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ADOPTING ACTIVITY-BASED RESOURCE PLANNING (ABRP) FOR RATIONALIZING THE OPERATING BUDGET: AN EMPIRICAL STUDY

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ABSTRACT. The paper aims to demonstrate the importance of using activity-based resource planning (ABRP) as a contemporary accounting technique and its significant role in developing the performance of the economic unit compared to traditional cost methods and to determine the role of the activity-based resource planning (ABRP) approach in rationalizing the preparation of operating budgets while demonstrating the effectiveness of the activity-based resource planning (ABRP) system in preparing operating budgets. To achieve these goals, the study sought to use the applied method on the data of the Middle Refineries Company (Dura Refinery - Samawah - Najaf - Diwaniyah - Karbala) in Baghdad for the year (2019) through field visits and personal interviews with department managers and employees to apply the activity-based resource planning (ABRP) technique and demonstrate its impact on rationalizing the preparation of operating budgets for the economic unit, the research sample. The results show that the application of the Activity-Based Resource Planning (ABRP) system allows for the provision of information that helps in the planning process by preparing the budget based on ABC activities that focus on customer requirements, analyzing their needs, and linking them to strategic objectives, in addition to accounting for resource consumption that depends on the resources of the economic unit. A significant decrease in total costs was observed when applying the Activity-Based Resource Planning (ABRP) system technology.

JEL Classification: H38, M41, R53

Keywords: APC Planning, Activity Based Costing, Operating Budget, Cost Accounting

Introduction

The intense competition that economic units are currently exposed to due to the openness of markets, and the inability of traditional accounting systems to provide appropriate information

for decision-making by management seeking to perform the function of control, planning and cost reduction, has led to the need to use new cost management methods aimed at increasing production and reducing costs while maintaining quality as well as maintaining customer satisfaction, which contributes to evaluating the performance of the economic unit. Among these techniques is activity-based resource planning (ABRP), as the activity-based resource planning (ABRP) technique is based on the fact that resources are the main cause of cost, so the concept of resources is the basic building block of this technique, as the general concept of resources refers to employee salaries, raw materials and the depreciation of physical assets, and covers a wide range of costs consumed by activities, and the term resource does not only include those consumed by activities, but also includes the resources consumed by the resources themselves, and in this method, resource costs are classified as fixed and proportional, while with regard to preparing operating budgets, they are represented by budgets that do not take strategic objectives into account, such as the traditional operating budget, and some of them take into account the strategic objectives of the economic unit Like the budget (ABP- ABB- ABC - RCA), the traditional operating budget determines the minimum funding for each activity and justifies the amounts that exceed the minimum for the purpose of approval by senior management and analyzes each activity according to its needs and costs, while the budget based on activity determines the cost of planned activities according to their expected size and the resources needed for them, meaning that the traditional budget focuses on distributing expenses to administrative units and is accustomed to allocating expenses regardless of their cost, while we find that the budget based on activities (ABP- ABB- ABC - RCA) focuses on reducing costs and improving the accuracy of financial estimates and paying attention to sound planning and effective control. Therefore, the aim of the research is to develop a framework for the activity-based resource planning (ABRP) technique and its role in providing appropriate information in order to rationalize the preparation of budgets and show their results in one of the Iraqi economic units, which was represented by the Middle Refineries Company (Dura Refinery - Samawah - Najaf - Diwaniyah - Karbala)..

1. Literature Review

The world has witnessed many rapid and tremendous developments and changes since the last decade until now. These developments and changes included the political, economic and social fields. With the increase in competition in the Iraqi and foreign industrial environment, international openness, globalization of markets, the entry of foreign products and their acquisition by customers, rapid technological development and change in the cost structure of products, in addition to providing inaccurate information and not taking into account the allocation of resources and the optimal utilization of resources and the exploitation of idle energy, which resulted in making wrong decisions about the total costs of products, which led to the emergence of a deficit in the result of the activity. Under the traditional system of cost accounting currently applied in the industrial economic unit, which weakened the competitive position of the industrial economic unit, it became necessary to search for the best costing techniques and find solutions to the problems created by traditional cost accounting systems. In a desire to respond to these developments, economic units have recently turned, and their interest has extended to other fields to keep pace with the development of economic life. Research efforts have resulted in the presentation of activity-based resource planning.

The success of any economic unit, whether industrial, service or commercial, is largely measured by the profits it achieves by reducing expenses and production costs. The process of controlling and monitoring expenses and production costs is not easy, especially in a large economic unit. This can only be achieved by following scientific methods, including budgets,

which we will explain in this section, both traditional operating budgets and activity-based budgets. The budget is one of the main tools for implementing the policies and programs of economic units to make the best use of their available economic resources in a manner that is consistent with the goals of the economic unit that it adopts to achieve decisive success, survival, and continuity in the market. Among these budgets are the operating budgets.

The first idea of preparing budgets in economic units was launched from the budgets that governments set for their expenditures and revenues, as the word budget was used to refer to the statement prepared by the government to estimate its revenues and expenditures. The origin of the budget goes back to the French word Bougette, which means the bag. The Minister of Finance used to prepare the budget estimates that he submitted to the Legislative Council in his bag, so those estimates were attributed to the bag that contained them (Al-Janabi, 2018: 610). Therefore, one of the most important functions of modern management has become planning for the future in implementation of a general or specific policy or preparing for emergencies and fluctuations in situations that occur in the future by taking the necessary means to confront those changing situations that are related to the success or failure of the industrial unit. The budget is the means by which future problems can be thought of in advance and before they occur (Al-Maamouri, 201: 2020). There are several definitions of the budget, some of which can be presented. It has been defined as "a plan for working on aspects of the industrial unit's activity that was put in the form of numbers that explain in detail this plan for the next session and the way in which it is implemented. It may also contain detailed information about the distribution of executive responsibility among workers in industrial units so that it becomes possible to monitor the achievement of each employee in it." (Hilton & Platt, 2020: 252)

(Horngren, et al, 2012: 55) indicates that the budget is a common tool used by units to plan and control what should be implemented. Budgets provide a measure of the financial results expected to be achieved by the industrial unit from its planned activities. By planning for the future, managers learn how to avoid problems that they may face in the future. In addition, they may focus their energy on exploiting opportunities instead of facing problems. The budget is a tool used to quantitatively and financially express the goal or goals that the management of the industrial unit seeks to achieve. This goal may relate to achieving a certain return on capital, achieving a certain profit rate, reducing costs, or any other goals. Therefore, the budget is viewed as "a translation of the goals of industrial units into a future work plan that depends on several assumptions and requires the approval of the administrative levels responsible for its implementation." (Horngren, et al, 2018:55)

In the unified accounting system, the budget system was considered one of the advanced systems, and a comprehensive program for the activity of the industrial unit for a future period of time, according to which the various activities of the industrial unit are reflected by translating quantitative indicators and qualitative plans to implement policies and achieve goals through financial budgets. (Al-Takriti, 2019:62)

Therefore, the importance of the budget is embodied by being an important tool that helps management achieve its main functions as follows:) (Garrison, et al, 2018:101-105)

1) Planning, i.e. determining long-term and short-term goals and determining the best alternative from among the available alternatives that help achieve goals under the available circumstances, and in other words, the budget helps identify and solve problems. 2) Coordination The budget is a coordination tool for the goals and activities of the various departments of the industrial unit in a single coordinated plan in a way that ensures work towards achieving the goals of the entire industrial unit without conflict between the goals and sub-plans. Failure to use budgets may lead to (conflict of interest) and failure to direct efforts

between workers in different directions, and thus a conflict occurs between the goals and plans of these departments, which negatively affects the goal of the industrial unit as a whole.

3) Communication (information systems) The existence of a means of communication between the upper and lower levels of management of a single industrial unit, i.e. by providing the necessary information to prepare a planning budget that suits the needs of the industrial unit and its current situation, makes each worker aware of the company's goals and what his role is in achieving these goals in order to achieve them effectively and sufficiently. The budget is considered an effective means of communication between all administrative levels because it will help all levels to know the goals of the industrial unit and then the upper administrative levels to know the possibility of achieving these goals within the available conditions of the industrial unit, as management can know whether the use of the resource is effective or ineffective and through analytical studies of the work of the industrial unit. 4) Motivation: In support of the previous point, and through the participation of individuals at various administrative levels in setting and planning the goals of the industrial unit, a sense of responsibility is generated in them and they are motivated to complete their assigned tasks in the best possible way, and then achieve the goals of the industrial unit efficiently, as the budget is a tool to influence the behavior of the individual (especially if they participate in preparing it) and benefits them to work in a group spirit towards achieving the goals of the planned industrial unit. If the budget is prepared by senior management only, this will lead to ignoring the implementation of the budget and resisting it due to the conflict between the goals of the different levels.
5) Monitoring and performance evaluation of the planning budget is considered a measure and standard of performance based on what has been accomplished by each responsibility center according to its specific authority within this budget, which gives the motivation to perform it correctly. Therefore, from what was mentioned above, the study (Juda, 2019: 23) summarizes that the budget is considered comprehensive, i.e. "it is a comprehensive financial plan consisting of the budgets of the various departments and individual activities, and the comprehensive budget can be divided into the operating budget and the financial budget, so the steps of preparing the budget taken by industrial units are an important point to achieve a certain level of profit, and this process is called profit planning, and this is done by preparing a set of budgets known as operating budgets, which are prepared in a contemporary technological manner and with high-level performance. The operating budget includes all the elements that make up the income statement
Although the activity-based costing (ABC) approach has caused a stir in contemporary accounting literature, as it has become the most prominent topic in most accounting studies, many writers point out that the idea of activity-based costing is not a new idea, as it has been mentioned by many people interested in accounting sciences for a long time (Carraro, 2018: 58), and the first academic study of the activity-based costing system approach dates back to the study conducted by Staubus, 1971), as he is considered the first to address the idea of the activity-based costing system in his book published in 1971, where he studied the basic points on which the activity-based accounting system is based, which clarified the activity center and cost objectives, and the concept of cost, through which he explained that the use of allocation bases in the traditional costing system, such as direct labor hours, overshadows the cost of the product due to charging some products less than their own costs, and then linking these activities to products through what is known as cost drivers (Dwivedi, Chikraborty, 2015: 27-42).

The comparison between the activity-based resource planning (ABRP) technology and the activity-based budget (ABP) can be made through table 1:

Table 1. Comparison between activity-based resource planning (ABRP) and activity-based budgeting (ABP)

Activity-based budgeting (ABP)	Activity-based resource planning (ABRP) technology
Focused on product demand and costs	Focuses on the quantity and amounts of resources
Determine the price according to the products (goods or services) according to demand	Identify resource demand and resource-associated costs
Know the sales costs incurred for each sale case using the ABC activity-based costing system	Low costs and they are related to resource outputs
Reduce costs by achieving internal and external optimization of various activities and processes	Encourages cost reduction and non-value-adding activities
Supply and demand matching can be made	Supply and demand matching can be made
When achieving financial returns, a good diagnosis is made of the financial situation of the industrial unit.	Offers a comprehensive and accurate cash plan
It supports and rationalizes product pricing decisions	Increases support and rationalization of additional investment decisions based on insights into resource demand
It does not help to find methods of regulatory control	Activity-based resource planning style enhances and activates organizational control methods

The advancement of modern policies and production systems, along with their impact on accounting frameworks, has led to a reformation of diverse methodologies in budget preparation. Certain budgeting approaches overlook strategic objectives, shown by the conventional operational budget, whilst others include the strategic goals of the economic entity, such as the activity-based budget. The traditional operational budget sets the minimum financial need for each activity and provides justification for amounts beyond this level, requesting approval from senior management. It evaluates each action according to its needs and related costs. The activity-based budget assesses the expenses of planned activities according to their expected magnitude and the necessary resources for their execution.

2. Data and Method

This article employs a descriptive exploratory strategy using a qualitative methodology. This technique delineates the phenomena or symptoms that manifest inherently in an oil refinery. This methodology employs a case study focused on Iraq's Middle Refineries Company (Dura Refinery). Qualitative data was collected through general descriptions of the refinery, including its history, vision, mission, and organizational structure. This enterprise is located in the southeastern suburb of Baghdad, next to the Tigris River, encompassing an area of around 250 hectares. The refinery is among Iraq's earliest big refineries and signifies the start of the contemporary oil industry in this resource-abundant nation. The construction of the refinery began in 1953 AD, facilitated by a consortium of worldwide firms, including M.W. Wheeler, Foster & Research, Exxon, and Kellogg Engineering. It was constructed as a conversion refinery to leverage crude oil to advance the nation's expanding economy. It included several units that progressed from basic distillation to sophisticated fat manufacturing equipment. The refinery commenced operations in 1955 and has subsequently evolved and expanded. The total firm members are 6,864 permanent workers and 483 temporary employees. The corporation has five linked refineries:

- Al-Dawra Refinery, production capacity (140,000 barrels/day).
- Al-Najaf Refinery, production capacity (30,000 barrels/day).

- Samawah Refinery, energy Productivity (30,000 barrels/day).
- Diwaniyah Refinery Production Capacity (20,000 barrels/day).
- Karbala Refinery (under construction) with a production capacity of 14,000 barrels/day) as a contract was signed to establish it with a group of Korean companies headed by Hyundai. The company provides a variety of products (hydraulic oil, gasoline, jet fuel, kerosene, liquefied gas, fuel oil, lubricating oils, gas oil, diesel fuel, greases, asphalt of all kinds, transformer oil, and fats upon request).

3. Results

To identify the impact of activity-based resource planning (ABRP) technology and operational budgets, we compare the cost of the nine products according to the traditional operational budgeting approach and according to the activity-based resource planning technique (ABRP) as shown in the following table:

Table 2. Comparative analysis of Product costs

Products	Activity-based resource planning technology (ABRP)	Resource Acquisition Accounting	Activity-based cost technique ABC	and activity-based budgeting ABB
Light naphtha	350,452,120.11	492,921,359	136,923,963.63	372,880,530.24
Heavy naphtha	89,089,404.48	125,355,724	36,265,154.90	63,069,977.48
Untreated White Oil	105,574,079.67	147,393,493	45,956,299.43	107,548,603.98
Gas oil	104,346,863.32	143,420,018	52,479,723.03	68,899,487.55
Diesel	5,898,940.65	8,166,777	3,670,147.79	3,159,894.32
Black oil	367,939,863.06	509,107,294	180,346,252.41	159,749,865.70
Ore Reduction	58,522,110.54	78,577,491	37,136,428.71	26,932,871.04
Liquid gas	23,158,351.43	32,824,396	9,489,341.43	12,180,798.27
Al Safwa Private	7,018,733.41	9,064,788	6,699,671.15	17,131.65

Source : Prepared by the researcher based on the previous table .

Table (2) above shows the extent to which the cost of the nine products has improved when the activity-based resource planning technique (ABRP) in which the planned resource increase was increased as follows:

Light naphtha: In the context of the application of activity-based resource planning technology (ABRP) in measuring the cost of the product, the unit cost is expected to be (350,452,120.11) dinars.

Heavy naphtha: Low production cost according to activity-based resource planning (ABRP) technology, as the unit cost is expected to be JD (89,089,404.48).

Untreated white oil: The cost of a flat sheet is expected to decrease when implementing activity-based resource planning (ABRP), as the unit cost is expected to be JD (105,574,079.67).

Gas oil: Low production cost according to activity-based resource planning technology (ABRP), as the unit cost is expected to be (104,346,863.32) JD.

Diesel oil: In the context of the application of activity-based resource planning technology (ABRP) in measuring the cost of the product, the unit cost is expected to be (5,898,940.65) dinars.

Black Oil: The cost of a flat sheet is expected to decrease when implementing activity-based resource planning (ABRP), as the unit cost is expected to be (367,939,863.06) dinars.
Reduced ore: The cost of flat sheet is expected to decrease when implementing activity-based resource planning (ABRP), as the unit cost is expected to be JD (58,522,110.54).
Liquid gas: In the context of the application of activity-based resource planning technology (ABRP) in measuring the cost of the product, the unit cost is expected to be (23,158,351.43) dinars.
Private Elite: Low cost of production according to activity-based resource planning technology (ABRP), as the unit cost is expected to be JD (7,018,733.41).
The rationalization and operational budgets of the research sample laboratory can be analyzed according to the activity-based resource planning technique (ABRP) as follows.

1. To become the main hydrogenation and improvement department to the public and private sectors:

As shown in the comparison between the costs when the activity-based resource planning technique (ABRP) decreased the cost less than the traditional method and thus the department can offer its products at lower prices than the rest of the products in the market and the processing of the public and private sector of products because one of the requirements of customers is the right price The researcher believes that this goal can be achieved by developing sales and marketing capabilities in the refinery Research sample by adopting contracts with state ministries to equip the public sector, adopting direct sales through the establishment of exhibitions, and forming work teams of specialized cadres to promote the department's products inthe private sector. It also proposes to study the local market for the purpose of producing products according to the price of customers and the required quality.

2. Diversification of products and the use of laboratory products in their manufacture and sale

When setting up the activity-based resource planning technique (ABRP), it relied on best-selling products as it achieves the goal of diversification and producing products that generate the highest revenue for the research sample department.
Maximizing the resources of the laboratory and its competition in the market:
Table (2) indicates the significant improvement in the cost of the nine products , and this helps the management to put the products on the market at competitive prices compared to similar products in the market. This achieves multiple objectives, including maximizing resources and competing with them in the market, i.e. when reducing the cost, products can be offered in the market at lower prices than competing products in the market, improving the position of the economic unit in the market towards competitors and increasing The demand for products as well helps in maximizing resources and increasing profits.
It also achieves other goals, for example, in evaluating alternatives, the highest level was chosen, which increases the efficiency of work and then evaluates the performance of employees in the department and further improves their work.
From the above, it is clear that the research objectives can be achieved as follows:
Developing budgeting methods, as these methods provide useful information that helps achieve the objectives of the economic unit, that the integration between the traditional operational budgets in the research sample led to the emergence of a new method in preparing budgets (activity-based resource planning technique ABRP), as it provides useful information to achieve the objectives of the economic unit.
Integration between operational budgeting and activity-based resource planning technology (ABRP) by taking advantage of the advantages of each type, to support planning budgeting methods, as shown in the applied aspect of that integration, where the budget is prepared

according to the useful information provided by each type of budget to achieve the best results to reach the objectives of the economic unit.

Statement of the impact of rationalization of the operating budgets of economic units: The previous paragraph showed the impact of rationalizing the operational budget in the research sample by comparing costs between the traditional operational budget and the activity-based resource planning technique (ABRP).

4. Diagnosis of factors affecting the rationalization of the operating budgets of Iraqi economic units :

To achieve their goals, economic units need several factors such as government support and reliance on modern accounting systems that help in cost management, optimal utilization of resources and cost reduction.

Encouraging economic units to apply modern administrative methods and activity-based resource planning technology (ABRP) because of their impact on the efficiency and effectiveness of planning and control systems and thus achieving the objectives of the economic unit.

The modern administrative methods and activity-based resource planning technique (ABRP) help raise the efficiency of performance and improve the work of economic units andthe researcher sees the possibility of encouraging economic units by gradually shifting towards the budget and activity-based resource planning technology (ABRP) and in stages in different departments and benefit from the experiences of workers.

4. Conclusions and Recommendations

The criticisms directed at traditional systems in particular, their inability to provide accurate cost data, especially for institutions with diverse products and a degree of complexity, in which indirect costs constitute a significant percentage, led to the need to find a system capable of providing more accurate information that helps in the management process. The activity-based costing system (ABRP) emerged as a management control tool and a means based on a better understanding of cost behavior by identifying what causes it by focusing on activities as cost targets and then allocating the cost of these activities to the final cost targets. The system provides information about the various activities of the economic unit, allowing them to be classified into value-adding and non-value-adding activities. Providing better information about the costs of each activity and identifying cost drivers in advance enables predicting activities and their costs. The importance of the activity-based resource planning system (ABRP) is highlighted in controlling cost elements at the activity level and cost occurrence, as defining the role of each activity and stating unimportant activities helps to address them and reduce their costs. Activity-based analysis facilitates cost control by focusing on activities that consume resources, and enables identifying opportunities to reduce costs by providing clearer information about activities and their cost drivers. The activity-based resource planning (ABRP) system is a performance measurement tool that evaluates the performance of activities in order to determine the extent to which each activity contributes to achieving the value expected by customers. The system also provides information that helps in making decisions that are affected by cost. The activity-based resource planning (ABRP) system represents a basis for management based on activity (ABB), which in turn is based on activities, to measure their performance to improve it, taking into account the extent to which they contribute to raising value. The application of the activity-based resource planning (ABRP) system allows for the provision of information that helps in the planning process by preparing the budget based on ABC activities that focus on customer requirements, analyzing their needs and linking them

to strategic objectives in addition to accounting for resource consumption that depends on the resources of the economic unit. The idle energy ratio when applying the activity-based resource planning (ABRP) technology decreased, indicating the exploitation of the resources of the economic unit of the research sample.

In light of the conclusions reached by the research, the following are recommended:

1) Encouraging the use of modern systems such as the Activity-Based Resource Planning (ABRP) system based on scientific and sound foundations in all industrial, commercial and service units that use cost accounting in their activities, with the need to convince officials in the economic unit of the importance of applying these systems because these systems facilitate work and ensure good performance, including the activity-based costing system.
2) It is necessary to adopt the allocation of resources based on activities and determine responsibility so that we can reach the activities that add value and have a major role in achieving the revenues of the economic unit, and those that do not add anything to the economic unit, even the necessity of collecting the information necessary for the decision-making process based on sound scientific studies and subject to horizontal and vertical analyses and comparisons that enjoy a high degree of security to ensure the validity of the decision-making process.
3) Organizing training courses and programs for the facility's employees on a regular and continuous basis to learn about everything new in work techniques, even if the employees are experienced and skilled. These courses and programs help them apply everything new in their field of work and lead to them gaining the experience and knowledge necessary for work.
4) Conducting an analytical study of the problems that accompany the application of the activity-based resource planning (ABRP) system and work to find solutions for them, taking into consideration the system's many advantages and considering them an incentive for application.

References

Ashwe , Chiichii, (2016) "Budgeting Processes and Procedures (Zero-Based Budgeting Initiative)" , Being text of a paper presented at the NIQS Workshop held in Makurdi, Benue State.

Bengu, Yrd Haluk , (2010) "The Role Of Activity Based Budgeting On Target Costing Practices‖"-Suleyman Demirel University-The Journal of Faculty of Economics and Administrative Sciences -Vol.15,No.1-2010.

Bradley, Garry, Mozjerin, Con , "An Introduction to Activity Based Costing and Activity Based Budgeting", G:\!Operations\!Wcc\!Oc\AAPPA Presen \ G_Bradley.doc.

Capusneanu , Sorinel & Sirina , Ileana & Marian , Cristian & Maria , Letitia &Topor , Dan , (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 Vol. 3, No.1.

Dahlgren, Jorgen , Holmstron , Magnus , " ABB at ABB " , School of Management Linkoping University , Sweden .

Dunn , Philip, "Zero-Based Budgeting" , available in www.bookkeepers.

Duran , Volkan , Mertol , Hüseyin , (2020)"Kaizen Perspective in Curriculum Development" , Asian Journal of Education and Training Vol. 6, No. 3.

Foster, Tracy, (2017) " Budget Planning, Budget Control, Business Age, and Financial Performance in Small Businesses " , Walden Dissertations and Doctoral Studies Collection .

Gabris , Gerald , (2016) "Educating Elected Officials in Strategic Goal Setting" , Public Productivity & Management Review, Vol. 13, No.

Gapenski, Louis, Reiter, Kristin, (2016)" Healthcare finance : an introduction to accounting & financial management", Association of University Programs in Health Administration.

Gaurav ,Singh , Prakash,Yadav, (2011)" Zero Bassed Budgeting in India – Its relevance to public ", Asian Journal of Technology & Management Research Vol. 01 – Issue: 01 (Jan - Jun).

Gomes , Shyamal , strategic-management , (2017) , Available for https://www.coursehero.com/ Government Finance Officers Association, (2011)" Zero-Base Budgeting Modern Experiences and Current Perspectives" , Research and Consulting Center .

Hatefi, Bahram,(1982) " Zero-Based Budgeting in American Institutionsof Higher Education", Higher Education Administration, August.

Haxholli , Burim , (2015) "Zero Based Budgeting in KCS Implementing Zero Based Budgeting Method in Kosovo Correctional Service".

Huynh , Tandung & Gong , Guangming , Huynh , Huyhanh , (2013) "Integration of activity-based budgeting and activity-based management" , International Journal of Economics, Finance and Management Sciences.

Ibrahim , Mukdad , (2019) "Designing zero-based budgeting for public organizations" , Problems and Perspectives in Management, Volume 17, Issue 2.

Ibrahim, Mustapha, Ashigar, Abba, Bello, Bello Muhammad , Mamuda, Ali Usman, (2017) " Zero-Based Budgeting is a Panacea to Fiscal Distress: Do the Perceived Benefits Significantly Influence its Adoption in Borno State ?" Saudi J. Bus. Manag. Stud.; Vol-2, Iss-10.

Ibrahim, Mustapha, Shettima 1 Abdulrahman, Mustapha, Babagana1 Yusuf1 Mohammed, Makama, Umar1(2018) "Understanding the Predictor of Zero--Based Budget Adoption in Borno State",Saudi Journal of Business and Management Studies (SJBMS) ISSN 2415--6663.

Kadhim , Hatem Karim , Kadhim , Abdal Abbas , Azeez , Karrar Abdulelah , (2020) " The Integration of Lean Accounting and Activities-Based Public Budgeting for Improving the Firm's Performance" , International Journal of Innovation, Creativity and Change. www.ijicc.net Volume 11, Issue 6.

Kootanaee , Akbar & Babu , Nagendra & Talari , Hamidreza (2013) " Just-in-Time Manufacturing System: From Introduction to Implement" , International Journal of Economics, Business and Finance Vol. 1, No. 2, March.

Mahmoud , Mahmoud , Just in time (JIT), lean , and Toyota production system (TPS) , Industrial Engineering Branch Department of Production Engineering and Metallurgy University of Technology Baghdad - Iraq , 2014 .

Mainardes , Emerson Wagner , Ferreira , João , Raposo , Mário , (2014) " Strategy and Strategic Management: are they recognized by management students ?", Business Administration and Management , DOI: 10.15240/tul/001.

Malagy, Magdy , Alain , Alaa Mohammad , (2017) "Program and Performance Budgeting System in Public Sector Organizations: An Analytical Study in Saudi Arabian Context " , International Business Research; Vol. 10, No. 4.

Maleka , Stevens , (2014) " Strategic Management and Strategic Planning Process" , Available for https://www.researchgate.net

Moustafa , Essam , (2005) "An Application of Activity-Based-Budgeting in Shared Service Departments and Its Perceived Benefits and Barriers under Low-IT Environment Conditions " , Journal of Economic & Administrative Sciences Vol. 21, No. 1.

Nicolae. Todea & Anca, Calin, (2010) "The Budget, an Insturment for planning and controlling the costs", available at https://ideas.repec.org/a/ora/journl/v1y2010i2p919-924.html.

Nnoli , Udeh Francis & Adeyemi , Sopekan , Onuora , Oraka , (2016) " Zero-Base Budgeting: Pathway to sustainable budget implementation in Nigeria " , Business Trends, vol.

O'Regan , Nicholas, Ghobadian, Abby , (2002) "Formal strategic planning: The key to effective business process management?", Business Process Management Journal, Vol. 8 Issue: 5, pp.416-429.

Oboladze, (2016) " Strategic planning as a necessary prerequisite to successful program budgeting in Georgia " , Taras Shevchenko National University of Kyiv ISSN 1728-3817 .

Pal , Rajesh , (2011) " Understanding Union Budget " , Kisan Post Graduate College Raksa, Ratsar in Ballia, U.P.

Pidgeon , Colin , (2010) "Methods of budgeting " Research and Library Services , Northern Ireland Assembly.