the market segments the organization chooses to compete in.
- Information about cost drives that will be useful for determining the elements that cause changes in the activity cost.

However, ABM can be only measured through the decisions, actions and obtained information. Only the information obtained through the optimal use of ABM is to be very useful, otherwise it would be regarded as a waste of resources. Benefits and values of a management based system can be demonstrated in a three phase cycle under the title

of management based value cycle system (Miller, 1996).

### **ABC/ABM integration for maximization profit:**

In today's business environment, ABM is a useful cost management system. One of the most useful applications of ABM is distinguishing between value-added costs and non-value-added costs. Another ABC related technique that has gained popularity is benchmarking, the continuous process of comparing products, services, and activities to the best industry standards. ABC system also focus on activities, its results are a very useful tool in cost management systems. ABM is using the output of an ABC system to aid strategic decision making and to improve operational control of an organization in order to achieve the aims: to improve the value received by customers and profits by identifying opportunities for improvements in strategy and operations (Huynh et al., 2013).

ABC is the major source of information for ABM. Where Kostakis et al. (2010) examined the integration of simulation modeling, association rule mining ARM and ABC in restaurants. Simulation modeling is used to model process variability and produce a range of cost values, instead of a point estimate of the cost, by generating a range of values for the simulated cost drivers. It extracts dependencies between a cost drivers whose estimation is time-consuming, with another cost driver, which can easily be calculated. These associations can assist the estimation of the empirical distributions of those cost drivers, which were difficult to calculate.

ABC and ABM systems emerged to meet the need for accurate information about the cost of resource demands by individual products, services and customers and these system also enabled indirect and support expenses to be driven first to activities and processes and then to products, services and customers. In this way managers have obtained a clearer picture of the economics of their operations and could improve their decisions.

ABC/ABM aim to increase the accuracy of cost information by assigning overheads and other

indirect costs directly to specific business activities. ABC goes beyond traditional cost allocation. It involves identifying and modeling the complexity of cost drivers and linking them around product, service, or customer-creation activities. ABC/ABM is rapidly becoming an accepted and practical tool for management accountants and maintain. Two critical elements necessary for the success of an ABC/ABM system are: (1) Involving people who have a strong understanding of the operations of the business organized into a project implementation team, and (2) making use of a practical and structures technique of analysis (Al abbad and Areiqat, 2010).

ABC/ABM integration has many advantages for many organizations. However, with the rapid change of today's economic environment, advanced technology, and the requirements of the modern enterprise's management force companies produce and supply its products at the lower price than its competitors do. The same goods or the functions of goods are the same but how to supply it to customer with the lower price and meet the customer need, and raise customer value. To solve this question, Huynh, et al. (2013) pointed out that managers need to focus on detailed cost information provided by costing system and analyze these information in the past, present, and the future in order to control cost and look for opportunities to reduce costs.

Alyamoor (2010) uses ABM to identify the opportunities of Cost Reduction in Mosul Dairy Factory. Where the cost is managed through management of activities that causing the emergence of this cost. As the ABM system integrated with the activities based costs system, the ABC through the use of the information is provided by the ABC, on activities and costs to achieve the goals and this was aimed by the research to clarify, so the case study methodology was used in an attempt to identify the opportunities of cost reduction in Mosul Dairy Plant.

Roztock (2010) examines the application of ABC/ABM in e-commerce by providing a step-by-

step ABC/ABM implementation procedure. He found that ABC/ABM is useful to e-businesses, where it appears to have the potential to lead e-businesses toward efficient levels of operations and more professional business strategies, and then will lead them toward the main goals of a for-profit-organization: profitability.

### Practical Framework

#### Methodology:

#### Data Measurement:

In order to be able to select the appropriate method of analysis, the level of measurement must be understood. For each type of measurement, there is/are an appropriate methods that can be applied and not others. In this research, ordinal scales were used. Ordinal scale is a ranking or a rating data that normally uses integers in ascending or descending order. The numbers assigned to the important (1,2,3,4,5) do not indicate that the interval between scales are equal, nor do they indicate absolute quantities. They are merely numerical labels. Based on Likert scale we have the following:

Paragraph	Very Small	Small	Medium	High	Very High
Scale	1	2	3	4	5

#### Statistical analysis Tools:

The researcher would use data analysis both qualitative and quantitative data analysis methods. The Data analysis will be made utilizing (SPSS 15). The researcher would utilize the following statistical tools:

1. Cronbach's Alpha for Reliability Statistics.
2. Spearman Rank correlation for Validity.
3. Frequency and Descriptive analysis.
4. Nonparametric Tests: Sign test.

Sign test is used to determine if the mean of a paragraph is significantly different from a hypothesized value 3 (Middle value of Likert scale). If the P-value (Sig.) is smaller than or equal to the level of significance,  $\alpha = 0.05$ , then the mean of a paragraph is significantly different from a hypothesized value 3. The sign of the Test value indicates whether the mean is significantly greater

or smaller than hypothesized value 3. On the other hand, if the P-value (Sig.) is greater than the level of significance,  $\alpha = 0.05$ , then the mean a paragraph is insignificantly different from a hypothesized value 3.

**Research Sample and population:**

The population of this research consists of Palestinian banks (7 banks) that include 153 branches around Palestine. The random sample was used to choose the target sample, where it was distributed 76 questionnaires and return 56 questionnaires. And then, it was used SPSS program for data analysis.

**Cronbach's Coefficient Alpha:**

This method is used to measure the reliability of the questionnaire between each field and the mean of the whole fields of the questionnaire. The normal range of Cronbach's coefficient alpha value between 0.0 and +1.0, and the higher values reflects a higher degree of internal consistency (Sekaran, and Bougie, 2013). The Cronbach's coefficient alpha was calculated for each field of the questionnaire.

The statistical results show that the Cronbach's Alpha equals 0.912 for the entire questionnaire which indicates an excellent reliability of the entire questionnaire. Thereby, it can be said that the researcher proved that the questionnaire was valid, reliable, and ready for distribution for the population sample.

**Data Analysis:**

**Sample characteristics:**

Through analysis of Sample characteristics in Table (1), it was found that bachelor (60.7%), master (35.7%), and Ph.D (3.6%). That means the education of sample is consider as positive indicator efficiency that increase validity degree. According to Scientific Specialty statement, the result indicates accounting (73.2%), business administration (14.3%), financial & banking sciences (8.9%), and economic & statistics (3.6%). The results demonstrated that all of respondents education specialist is related to banking and business. That can provide more accuracy of results. As well as, regarding to Job Title, it

indicates that accountant (33.9%), section head (23.2%), financial manager (25%), general manager (14.3%), and deputy administration (3.6%). The results of this table points out that all of respondents can make financial decision within his position, where all of them works in important departments in the banks. So, this result enhance the confidence of data collected.

	Scientific Qualification	Frequency	Percent
Scientific Qualification	Bachelor	34	60.7
	Master	20	35.7
	Ph.D	2	3.6
	<b>Total</b>	<b>56</b>	<b>100.0</b>
Scientific Specialty	Accounting	41	73.2
	Business Administration	8	14.3
	Financial & Banking Sciences	5	8.9
	Economic & Statistics	2	3.6
	<b>Total</b>	<b>56</b>	<b>100.0</b>
Job Title	Accountant	19	33.9
	Section Head	13	23.2
	Financial Manager	14	25.0
	General Manager	8	14.3
	Deputy Administrator	2	3.6
	<b>Total</b>	<b>56</b>	<b>100.0</b>

**Hypothesis analysis and test:**

**\* Analysis for Cost Assignment view ABC:**

Table (2), shows that item (statement) no. 14 "Allocated costs which are not directly relating to business results, but which are essential to

continuing operations are summed up" and item no. 15 "Overhead costs include all costs which are related to the right operation of the activity but it do necessarily relate directly to it" Get the highest average mean 4.29 and 4.27 respectively. That means the respondents agreed and know the role and importance of ABC in allocating cost that may related or not related to operations. That may due to more than 66% of the respondents in a high position in their organizations.

Whereas statement no. 1 "Management understands that fixed costs on a time basis include overhead costs" get the lower average mean which equal 3.91, but it greater than the hypothesized value 3. This ensure that the respondents aware the cost assignment and its

role taking decision, that may refer to most of the respondents from the business filed.

In general, the mean of the filed "Cost Assignment view ABC" equals 4.10 (82.10%), Test-value = 7.35, and P-value=0.000 which is smaller than the level of significance  $\alpha = 0.05$  and standard deviation 0.35. The sign of the test is positive, so the mean of this field is significantly greater than the hypothesized value 3. We conclude that the respondents agreed to field of "Cost Assignment view ABC". This result agreed with (Karim and Rahmouni, 2014) study. The ABC systems improved resource allocation and for better decision-making.

**Table 2** Mean and Test value for "Cost Assignment view ABC"

#	Paragraph	Mean	SD	Mean (%)	Test value	P-value
1	Management understands that fixed costs on a time basis include overhead costs.	3.91	0.793	78.21	5.71	0.000*
2	Management understands that fixed costs don't change by the volume of activity over a defined of time.	4.05	0.840	81.07	6.18	0.000*
3	Fixed costs are used in predicting profits through variable changes in sold units.	3.96	0.914	79.29	5.31	0.000*
4	Identifying fixed costs is considered as a crucial issue in determining the financial impact of potential marketing campaigns of enterprise.	3.95	0.796	78.93	5.79	0.000*
5	Fixed costs which relating to various activities is measured according to the costing system of the individual activity.	4.07	0.735	81.43	6.34	0.000*
6	Fixed costs are allocated to the various activities based on the relationship between the activities and the fixed costs themselves.	3.96	0.808	79.29	5.85	0.000*
7	Variable costs are defined as the sum of the marginal cost of the individual units produced.	4.07	0.684	81.43	6.56	0.000*

8	It is easy to link direct costs to a specific unit cost. "Not every variable cost is a direct cost".	4.21	0.803	84.29	6.40	0.000*
9	Variable costs are have a direct relationship with the number of units produced or sold.	4.16	0.708	83.21	6.63	0.000*
10	Period variable costs related to interval basis synchronization with output activity and sales revenue.	4.18	0.765	83.57	6.48	0.000*
11	Applying overhead costs approach can shift more indirect costs to direct costs.	4.09	0.769	81.79	6.26	0.000*
12	Cost allocation includes activity determination and cost allocation for each activity and its resources.	4.18	0.716	83.57	6.63	0.000*
13	Allocated costs are defined as those expenses that relate to a particular operational period of a specific activity.	4.21	0.706	84.29	6.71	0.000*
14	Allocated costs which are not directly relating to business results, but which are essential to continuing operations are summed up.	4.29	0.653	85.71	6.93	0.000*
15	Overhead costs include all costs which are related to the right operation of the activity but it do necessarily relate directly to it.	4.27	0.820	85.36	6.29	0.000*
	<b>Total</b>	<b>4.10</b>	<b>0.35</b>	<b>82.10</b>	<b>7.35</b>	<b>0.000*</b>

\* The mean is significantly different from 3.

#### \* Analysis for Cost objects:

Table (3), shows that item no. 6 "Cost object is used for pricing or for determining the reasonableness of a cost" And item no. 12 Cost objects represent intermediate or final arrangements for total costs" have the same and greater average mean 4.25. That means the respondents used cost object to know the total cost and taking pricing decisions. That ensures that the respondents understand very well a cost object, which may due to their experiences and educational levels.

Whereas item no. 2 "Generally speaking, cost object is linked to fixed costs components of the total cost" get lower average mean 3.91. it still greater than the hypothesized value 3. This arise

that the respondents understand that cost object include all cost (variable & fixed, direct & indirect).

In general, the mean of the filed "Cost objects" equals 4.16 (83.11%), Test-value = 7.35, and P-value=0.000 which is smaller than the level of significance  $\alpha = 0.05$  and standard deviation 0.33. The sign of the test is positive, so the mean of this field is significantly greater than the hypothesized value 3. We conclude that the respondents agreed to field of "Cost objects". This is confirm that the sample understand of ABC and its uses in cost allocation. This result is due to their education level and their position. Moreover that, the cost determining help decision makers in calculate services cost and the optimal price. This result agreed with (Cardos and Pete, 2011) study.

**Table 3** Mean and Test value for "Cost objects"

#	Paragraph	Mean	SD	Mean (%)	Test value	P-value
1	For management, cost object represents real input to which cost could be directly linked.	4.16	0.910	83.21	5.85	0.000*
2	Generally speaking, cost object is linked to fixed costs components of the total cost.	3.91	0.815	78.21	5.62	0.000*
3	The term cost object could be used to mean anything that causes and captures costs.	4.13	0.740	82.50	6.42	0.000*
4	The term cost object includes a production line, a customer, a contract, or a department.	4.14	0.773	82.86	6.29	0.000*
5	Cost object means any item to which a cost could be separately attributed and measured.	4.20	0.749	83.93	6.56	0.000*
6	Cost object is used for pricing or for determining the reasonableness of a cost.	4.25	0.580	85.00	7.07	0.000*
7	Cost object provides the desired information about costs.	4.21	0.680	84.29	6.78	0.000*
8	The number of cost objects and the frequency of cost measurement differs from one unit to another.	4.18	0.811	83.57	6.21	0.000*
9	Enterprise classifies its costs to direct and indirect costs.	4.20	0.749	83.93	6.56	0.000*
10	The term direct cost means those costs that could be linked to a specific cost object.	4.21	0.706	84.29	6.71	0.000*
11	The term indirect cost refers to those costs that could not be linked to a specific cost object.	4.09	0.721	81.79	6.48	0.000*
12	Cost objects represent intermediate or final arrangements for total costs.	4.25	0.694	85.00	6.78	0.000*
13	By specifying cost objects, the management of an enterprise aims at achieving a separate cost measurement and collecting the costs related to each cost object.	4.21	0.731	84.29	6.63	0.000*
14	The enterprise assigns the costs to the cost objects on a direct basis that would enable tracking such costs without any bias.	4.07	0.828	81.43	5.96	0.000*

15	The assignment of overhead costs approach enables the tracing and allocating the indirect costs on the various activities.	4.09	0.793	81.79	6.18	0.000*
16	The enterprise establishes an approach to assign costs to the cost objects.	4.21	0.803	84.29	6.34	0.000*
17	Enterprise finds it difficult to track indirect costs and therefore finds difficulty in allocating them.	4.13	0.810	82.50	6.13	0.000*
	<b>Cost objects</b>	<b>4.16</b>	<b>0.33</b>	<b>83.11</b>	<b>7.35</b>	<b>0.000*</b>

\* The mean is significantly different from 3.

**Test of Hypothesis (H 1):** There is insignificant statistical relationship between allocate costs on cost objects according to ABC and Palestinian banks profit maximization.

Table (4), the correlation coefficient between allocate costs on cost objects and Palestinian banks profit maximization equals 0.731 and the p-value (Sig.) equals 0.000. The p-value (Sig.) is less than 0.05, so the correlation coefficient is statistically significant at  $\alpha = 0.05$ . So it can be said that there exists a significant relationship between allocate costs on cost objects according to ABC and Palestinian banks profit maximization. This result agreed with (Durgham and Shakfa, 2009) study, where ABC system provide all information about services cost by separate activities that add value and that activities don't add values, therefore, banks should exclude those non value activities, which reflect positive show for banks' profit. As well as, it agreed with (Abu-Maghly, 2008) study, where the participation of ABC in reducing cost in away leads to profit maximization. and minimize environmental impact (Tsai et al., 2015).

<b>Table 4</b> <i>Correlation coefficient between allocate costs on cost objects and Palestinian banks profit maximization</i>		
<b>Field</b>	<b>Spearman Correlation Coefficient</b>	<b>P-Value (Sig.)</b>
Cost objects	0.731	0.000*

\* Correlation is statistically significant at 0.05 level.

**\* Analysis for Process View ABM:**

From Table (5) it can be seen that all items have about the same mean, which more than 4

(4.04–4.25). This indicate that the respondents evaluate all items in the field at same degree. This result may arise from many reasons:

- The importance of ABM (operational & strategic).
- Education level of the respondents (Bachelor & Master & PHD).
- Position of the respondents at the organizations.

In general, the mean of the filed "Process View ABM" equals 4.13 (82.55%), Test-value = 7.35, and P-value=0.000 which is smaller than the level of significance  $\alpha = 0.05$  and standard deviation 0.39. The sign of the test is positive, so the mean of this field is significantly greater than the hypothesized value 3. We conclude that the respondents agreed to field of "Process View ABM". This result agreed with (Movahedi, et al., 2010) Study. This result indicates that they know the importance of ABM implementation within both sides "operational and strategic" in Palestinian banks for improve the relationships with their customers and suppliers, and then maximize profit by providing competitive services. and to make right decisions (Huynh, et al., 2013).

**Table 5** Mean and Test value for "Analysis for Process View ABM"

#	Paragraph	Mean	SD	Mean (%)	Test value	P-value
1	Enterprise management recognizes the operational approach on an activity basis as the accomplishment of any activity in a correct manner.	4.05	0.644	81.07	6.63	0.000*
2	The information generated by the cost allocation system is used to improve the effectiveness and quality of the activity.	4.04	0.830	80.71	5.93	0.000*
3	Value addition activities could be determined on the basis of each activity.	4.25	0.720	85.00	6.71	0.000*
4	Non-value addition activities could be reduced without reducing the value of the product itself.	4.05	0.840	81.07	6.18	0.000*
5	Operational performance measures are used to provide an indication about progress to determine specific organizational objectives.	4.14	0.749	82.86	6.48	0.000*
6	Management's cost allocation approach used by the activity based strategic management is used to identify the products that need to be improved upon the activities that should be adopted.	4.16	0.757	83.21	6.42	0.000*
7	Activity based strategic management could be used to analyze the profitability of the customers and to concentrate on those who achieve more profitability.	4.20	0.644	83.93	6.86	0.000*
	<b>Total</b>	<b>4.13</b>	<b>0.39</b>	<b>82.55</b>	<b>7.35</b>	<b>0.000*</b>

\* The mean is significantly different from 3.

**\* Analysis for Performance Measures:**

Table (6) shows that item no. 6 "Operational performance measurement can be used to look at the process and strategies that fit the output during actual work" get the highest average mean 4.29, whereas item no. 12 get the lower average mean 4.04. this result point out Palestinian organizations recognize importance of operational performance measurement and strategic performance management which refer to

respondents qualifications and job title. 60% have bachelor and 40% have master and PH.D. also 66% from the respondents in a management sector which enable them to take a decisions.

In general, the mean of the filed "Performance Measures" equals 4.17 (83.30%), Test-value = 7.35, and P-value=0.000 which is smaller than the level of significance  $\alpha = 0.05$  and standard deviation 0.32. The sign of the test is positive, so the mean of this field is significantly greater than the

hypothesized value 3. We conclude that the respondents agreed to field of "Performance Measures". This result agreed with (Cardos and Pete, 2011) study, where it indicates that they know the importance of ABM implementation within both sides "operational and strategic" in

Palestinian banks, where their education and their positions in banks help in using ABM system. As well as, the results point out that Palestinian banks benefit of all available sources to provide competitive services and preserving relationship with their customers.

**Table 6** Mean and Test value for "Performance Measures"

#	Paragraph	Mean	SD	Mean (%)	Test value	P-value
1	Operational performance measures are configured to provide evidence to decide the extent of progress towards identifying specific organizational goals.	4.20	0.672	83.93	6.78	0.000*
2	The required evidence used in the enterprise for operational performance measures can be quantitative such as measuring the frequency of an activity.	4.07	0.783	81.43	6.25	0.000*
3	The required evidence for operational performance measurement used in the enterprise can be qualitative such as customer satisfaction or realization.	4.25	0.611	85.00	7.00	0.000*
4	Enterprise management uses operational performance measurement as tools to control the organizational output, and control it.	4.14	0.724	82.86	6.56	0.000*
5	Operational performance measurement is considered as a process to gather information related to individual and collective performance in the enterprise and reporting about it.	4.16	0.682	83.21	6.71	0.000*
6	Operational performance measurement can be used to look at the process and strategies that fit the output during actual work.	4.29	0.731	85.71	6.65	0.000*
7	Strategic performance measurement focuses on the objectives and activities which make a difference in long and medium term.	4.09	0.769	81.79	6.26	0.000*
8	Strategic performance measurement applied in the enterprise, are collected within two groups, functional and non-functional.	4.16	0.733	83.21	6.56	0.000*

9	Strategic performance measurement in the enterprise enables the identification of strategic objectives, and correspondence behaviors, attitudes and achieve it.	4.14	0.796	82.86	6.21	0.000*
10	Strategic performance measurement leads to achievement of the interaction between the different functions within the enterprise and external environment.	4.18	0.741	83.57	6.56	0.000*
11	Strategic performance measurement is considered as a management tool to gain organizational power inside the enterprise.	4.27	0.751	85.36	6.57	0.000*
12	Strategic performance measurement applied inside the enterprise, contains financial, strategic and operational to match the objectives.	4.04	0.808	80.71	5.96	0.000*
	<b>Total</b>	<b>4.17</b>	<b>0.32</b>	<b>83.30</b>	<b>7.35</b>	<b>0.000*</b>

\* The mean is significantly different from 3.

**Test of hypothesis (H 2):** There is insignificant statistical relationship between activation of ABM and performance measure in Palestinian banks profit maximization.

Table (7), the correlation coefficient between the appropriate standards of operational performance (O-PM) as well as strategic one (S-PM) and Palestinian banks profit maximization equals 0.676 and the p-value (Sig.) equals 0.000. The p-value (Sig.) is less than 0.05, so the correlation coefficient is statistically significant at  $\alpha=0.05$ . So it can be said that there exists a significant relationship between the appropriate standards of operational performance (O-PM) as well as strategic one (S-PM) according to ABM and Palestinian banks profit maximization. The results because the operational ABM aims to improve the efficiency and reducing cost through an optimal using of resources and avoiding of unnecessary costs. While the strategic ABM aims to keep of competitive advantages of Palestinian banks, and then maximize their profits. So, this result agreed with (Cardos and Pete, 2011) study, through enabling a better operational performance and improve business strategies and, thus, will lead

them toward the main goals of a for-profit-organization: profitability (Roztock, 2010).

<b>Table 7</b> Correlation coefficient <i>relationship between activation of ABM and performance measure in Palestinian banks profit maximization</i>		
<b>Field</b>	<b>Spearman Correlation Coefficient</b>	<b>P-Value (Sig.)</b>
Performance Measures	0.676	0.000*
* Correlation is statistically significant at 0.05 level.		

**Test Main hypothesis:** There is insignificant statistical relationship between the application of activity-based costing (ABC) system, and activity-based management (ABM) system in Palestinian banks profit maximization.

Table (8) shows that item no. 5 "Enterprise continues to produce until achieving the equality between the marginal cost with the marginal revenue" get the highest average mean 4.21. this result may arise from the economic fluctuations and uncertainties in Palestine which push organizations to achieve the equality between marginal cost and marginal revenue. Whereas item no. 6 "The enterprise leaves the forces of market supply and demand on products to determine the prices of its products" get the lower average mean

3.84. but it greater than the hypothesized value 3, that may due to respondents level of educations which enable them to understand market forces.

In general, The mean of the filed "Profit Maximization" equals 4.11 (82.14%), Test-value=7.28, and P-value=0.000 which is smaller than the level of significance  $\alpha = 0.05$  and standard deviation 0.41. The sign of the test is positive, so the mean of this field is significantly greater than the hypothesized value 3. We conclude that the respondents agreed to field of "Profit Maximization". This result indicates that

Palestinian banks try to maximizing their profit using many different methods, where they employ high level of education "40% PhD and master degree) to create long-term plans and strategies in order to achieve this goal. One of these strategies is ABM. This result agreed with (Al abbadi and Areiqat, 2010; Huynh et al., 2013) studies, where the ABC/ABM system alone, however, lacks the ability to support information for managerial decisions (Huynh et al., 2013; Capusneanu, and Martinesc, 2010).

**Table 8** Mean and Test value for "Profit Maximization"

#	Paragraph	Mean	SD	Mean (%)	Test value	P-value
1	Profit maximization is considered as short -term or long- term process, to determine the price level, and output, to achieve the greatest profit.	4.20	0.672	83.93	6.78	0.000*
2	Management calculates profitability through subtracting all costs from the total revenue, this approach focuses on maximizing the differences.	4.07	0.850	81.43	6.00	0.000*
3	Management uses an alternative approach based on subtracting the marginal cost from the marginal revenue.	4.13	0.662	82.50	6.71	0.000*
4	The enterprise aims by profit maximization to achieving a balance between its requirements and customers' requirements of quality and low price.	4.20	0.749	83.93	6.56	0.000*
5	Enterprise continues to produce until achieving the equality between the marginal cost with the marginal revenue.	4.21	0.706	84.29	6.71	0.000*
6	The enterprise leaves the forces of market supply and demand on products to determine the prices of its products.	3.84	1.005	76.79	4.67	0.000*
	<b>Profit Maximization</b>	<b>4.11</b>	<b>0.41</b>	<b>82.14</b>	<b>7.28</b>	<b>0.000*</b>

\* The mean is significantly different from 3.

### Conclusions:

1. There is significant statistical relationship between allocate costs on cost objects

according to ABC and Palestinian banks profit maximization.

2. There is significant statistical relationship between activation of ABM and performance

measure in Palestinian banks profit maximization.

3. There is significant statistical relationship between the application of activity-based costing (ABC) system, and activity-based management (ABM) system in Palestinian banks profit maximization.
4. Most Palestinian banks aware of the importance of cost allocation according to ABC which including minimizing cost and determine cost structure.
5. Most Palestinian banks aware of the importance of ABM implementation within both sides "operational and strategic" for improve the relationships with their customers and suppliers, and then maximize profit by providing competitive services.

#### Recommendations:

The study recommends for the priority of the implementation of ABC and ABM in all Palestinian institutions. Particularly, education and health institutions suffered of many problems that most of them related to managerial and financial problems.

The study presented the following recommendations to overcome these challenges.(a) Improving the employees' skills by training and using the external expertise.(b) Creating a practical database for the interest of the new system.

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