

THE USE OF MANAGERIAL ACCOUNTING METHODS FOR CONTROLLING, PLANNING, AND EVALUATING THE PERFORMANCE OF IRAQI INDUSTRIAL FIRMS

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ABSTRACT

Iraqi companies need proper planning to achieve their goals. Planning involves selecting and comparing alternatives to determine the best alternative to achieve the planned objectives. Management accounting provides valuable information and data for planning. Budgeting is one of the essential managerial accounting methods in this aspect. The budget thus redirects the government's strategic plan. As an intermediary, it controls the condition's financial strategy. This study aims to illustrate how planning budgets can be used to plan, control, and evaluate the performance of Iraqi public shareholding industrial companies and how all departments must be included in preparing for them. Additionally, these companies must demonstrate their commitment to using these budgets.

Budget planning success depends on applying scientific principles and foundations, the availability of sufficient information, and the level of collaboration between departments. Moreover, follow up on the performance of these budgets by analysing the outputs and comparing the actual outputs to the budgeted outputs. A questionnaire containing comprehensive questions related to all aspects of the study was designed according to the Five-Likert scale to achieve the study's objectives. 32 Iraqi industrial companies received 123 questionnaires. Using budgets to plan, control, and evaluate the performance of Iraqi industrial companies (the sample) is essential. Budget creation involves internal and external challenges. Utilizing the system's outputs and planning a perfect future for the company can serve as a valuable tool for revenue planning and cost reduction.

Keywords: Managerial Accounting, Planning Budget, Decision-Making, Industrial Companies.

INTRODUCTION

Management accounting is used to gather information and data regarding administrative managers' studies to make better decisions. Essentially, managerial accounting is a set of foundations, principles, practical and scientific rules, and several analytical scientific methods that are interdependent and integrated. In addition, it aims to rationalize and improve various administrative decisions.

Generally, Iraqi industrial companies misuse available material and human resources, so solutions are needed to ensure they are utilized and protected from waste. A budget is used to plan, control, evaluate, and direct a company's resources toward optimal utilization. Actual costs were compared with estimated (static budgets) to ensure accurate control. In light of the unpredictable nature of future product prices, flexible budgets are used to quantify and explain deviations between actual and estimated levels and prices (Siu, 2019; Conversi & Machin-Autenrieth, 2019). According to this study, Iraqi industrial companies use planning budgets to plan, control, and evaluate their performance.

They assess whether practical budget planning systems are compatible with contemporary accounting theory's scientific foundations. To achieve budget planning objectives and control deviations, system outputs are essential. It is essential to measure the efficiency of production processes for long-term sustainability (Harris et al., 2006; Horngren, 2006). To achieve the company's objective, the administration needs to plan, organize, direct, and control the administration. The planning budget serves as a quantitative and financial representation of the company's goals. Planning and implementing plans before the administration are ensured by a budget (Islami & Nahartyo, 2019). The upper management sets the company's strategic goals, the middle management translates these goals into practical means and steps, and the lower management implements these measures. The budget defines the activities and performance of departments within a company (Bitoleuova et al., 2020; Cuganesan & Donovan, 2011; Dahana & Ermwati, 2020; Hansen & Van der Stede, 2004).

In contrast to previous studies, this study measures the commitment of industrial companies in Iraq to planning budgets as a tool for monitoring and evaluating performance. Budgets will be used first in the planning process, followed by control and performance evaluation. Compared to Al-Alaween, this study emphasizes the importance of planning budgets for future planning and forecasting, control, and evaluation of performance. We will examine environmental conditions, budget preparation information, and difficulties encountered. The outputs of the planning budget system can be used to achieve predetermined goals, correct deviations, and identify obstacles to their effective deployment (Arnold & Artz, 2019; Cuganesan & Donovan, 2011; Tyyska et al., 2017).

Literature Review and Hypothesis Developments

In their study on the adoption of budgets by hotels: a field study by Almadina Almunawara, found that 80% of the hotels studied were not involved in the preparation of budgets, were not shown them, nor were they explained to them. The study titled Capital budgeting practices in the Jordanian industrial corporations.

Planning, controlling, evaluating performance, administrative decision-making, coordination, and communications between all levels of the organization resulted in the success of the budget. The same study also led to several obstacles facing the preparation and application of the planning budget in the Greater Amman Municipality, the most important of which is the need for Participation of different levels of management in preparing the budget. Lack of awareness and awareness of the importance of the budget, lack of cooperation between individuals involved in preparing the budget, inaccurate forecasting of revenues and expenditures, lack of use of modern methods of forecasting and analysis in the field of budgeting, lack of scientific competencies, and lack of material and moral incentives (Khamees et al., 2010). The study (Kinyua, 2015) on *"The impact of bias in preparing planning budgets"* concluded that there is a consensus that may reach the congruence between the objectives of the higher management and the objectives of the different administrative levels in a way that reflects the responsibility that workers at these levels must bear. Thus, this is a very positive case and acceptable bias that will ultimately lead to the program's success when its effects appear within the budget estimates. (Abdel-Kader & Luther, 2008) According to his study entitled *"The Extent of Use of Discretionary Budgets in Planning, Control and Decision-Making in Jordanian Public Shareholding Pharmaceutical Industry Companies,"* several results were obtained. The most important results were that budgets assist management in performing administrative functions and that company management recognizes the importance of Planning, controlling, and making decisions using budgets. On the other hand, it was found that several obstacles limit the optimal use of discretionary budgets, the most important of which is the need for sufficient confidence in the predicted figures contained in the discretionary budgets. (De Baerdemaeker & Bruggeman, 2015)

Their study of "*Testing the Process Model of Recognizing the Role of Participation in Planning Budgeting in the Framework of Latent Variables*" concluded that Participation in planning budgeting enhances budget quality, positively affecting budget utility. In addition, the study showed that Participation positively and directly impacts job-related information. (Wafiroh et al., 2020) According to a study on Participation, motivation, and performance for planning budgets, there is a strong positive relationship between Participation in preparing planning budgets and organizational performance. If individuals are actively involved in budget preparation and setting goals and standards, they are more likely to develop an internal expectation relationship for their performance, which motivates them. Moreover, raise their performance to achieve their ambitions by implementing the budget. Based on the above, the following hypothesis was formulated.

HYPOTHESIS

- H₁:** *Industry companies are negatively associated with using planning budgets to monitor and evaluate performance.*
- H₂:** *Business performance is positively correlated with the availability of information and the appropriate environment.*
- H₃:** *System outputs are not used to correct errors and improve production efficiency and effectiveness.*

(Jermias & Yigit, 2013) A study on "*Authoritarianism and Participation in the budget concluded that Participation in the preparation of the planning budget has a significant role in raising job satisfaction. The higher the degree of Participation, the greater the subordinates' conviction of the budget.*" To participate in the preparation of planning budgets and the supervisory view, High Participation shows job satisfaction and better performance for individuals. As for the problems of preparing and implementing the planning budget, (Verwey et al., 2008; Tejedor-Estupinan, 2018) indicated that the most critical obstacle to applying the planning budget system is the failure to allocate an independent department or unit to prepare planning budgets and the need for the necessary financial and accounting independence. (El-Daour & Abu Shaaban, 2014) He also reported in his study of the problems of preparing budgets in the Gaza Strip that there are several problems in preparing and implementing budgets, the most important of which are lack of awareness of the importance of planning budgets, lack of experience, and lack of skills.

Meanwhile, we have recently observed several companies that have begun to switch from planning budgets to strategic planning in the budget, enabling companies to measure results more accurately (Mason et al., 2013). While we find that the planning budget begins by relying on last year's figures, and its preparation starts from the lower levels, where the heads of departments deliver their departments' budgets, which in turn are included in the budgets of departments and higher levels. While planning budgets are essential, we find that they are frequently criticized, including that they are no longer effective means of planning and control in today's complex, volatile and high-risk business and investment climate (Phua & McNally, 2008). In addition, we find that the budget focuses on planning and control and neglects essential things such as quality and customer services, as it becomes inaccurate for products with a short life cycle or in a rapidly volatile investment climate (Sahin et al., 2018; Malik et al., 2019; Al Jasimee et al., 2019). A Linear Programming Framework for Flexible Budgeting and its Application to Classroom Teaching. The objective of this study was to develop a new approach to preparing planning budgets and analyzing deviations using linear programming and the theory of constraints, incorporating operating expenses into deviation analysis, and arriving at meaningful readings to be used in constraint theory. The study showed that the integration of linear

programming in the preparation of planning budgets enhances the relationship between the analysis of deviations and financial control. The study indicated some obstacles in applying this method, as it showed that its use requires high skill in statistics and computers, which is usually not always available together (Yahya-Zadeh, 2002). This study aimed to test the effect of performance information on designing the budgeting system for Chili's restaurants in the United States of America. To eliminate all the obstacles that faced all previous and similar research and studies, this study addressed two critical factors not addressed in all previous studies and research related to planning budgets. The first factor is the ways of using information related to performance, and the second factor is the plurality of methods and methods in how performance considerations affect the distribution of resources within the organization. As part of the study, data was collected through interviews and Focus Groups, as well as the use of regression analysis for the administrative data related to the company, and the results of this study indicated that the most critical part of performance-based budgeting was not clear (Zaltsman, 2008). According to previews studies, the two hypotheses were formulated:

H₄: Monitoring and evaluating performance using planning budgets are manageable.

H₅: Industrial companies need to prepare planning budgets based on scientific evidence.

METHODOLOGY

Discussing the Results of Statistical Analysis and Testing Hypotheses

Table 1 THE EXTENT TO WHICH IRAQI INDUSTRIAL COMPANIES ARE INTERESTED IN PREPARING PLANNING BUDGETS				
N0	Questions	Arithmetic mean	Standard\deviationn	T
1	The company uses a system of planning budgets for all the company's operational and administrative departments.	4.05	1.016	30.891
2	The company trains employees in preparing budgets to ensure the efficiency of the employees working on preparing them.	3.62	1.01	27.738
3	The budget, after its approval, is considered a tool or means of control.	4.25	0.773	42.59
4	The budget, after its approval, is considered a tool or means for evaluating performance.	4.13	0.749	33.802
5	Budget objectives are explained to those responsible for the departments.	3.8	0.879	33.481
6	Budgets are prepared periodically.	4.23	0.81	40.471
7	Management uses budgets to chart and predict the future.	4.08	0.962	32.884
8	The company's management is interested in having a special department for preparing budgets.	3.18	1.304	18.81
9	Incentives are given to departments whose budget results match actual performance.	3.05	1.032	22.89
10	The nature and size of the company's activity do not allow or do not require the work of planning budgets.	1.05	0.869	17.079
11	The use of budgets in the company leads to an increase in the efficiency and effectiveness of the company.	4.38	0.613	55.372
12	The company sets clear instructions for preparing	3.80	0.798	36.872

	budgets.			
	The arithmetic means and the standard deviation.	3.75	0.901	

In this part, the results of the study sample's answers will be presented and discussed. Descriptive Statistics were used to calculate the arithmetic standard deviation (SD) and mean of the study questions for each of the study hypotheses independently, as shown in the following tables:

Table 1 shows the arithmetic mean values for the answers to the questions related to this hypothesis. These results indicate that the sample members are optimistic about all questions, except question no.

Table 2 THE EXTENT OF THE AVAILABILITY OF SUFFICIENT INFORMATION AND THE APPROPRIATE ENVIRONMENT WITHIN THE IRAQI INDUSTRIAL COMPANIES				
No	Questions	Arithmetic mean	standard deviation	T
1	The company has the sound data and information necessary to prepare planning budgets.	4.08	0.743	42.562
2	Effectively collaborate by department heads within the company to implement the planning budgeting system	3.75	1.019	28.509
3	Information exchange between departments is carried out with high efficiency and transparency.	3.8	0.819	35.928
4	The company provides the conditions required for the implementation of planning budgets.	3.78	9.783	37.422
5	Planning budgets are prepared in order to achieve the planned objectives.	4.05	0.891	35.205
6	Legal and economic circumstances are taken into consideration when preparing planning budgets.	4	0.781	39.665
7	The company's management is concerned with estimating direct and indirect industrial costs when preparing the budget.	4.23	0.698	46.988
8	A financial and accounting system meets the requirements of preparing planning budgets.	4.05	0.999	31.411
9	Periodic meetings of department heads are held in order to discuss budget items.	3.55	1.032	26.642
10	The company's management allows the budget department to see the entire activities and business of the company.	3.72	0.804	35.786
11	All departments are involved in the preparation of budgets.	3.42	0.926	28.583
12	The company has information systems for the preparation of planning budgets.	3.73	1.103	26.226
13	The company prepares its data for a subsequent year by planning budgets.	3.8	1.038	28.35
14	The company's budget preparation committee is qualified to prepare it properly.	3.9	1.037	29.142
15	The planning budget system includes addressing proposals to improve the level of performance.	3.92	0.809	37.516
	The arithmetic mean and the general standard deviation	3.85	0.899	

As indicated by the negative attitude of the sample members toward this question, planning budgets must be prepared and used as an instrument for detecting and assessing performance in light of the nature and volume of work. The general arithmetic mean was 3.75, higher than the standard value of 3, and the general standard deviation was 0.901, suggesting that Iraqi industrial companies are interested in preparing planning budgets and using them as performance monitoring and evaluation tools (Table 2).

Notes from (Table 3) that the average responses of the sample members about the questions related to this hypothesis are higher than the standard value 3, which indicates that the companies included in the study provide adequate information required to facilitate those concerned to prepare the estimated budgets to the fullest. According to the study, Iraqi industrial companies prepare planning budgets by calculating and estimating direct and indirect industrial costs, with an average response of 4.23, the highest arithmetic means recorded among all questions related to this hypothesis. The value of the general arithmetic mean was 3.85, which is higher than the standard value of 3, and the value of the general standard deviation was 0.899, which indicates that individuals' attitudes are positive towards the availability of sufficient information and the appropriate environment within Iraqi industrial companies to prepare those budgets. The researchers believe that such trends must be strengthened within all departments of companies for constant communication of information through the scientific application budgeting and training seriously.

Table 3 THE EXTENT TO WHICH PLANNING BUDGETS ARE PREPARED ACCORDING TO SCIENTIFIC BASES FOR USE IN THE PLANNING PROCESS					
No	Questions	Arithmetic mean	standard deviation		T
1	The budgeting system applied in the company is based on standard plans and methods.	3.65	0.799		37.437
2	Specify the detailed objectives of the planning budgets based on the long-term strategic plan.	3.67	0.752		37.786
3	Budgets from previous years are used to guide when preparing the new budget.	3.97	0.863		35.607
4	The financial plan for the budget is drawn up based on the objectives the company seeks to achieve and the facts of reality.	4.1	0.796		39.889
5	The budgeted plans are adhered to:	3.67	0.933		30.449
6	A planning budget is an essential tool in implementing the plans and objectives of the company's vision.	4.13	0.7		45.72
7	Planning is the primary and most important objective of preparing planning budgets.	4.33	0.51		65.842
9	The process of preparing planning budgets as planned.	4.1	0.817		38.863
	Planning budgets are built based on planning sales, costs, and profit.	4.27	0.733		45.064
	The arithmetic mean and the general standard deviation	3.99	0.762		

Table 3 shows that the average answers of the sample members to the questions related to this hypothesis are higher than the standard value 3. Hence, the companies that participated in the study prepared their planning budgets based on scientific evidence. Those companies' decision-makers can use these budgets during the planning process. According to the field study, planning is the main objective for preparing planning budgets. The average of the respondents' answers to this question was 4.33, the highest arithmetic means value among all questions related to this hypothesis. A mean value of 3.99 was obtained, higher than the standard value of 3, and the standard deviation was 0.76. These results indicate that Iraqi industrial companies (the sample) prepare their planning budgets by the generally accepted practice. According to the researchers, after reviewing the results presented in the previous table. Based on the study sample results, most respondents are optimistic regarding using the planning process for the company's future, explicitly planning through budgeting. Budgets are essential tools to reduce costs and increase revenues by planning sales in advance.

Hypotheses Test

Budget use and contingency factors are positively associated with business performance.

H_1 : *Industry companies are negatively associated with using planning budgets to monitor and evaluate performance.*

Table 4 THE RESULTS OF THE FIRST HYPOTHESIS TEST		
Null hypothesis	T-Tabulated	T-Calculated
485.16	1.9873	Rejection

Table 4 indicates that $T=16.485$ is more significant than its tabular value; therefore, we reject the null hypothesis H_1 in favor of the alternative hypothesis H_a , which indicates that Iraqi industrial companies use planning budgets for performance control and evaluation.

H_2 : *Business performance is positively correlated with the availability of information and the appropriate environment.*

Table 5 THE RESULTS OF THE SECOND HYPOTHESIS TEST		
T-Calculated	T-Tabulated	Null hypothesis
16.84	1.9873	Rejection

Table 5 shows that $T=16.84$ is more significant than its tabular value, thus rejecting the null hypothesis H_2 and accepting the alternative hypothesis H_a . In other words, the Iraqi industrial companies have sufficient information and an appropriate environment to prepare planning budgets.

H_3 : *System outputs are not used to correct errors and improve production efficiency and effectiveness.*

Table 6 THE RESULTS OF THE THIRD HYPOTHESIS TEST		
T-Calculated	T-Tabulated	Null hypothesis
6.968	1.9873	Rejection

Based on the results of (Table 6), we find that the $T = 20.105$ is more significant than its tabular value. Therefore, we reject the null hypothesis H_3 and accept H_a , the alternative hypothesis. It means that Iraqi industrial companies use the system's outputs to correct deviations and errors and improve the efficiency and effectiveness of production processes.

H_4 : *Monitoring and evaluating performance using planning budgets are manageable.*

Table 7 FOURTH HYPOTHESIS TEST RESULTS		
T-Calculated	T-Tabulated	Null hypothesis
6.968	1.9873	Rejection

The value of $T=6.968$ in (Table 7) is more significant than its tabular value, and therefore we

reject the null hypothesis H_4 and accept the alternative hypothesis H_a . Thus, Iraqi industrial companies face certain obstacles that prevent them from using planning budgets to monitor and evaluate their performance.

H_5 : *Industrial companies need to prepare planning budgets based on scientific evidence.*

Table 8		
FIFTH HYPOTHESIS TEST RESULTS		
T-Calculated	T-Tabulated	Null hypothesis
13.65	1.9873	Rejection

Our reading of the computer results in (Table 8) shows that the $T=13.65$ is more significant than its tabular value. Therefore we reject the null hypothesis H_5 and accept the alternative hypothesis H_a . For this reason, Iraqi industrial companies prepare planning budgets based on recognized scientific bases.

The following table shows a summary of the results of the study's hypotheses testing (Table 9):

Table 9			
SUMMARY OF HYPOTHESIS TEST RESULTS			
Hypothesis	Statistical Hypothesis Test Result		Null hypothesis
	T-Tabulated	T-Calculated	
Iraqi industrial companies are interested in something other than preparing planning budgets that use a tool for monitoring and evaluating performance.	1.9873	485.16	rejection
There needs to be more information and the appropriate environment within the Iraqi industrial companies to prepare these budgets.	1.9873	16.84	rejection
The system's outputs are not used to correct deviations and errors and to develop the effectiveness and efficiency of the production process in Iraqi industrial companies.	1.9873	20.105	rejection
There are no obstacles to using planning budgets to monitor and evaluate performance in Iraqi industrial companies.	1.9873	6.986	rejection
Iraqi industrial companies must prepare planning budgets according to the recognized scientific bases to be used in the planning process.	1.9873	13.65	rejection

According to the researchers, Iraqi industrial companies, the subject of the study, value the importance of planning budgets in planning, controlling, and evaluating their operations. While there were some internal and external obstacles to preparing these budgets, the study proved that they continue to move forward in using these budgets in revenue planning and cost reduction by taking advantage of the system's outputs and drawing more transparency for the facility's future.

FINDINGS AND RECOMMENDATIONS

The study reached the following results:

Iraqi companies regularly prepare their budgets as planning, monitoring, and evaluation tools. In addition, Iraqi companies use planning budgets to estimate operating expenses and revenues. Iraqi companies have a high level of awareness regarding the need to make information available and create

a conducive environment for preparing budgets. Results of the study show that most companies use budget results to resolve current budget variances to avoid future problems. However, the results created obstacles that may affect implementing the budget planning system as a control tool within these firms.

The researcher recommended the following based on the above results and conclusions: The company's management should consider behavioral aspects when planning budgets, invite all internal departments to prepare budget documents, and reduce internal obstacles. The researcher recommends a separate organization issue, implementation, and monitor company planning budgets.

CONCLUSION

A questionnaire containing comprehensive questions related to all aspects of the study was designed according to the Five-Likert scale to achieve the study's objectives. 32 Iraqi industrial companies received 123 questionnaires. Using budgets to plan, control, and evaluate the performance of Iraqi industrial companies (the sample) is essential. Budget creation involves internal and external challenges. Utilizing the system's outputs and planning a perfect future for the company can serve as a valuable tool for revenue planning and cost reduction.

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