THE POSSIBILITY OF APPLYING ACTIVITY BASED BUDGETING IN IRAQ

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ABSTRACT

Under major developments in the field of business environment, the use of traditional budgets do not fit into these developments and adversely affect the future performance of the enterprises, which requires the transition to modern systems in the preparation of the budgets of activity based budgeting ABB because they provide a more accurate and objective estimates based on scientific foundations and practical avoided arising from the use of traditional budgeting problems, Where ABB is working better allocation of resources based on the activities of an enterprise and this positively affects the performance of the administration for the purpose of evaluating their performance according to responsibility centers and decision-making governance. The research concluded that the use of the activity-based budgeting ABB data service costs fairer base provides leading to convince top management of the Directorate of the importance and the role of the activity-based budgeting system ABB and provided them with the cost of data more accurate and appropriate help in planning, control and make the right decisions.

Keywords: Activity Based Budgeting, ABB, Activity Based Costing, ABC

INTRODUCTION

Budgets play a crucial role in planning and control. They define the targeted plans and the necessary measures to achieve them. The budget is a quantitative expression of these plans and shows their financial or financial status or both. When used for planning, it is considered as a means to translate the objectives and strategies of the enterprise, and can also be used to use the budget in the control of those goals and strategies and control is the process of setting standards and compare the actual performance with the scheme and address the deviations between them (Mwakibasa, 2013).

Traditional budget approaches are insufficient to meet the demands of modern companies with multiple activities and large services they provide. They need advanced and sophisticated budget methodologies (ANULIKA, 2012). One of these modern approaches is the ABB, which is the fruit of the Activity based costing ABC. Therefore, this system was addressed during the research because it is considered the basis in the budgeting process based on ABB activities.

The research consists of five parts, the first described ABB, the second part includes ABC because of its relationship with ABB and is a precedent for them. The third part concerned the research methodology and the fourth part for the practical application of ABB according to ABC, and the conclusion was the fifth part which discussed the most important conclusions of the research.

Activity Based Budgeting ABB

The ABB concept was addressed in many ways, some of them described as a planning department and another seen as a tool to reduce costs and we will show that (Horngren et al., 2012) sees it as an entrance that focuses on the planned costs of activities necessary to produce and sell goods and services. explained that (Barfield et al., 2003) it is a planning approach that

applies cost factors to estimate the levels and costs of activities necessary to provide a quantitative and qualitative balance of production.

Consider (Hansen et al., 2007) it an approach that emphasizes cost reduction by eliminating wasteful or wasteful activities and improving the efficiency of essential activities.
In a simplified way, the budget can be prepared on the basis of activities in three steps according to what has been divided in the website that was relied upon as follows: (www.cgma.org) on line

1. Determine the activities and their cost guides.
2. Estimate the number of units for cost directives.
3. Calculate the unit cost per activity.

There are two main benefits of ABB: (Huynh et al., 2013)

1. Identify situations when the production plan requires new energy, such as physical or human energies, to provide support and service activities in the organization.
2. Provides a more accurate method of estimating future costs.

It should be noted that there are several differences between the ABB system and the traditional budget, which he referred: (Sorinel et al., 2013) in the table (1)

Table 1
DIFFERENCES BETWEEN THE ABB AND THE TRADITIONAL BUDGET

ABB	Traditional budget
Focus on workload and operational costs	Focus on staff and departmental costs
Identify unexploited capabilities	Measuring impacts but not identifying untapped capacities.
Identify the necessary resources for the production plan.	Do not achieve the purpose in the general budget and only analysis and control
Ensure performance to transform the Organization's thinking on fixed costs	Based on frequent negotiating processes between managers
Focus on exploited and unexploited capabilities	Focus on fixed and variable costs

An activity-based budgeting system can succeed only if the following main pillars are available (Shane, 2005):

1. Existence of Activity Based Costing: ABC.
2. Absolute support from senior management to prepare the budget system and the basis of activities and duly implemented.
3. The existence of an effective laminating system, following the actual implementation steps and limiting possible deviations as soon as possible so that management can find the necessary solutions to address them.
4. An effective system of human and material resources management is available.
5. The existence of an incentive system linked to the extent of commitment to the implementation and implementation of budget items prepared on the basis of activities to achieve the objectives set.
6. The existence of sub-departments capable of adopting positions that serve the public interest rather than personal and functional interests.
7. Adopting targeted individual initiatives, and holding meetings and discussions in order to benefit from the participation of all different administrative levels.
8. The presence of a cadre with sufficient knowledge of the system of budgets prepared on the basis of activities through the intensification of training courses and seminars in this area.

The implementation of the ABB system suffers from several difficulties summarized as follows: (Moustafa, 2005):

1. Resistance to changes by staff: When introducing a modern system in the preparation of budgets and work to change the traditional system here you find resistance to change by employees.
2. Lack of senior management support: We may also find boards with traditional thinking difficult to change, and therefore do not receive support for the modern system in the preparation of budgets ABB by the senior management of the facility for fear of increasing costs.
3. Lack of trained accountants: The modern approach to budgets (ABB) needs a number of trained accountants with high experience, and in the absence of trained accountants, it is difficult to apply the modern approach to the budgets and may lead to the wrong future targets, and thus increase costs.
4. Lack of experience and ability to use electronic devices: Lack of experienced staff in
5. The use of electronic devices prevents the application of the system (ABB) properly and feasible.
6. Difficulty in estimating costs: The inability to identify and estimate costs prevents the application of the modern approach to budgets and therefore must apply the ABC system through which the establishment can determine the costs accurately.

Activity Based Costing Abc

He defined it (Maher, 1997) as the system that assigns costs first to activities and then to products or services based on the use of each product or service.

Considers it the best tool to revise the cost system, Customers on the basis that activities are required to produce both these products and services, since the philosophy of the system is based on the idea that activities consume resources, and that products consume activities (Horngren et al., 2012).

(Hilton, 2011) shows that it is a system that allocates indirect costs to the product or service using two steps and by focusing on activities where the indirect costs are allocated to the activities in the first step and then the costs of the activities are allocated to the product or service in the second step.

(Atkinson et al., 2012) is a system based on cost drives that link activities to products or services and distribute indirect costs to products or services.

Technical developments in the world during the 1980s have complicated production processes. To avoid making the wrong decisions regarding their outputs and to help them develop an appropriate price policy for their products or services to maximize their profitability. (Drury, 2006).

Relationship between ABC/B

The use of activity-based costing in the budgeting process enables managers to convert fixed costs into variable costs and to think about costs more objectively. Activity-based budgeting is part of the activity-based costing system (Haluk, 2010).

(Cooper & Kaplan, 1998) point out that ABC is not only an accounting method, but also in all aspects of the business, where it helps management to know which products to produce and which customers serve? In addition to the role this system plays in improving the company's future performance. “It is a strategic tool for the company to get more accurate cost and information on the profitability of its operations, products, services and customers, which contributes to many important decisions, including pricing, marketing, product or service design, and resource recruitment decisions.” This makes ABC the cornerstone of ABB preparation. The next step of ABC is ABB. The Activity Based Analyzes (ABA) system is the ABC system, which is based on tracking the actual activities and actual resources that have achieved the cost objective and procedures based on the distribution of direct and indirect costs to the product. The ABA system is based on a detailed analysis of the activities and functions as well as the resources consumed by the activities. Hence, both systems are the basis for building the ABB system, which builds on the information provided by the two systems to give accurate estimates of future activities and required resources.

However, ABC attributes resources to activities to determine the cost of products and services provided to customers. The activity-based budgeting approach begins with a prediction

of the needs of products or services provided to clients that are used to plan activities for the duration of the budget and then identify the necessary resources for these activities (Hilton, 2011).

Application of the ABB system in the Directorate of Municipalities of Babylon

Babylon Municipalities Directorate is one of the formations of the Ministry of Municipalities and Public Works and consists of fifteen municipal institutions distributed in the districts and districts, and these municipalities practice a range of activities, which are of great importance in the well-being of the public life of the people of the province and the municipalities provide a wide range of services can be limited as follows:

1. Preserving the environment through cleaning the streets, landfill, filling swamps, lifting debris and distributing containers.
2. Establishing recreational and public projects such as gardens, parks and nurseries.
3. Distributing land to citizens and renting their own properties such as kiosks and shops.
4. Maintenance and maintenance of gardens, parks, streets, roads and bridges.
5. Identify and organize commercial advertisements.
6. Monitoring markets and issuing vacations.

For the purpose of preparing ABB, it is necessary to provide the requirements for their application.

Table (2) show the five activities carried out by the municipal institutions were selected and linked to appropriate cost directives based on the cause and effect relationship between the activities and cost directives.

Table 2
ACTIVITIES AND COST DRIVE

Activity	Number of specialized mechanisms
Maintenance of specialized machines	Waste lift (ton)
The environment	Number of pieces distributed
Property	Tiled streets (km)
Projects	Cleaned streets (km)
Cleaning services	Number of specialized mechanisms

Allocating and Distributing the Costs of Activities to Municipal Institutions

Maintenance Activity

Is one of the most important activities in the municipal institutions where the following tasks (maintenance of machinery and equipment and maintenance of roads and bridges and maintenance of gardens and parks and others).

The number of specialized mechanisms was select as a cost drive for this activity. The cost of this activity amounting to (1 010 347 654) was distributed. Note that the number of specialized mechanisms (318) is as follows:

Average cost per vehicle=(1 010 347 654) /318=3 177 194

From the table (3) we note that the Municipal Corporation 14 got the highest percentage of the distribution of maintenance costs while the Municipal Corporation 12 got the second percentage of maintenance costs

Table 3 DISTRIBUTION OF MAINTENANCE ACTIVITY COSTS AMONG MUNICIPAL INSTITUTIONS			
Institution	**The average**	**Number of specialized mechanisms**	**Total amount (Iraqi Dinar)**
1	3 177 194	21	66 721 071
2	3 177 194	17	54 012 295
3	3 177 194	30	95 315 816
4	3 177 194	27	85 784 234
5	3 177 194	17	54 012 295
6	3 177 194	10	31 717 940
7	3 177 194	27	85 784 234
8	3 177 194	14	44 480 714
9	3 177 194	24	76 252 653
10	3 177 194	15	47 657 908
11	3 177 194	20	63 543 877
12	3 177 194	31	98 493 010
13	3 177 194	17	54 012 295
14	3 177 194	33	104 847 398
15	3 177 194	15	47 657 908
Total			1 010 347 654

Environment Activity

It is one of the basic and important activities and at the heart of the work of municipal institutions as it performs the following tasks (sanitary landfill, lifting waste and debris, filling swamps and distribution of containers)

The cost of this activity was distributed to the municipal establishments amounting to (425 000 000) Iraqi Dinars. The amount of waste collected is (269,616 tons) as follows:

Average cost per ton=(425 000 000)/(616 269) =1576 Iraqi dinars per ton

From the table (4), we note that the Municipal Corporation 14 received the first share of the costs of the waste submitted to the municipal institutions, followed by Municipal Corporation 2 and 4 respectively in the process of allocating and distributing the cost distribution.

Table 4 DISTRIBUTION OF ENVIRONMENTAL ACTIVITY COSTS AMONG MUNICIPAL INSTITUTIONS			
Institution	**The average**	**Quantity of Waste Lifted (Tons)**	**Total Cost (Iraqi Dinar)**
1	1576	10 116	15 942 816
2	1576	15 900	25 058 400
3	1576	42 000	66 192 000
4	1576	36 000	56 736 000
5	1576	14 496	22 846 696
6	1576	2 400	3 782 400
7	1576	15 360	24 207 360
8	1576	8 700	13 711 200
9	1576	18 000	28 368 000
10	1576	2 808	4 425 408
11	1576	16 176	25 493 676
12	1576	33 600	52 953 600
13	1576	4 800	7 564 800
14	1576	46 380	73 094 880

15	1576	2 808	4 538 880
Total			425 000 000

Property Activity

Is one of the activities of municipal institutions, which performs the following tasks (distribution of land to citizens and rent and sell stalls and shops)

The number of pieces distributed to citizens was chosen as a cost guide for this activity. The cost of this activity was distributed to municipal institutions amounting to (1,200,000,000) Iraqi Dinars. The number of pieces distributed (3600) pieces, as follows:

Average cost per piece=(1 200 000 000)/(3600)=333 333 Iraqi Dinar per piece

We note that the municipal institution 11 got the highest percentage of the costs of this activity, followed by institutions 6 and 7 respectively in terms of their share of the costs of the activity mentioned.

Project Activity

Is one of the activities of municipal institutions that are interested in the following tasks (construction and paving of roads and bridges and the establishment of gardens, parks, nurseries, etc.)

Tiled streets have been approved as a cost drive for this activity, and the costs of this activity have been distributed to municipal institutions amounting to IQD 12,000,000,000. Note that the length of tiled streets reached (500 km), as follows:

Average cost per kilometer=12 000 000 000/ (500)=24 000 000 Iraqi dinars per kilometer.

Note from the table (5) that the municipal institution 12 most institutions percentage of costs due to the large number of projects for paving streets and followed by the institution 14.

Table 5
DISTRIBUTION OF PROJECT ACTIVITY COSTS AMONG MUNICIPAL INSTITUTIONS

Institution	The average	Length of Tiled Streets (km)	Total Cost (Iraqi Dinar)
1	24 000 000	25	600 000 000
2	24 000 000	36	864 000 000
3	24 000 000	28	672 000 000
4	24 000 000	22	528 000 000
5	24 000 000	32	768 000 000
6	24 000 000	17	408 000 000
7	24 000 000	35	840 000 000
8	24 000 000	42	1 008 000 000
9	24 000 000	41	984 000 000
10	24 000 000	35	840 000 000
11	24 000 000	33	792 000 000
12	24 000 000	46	1 104 000 000
13	24 000 000	35	840 000 000
14	24 000 000	45	1 080 000 000
15	24 000 000	28	672 000 000
Total cost			12 000 000 000

Cleaning Activity

It is one of the important activities of the municipal institutions as it is the task of cleaning the streets, and the length of the cleaned streets was chosen as a cost drive for this activity, the cost of this activity was distributed to municipal institutions amounting to (250,000,000) Iraqi dinars, note that the length of the cleaned streets (74330) km, As follows:

Average cost per kilometer=250 000 000/74 330=3363 Iraqi dinars per kilometer

From the table (6) we note that the municipal institution 4 got the highest rate of cost compared to other institutions and the reason for this is that this institution has a high proportion of clean streets and previously planned, followed by the institution 14 in terms of the number of streets cleaned.

Table 6
DISTRIBUTION OF CLEANING ACTIVITY COSTS AMONG MUNICIPAL INSTITUTIONS

Institution	The average	Length of clean streets (km)	Total Cost (Iraqi Dinar)
1	3363	2880	9 685 440
2	3363	3000	10 089 000
3	3363	7600	25 558 800
4	3363	10800	36 320 400
5	3363	3000	10 081 000
6	3363	750	2 522 250
7	3363	3000	10 089 000
8	3363	7500	25 222 500
9	3363	3700	12 443 100
10	3363	2000	6 726 000
11	3363	6500	21 859 500
12	3363	6000	20 178 000
13	3363	5500	18 496 500
14	3363	8500	28 585 500
15	3363	3600	12 106 800
Total cost			250 000 000

ABB of the Directorate of Babylon Municipalities:

We can see from the table (7) that a parallel has been prepared for the municipal institutions based on their activities, as the previous tables were adopted to obtain the rates of loading, through this budget will provide institutions large sums that do not need.

Table 7
ABB BASED ON THE TABLES ABOVE

Service activities	Planned Projects	Planned indirect cost per unit	Total planned factory overhead
Maintenance	318machine	3 177 194	1 010 347 692
Environment activity	500000ton	1576	780 000 000
Property activity	4500 Plots	333 333	1 499 998 500
Project activity	750 Km	24 000 000	10 800 000 000
Cleaning activity	100000 Km	3363	336 300 000
Total cost			14 326 646 192

CONCLUSIONS

A range of conclusions can be presented as follows:

1. The application of (ABB) by the Directorate of Babylon Municipalities provides more accurate and objective information.

2. The Babylon Municipalities Directorate applies the traditional budgeting system in preparing the budget.
3. Lack of the requirements of the Babylon Municipalities to prepare the requirements (ABB) such as qualified human cadres and modern accounting systems.
4. Increasing the percentage of indirect costs from the total cost of the services of the Babylon Municipalities Directorate gives an incentive to implement ABB system.
5. Because of what ABB requires to have a cost-based activity system that contributes significantly to providing a database of service costs more equitably.
6. ABB is the result of ABC system.

RECOMMENDATIONS

Based on the conclusions, the most important recommendations can be summarized

1. The need to use scientific sources such as research, theses, theses or experts and accounting consulting firms to plan and assist in the application of ABB system.
2. the need to qualify the accounting staff in the Directorate and training him to process data and information electronically.
3. The need to hold training courses for the accounting staff in order to increase the efficiency and effectiveness of this staff in the field of preparation and implementation of ABB.
4. Convince the senior management of the Directorate of the importance and role of ABB system and the more accurate and appropriate cost data that it provides to them in the field of planning, control and decision making.
5. The need to understand and recognize the administrative levels of the advantages of modern systems (ABC and ABB) in turn in the redistribution of costs more accurately and in the process of proper planning.
6. For the purpose of the success of such modern systems it is necessary to combine efforts between all departments to overcome the difficulties that exist in the application process.

REFERENCES

Anulika, U. (2012). *The role of budgeting in managerial planning and control: A case study of guinness Nigeria Plc Benin, Edo State and Nigerian Breweries Plc Ama, Enugu State*. A project submitted in partial fulfulment of the requirement for the award of Masters of Business Administration (MBA) in management department of management, faculty of business administration, University of Nigeria, Enugu Campus, 17 - 27.

Ebaid, I.E.S. (2021). Incorporating International Financial Reporting Standards (IFRS) into accounting curricula: Perceptions of undergraduate accounting students in Saudi Universities. *Journal of Advanced Research in Economics and Administrative Sciences, 2*(2), 1-15.

Atkinson, A., Kaplan, R., Matsumura, E., & Young, S. (2012). *Management accounting: Information for decision making and strategy execution*, (*6th edition*). Pearson Education, Inc., Upp.er Saddle River, New Jersey, USA.

Barfield, J., & Raiborn, K.M. (2003). *Cost accounting traditions and innovations*, (*5th edition)*. South Western, Thomson.

Cooper, R., & Kaplan, R. (1998*). Profit priorities from ABC Costing*. Harvard Business Review.

Drury. (2006). *Cost and management accounting*, (*6th edition)*. Thomson, London.

Haluk. (2010). The role of activity based budgeting on target costing practices, Suleyman Demirel University. *The Journal of Faculty of Economics and Administrative Sciences,15*(1), 213-233.

Hanson, D., & Mowen, M., (2007). *Managerial accounting*, (*8th edition)*. Thomson South Western.

Hilton. (2011). *Managerial accounting creating value in a dynamic business environment*, (*9th edition*). McGraw Hill.

Horngren, C., Datar, S., & Rajan, M. (2012). *Cost accounting managerial emphases*, (*14th edition*). Prentice Hall, 146.

Dahunsi, O. (2020). Effect of interest rate liberalisation on domestic savings in Nigeria. *Journal of Advanced Research in Economics and Administrative Sciences, 1*(2), 123-133.

Huynh, T., Gong, G., & Huynh, H. (2013). Integration of activity based budgeting and activity based management. *International Journal of Economics, Finance and Management Sciences*.

Maher. (1997). *Cost accounting*, (5*th edition*). McGraw Hill.

Mustafa, E. (2005). *An application of activity-based-budgeting in shared service departments and its perceived benefits and barriers under low-IT environment conditions*.

Mwakibasa, E. (2013). The role of budgetary control in enhancing financial management in local government authorities: A case of kinondoni municipal council. *A dissertation to Mzumbe University in partial fulfillment of the requirements for the award of a Masters of Science Degree in Accounting and Finance*, 1-5.

Shane. (2005). Activity-based budgeting creating a nexus between workload and costs. www.jonmshaneassociates.com.

Sorinal, Boca, Barbu, Rof & Topor. (2013). Implementation of Activity-Based Budgeting method in the economic entities from mining industry of Romania. *International Journal of Academic Research in Accounting, Finance and Management Sciences*.

www.cgma.org. online.