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THE ROLE OF PROJECT RESOURCE PLANNING IN COST MANAGEMENT: AN EMPIRICAL STUDY IN THE CENTRAL NAJAF DRUG STORE

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ABSTRACT. This paper is concerned with highlighting the changes in the environment of economic units and the critical requirements for success in them. The ERP that is the subject of the study is a powerful management tool that classifies costs based on resources and their legacy and expenses associated with time-sensitive activities and provides cost-effective environments. However, economic units attempt to optimize the outcomes obtained more than they would if utilized independently since most economical units suffer from insufficient planning and preparation for resource-consuming operations. The study discovered that ERP organizes time data for all resource operations into theoretical and practical energy to regulate and control resource expenditures. It was consequently advised that the ERP application's findings be distributed and publicized in Iraqi economic units since they address the issue of data inaccuracy in cost measuring methodologies.

JEL Classification: D02, O17, P31

Keywords: : Project Resource Planning, Cost management, costs based on time activities, commercial sector

Introduction

Project ERP ispart of the set of information systems that are given greater relevance based on greater oversight on the one hand and the immediate updating and presentation of information related to the activities and functions of business organizations on theother, which has been positively reflected in enhancing the advantages and competitiveness of organizations, as enterprise resource planning project resource planning Management information systems that open and operate many business practices associated with the organization's production processes or manifestations. Subsystems make up systems as needed, such as financial system, warehouses, manufacturing, marketing, procurement, personnel, and other activities that can benefit from ready-made and adaptable subsystems.

In light of developments in the environment ofmodern economic units, the need for information has emerged that serves the strategic orientation of economic unity, which requires accurate and appropriate information that goes beyond the internal environment to the external

environment, and the measurement of resource capacities, In addition, the methods of reducing costs have become very capable of responding to the needs of management in light of the technological development that has occurred because it does not require the development of appropriate information to achieve the requirements of success in this environment and in which advanced costs techniques have emerged to meet the requirements of the marginal environment Its various needs and method of costs based on ABC activities, including the method of costs based on time-oriented activities, project resource planning, which is an integrated and comprehensivesystem for the management of costs, combines the principles of costs management and the method of costs based on time-oriented activities provides management with appropriate information on the allocation and efficient use of available resources and this combination involves features that achieve significant improvement in other agency managementsystems..

1. Literature review

The project resource planning and its role in cost management

ERP helps to increase the interaction between tasks and functions while supporting the application of integrated business management systems and applications, as well as automating many office functions related to the technical aspect, services and human resources by providing data on finance, manufacturing, processing chain management, maintenance and other tasks in a single technical space, making it easier for executives to have an integrated view of multiple business processes with more effective technology. Operational processes are more valuable and efficient in terms of project performance information, which we obtain from project ERP.

First: The Concept of Enterprise Resource Planning

The information systems performance of project ERP departments also dates back to the 1990s, a literal translation of what is universally known as Enterprise Resource Planning,and is shortened to ERP(this abbreviation has become widely known and used to demonstrate the computer-based information technology and its large renewable and growing potential, and project resource planning has become known in organizations of all sizes and types and is widely used to demonstrate what has been achieved. Much of the ERP book even argues that ERPis a functional extension of manufacturing resource planning(MRPII)that emerged during the 1980s, before whichMRP and its inventory tracking systemsemerged in the 1960s and 1970s, and were used exclusively in the industrial sectors.

. (Rashid, et,al,2002: 17) Project ERP is also defined as multi-software systems that integrate all business processes and functions of the project into a single software system using a single database. Turner&Weickgenannt,2013,616) It is also known as "a complete set of software covering accounting, manufacturing, procurement, distribution, human resources, as well as other functions, where it uses a unified database to collect and distribute data and information for all software applications and allows for the full and timely sharing of information, as well as providing a comprehensive view of the project." (Horngren,2016:718) .

In addition, it was known as a system for integrating the information of the broad economic unit with the streamlining of the main processes of theunit. Laudon&Laudon, 2010,631)wasalso known as "an integration of all important ERP systems in the company in the context of planning and control processes with other business functions. (Abad,2016:535)

Project Resource Planning(ERP)is a set of integrated applications - which theeconomic unit can use to collect, store, manage and interpret data from many business activities, including: product planning, cost or delivery of marketing services, sales inventory, shipping management, payment processes, facilitating the flow of data and information between all business operationsof the economic unit and between commercial units(Wier et al. 2007.

The importance of project ERP of Enterprise Recourse Planning Importance The

There is no doubt that ERP is of clear importance in our current world, especially in the context of competition, increased efficiency and effectiveness, and the acquisition and maintenance of customers. Projects are also required to simplify their operations, and highlights of the importance of project resource planning for economic units such as Exforsys, 2006:2)(and Jawad,2016,27)andZughoul, et al., 2016:5).

-1 Simplifies business processes in one cohesive unit, thereby working at a higher level, resulting in a higher level of productivity, which in turn will lead to moreprofits.

-2 Provides high levels of information flow, asprojects should be able to transmit information quickly and efficiently, so when this information is transmitted quickly and efficiently, the project is able to dispose of and process data within a short period of time.

-3 Application gives higher quality of information, the transmission of information quickly is not enough for the project but must be able to confirm the quality of the data, so the information is not appropriate if it is not highquality.

-4 Leads to a significant improvement in the financial ratios after its application, there has been a rise inthe rate of revolving in inventory and return on assets reflecting the efficiency of the employment of sources, and the improvement in the rate of repayment daysof debtors reflecting efficient managementof debtorsn

-5 Contributes to improving manufacturing efficiency it can generate more accurate expectations of demand, afastproduction role, greatly enhance customer service, and help reduce inventory, because material management planners can obtain more accurate data) such as the volume of inventory that was in the process ofbeing prepared(and they can do a better job of predicting future demand).

6. Improves cash management, reduces staff needs and reduces total IT costs by removing redundant information and computer systems.

7. Helps in the application of new accounting methods and procedures, when it is able to respond quickly to business requirements, it facilitates the application of accounting techniques such as balanced scorecard, budgets, profitability analysis and, as a result, improved project performance.

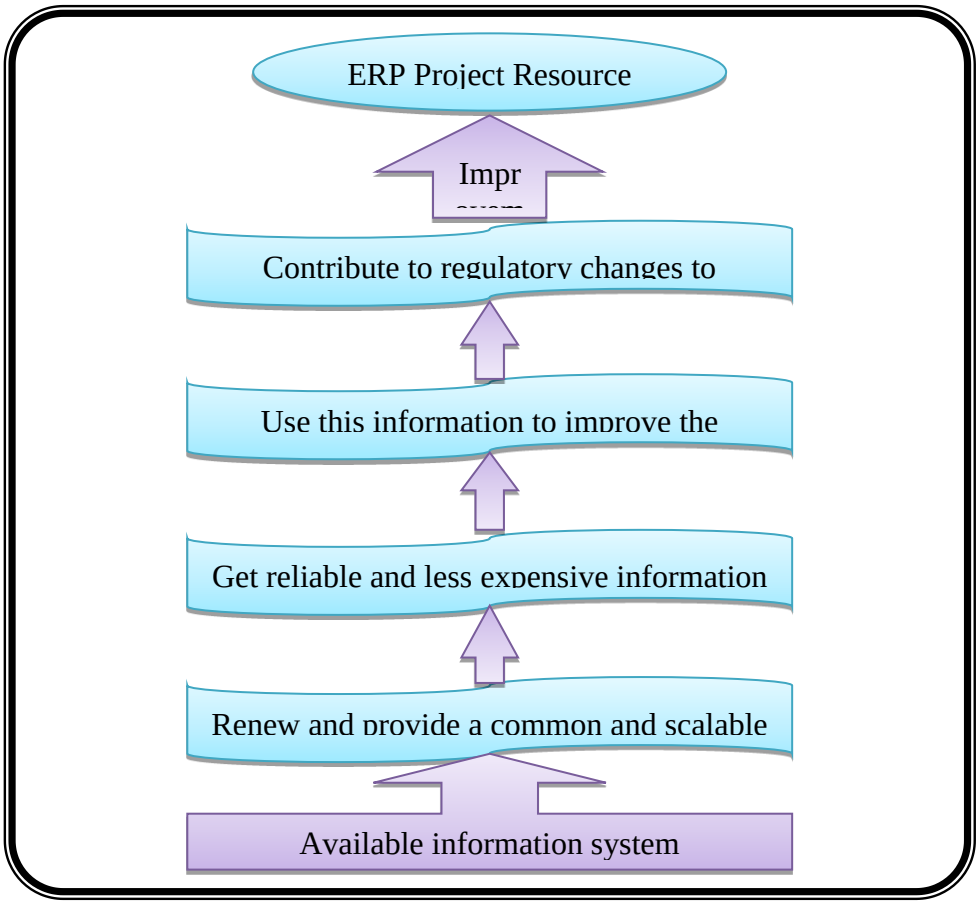


Figure 1. The importance of project resource planning
Source: Abeer Mahmoud Mohammed Abdul Halim Engines of Change in Advanced Management Accounting Practices in the IT Environment (Tanta: Tanta University, Faculty of Commerce, Scientific Journal of Trade and Finance, Volume 2,Issue 4, 2013: 464.

Third: Steps to apply project ERP The Step of Enterprise Recourse Planning
It is the achievement of the goals adopted for it and one of the most important methods and mechanisms that measure the success of ERP is the quality of information, system quality, and individual and organizational effects due to the application of project resource planning and user satisfaction, where these factors are the real indicator that measures the success achieved by ERP, as the steps of resource planning are the following (Ahmed&Mose, 2011:759) ; (,2017:29-31Flatness); O'Donnell, 2017: 2-7)):

1- Project ERP collects data from various businesses and key activities (sales, accounting, production, etc.)
2- The data is then stored in a unified software store which can be used by other parts of the project.
These initially focus on the integration of processing between different systems.
4- Project ERP software enhancesthe quality of products b to coordinate withthesupplier where project systems can be linked with supplier systems, distributors, retailers, manufacturers or can be linked with consumer relationship management and supply chain

Fourth: The concept of costs based on time-oriented activities The Concept of Time - Driven Activity Based - Costing

The cost method based on time-oriented activity(TDABC)is amodern method of cost measurement, and this method addresses most ofthe problems and shortcomings of theABC system in 2004 has created both cost technology based on time-oriented activity, or as it sometimes calls the method Cost based on integrated activity with optimal cost time style, where it indicates that the emergence of the optimal cost time method integrated with the cost style based on activities has led to overcoming the criticisms and disadvantages directed atthe activity cost system(ABC),and adds that TDABC is a less expensive, easier to use and faster method in practice, and helps to determine cost turnover rates based on the actual capacity of resource supply. (Kaplan & Anderson, 2011:112)).

And that one of the main reasons for the emergence of the TDABC method is that many economic units are different from the cost technology based on activity (ABC) because of the problems caused by its application,

According to Atkinson et. al., 2004,this approach is based on two phases:

Phase 1: Determining the actual capacity and cost of resources, as a basis for calculating cost in the right way to over-cost as a result of the loading of untapped energy.

Phase II: Estimating the time required to perform each activity, i.e. it is a TDABCmethodbased on estimating the time required for each operation or limit of the operations of the activity we have based on the multiple characteristics of the activity (time triggers), which requires determining the unit cost rate of available resources, and determining the time required to perform the activity through time rates.

The cost method was also defined on the basis of time-oriented activities with several definitions, including as a technique based on abc principles(but at alower cost, as well as relying on time-based cost guides expressed by practical energy that helps complete the cost allocation process. Abad,2016:353).

Fifth: Steps of Time - Driven Activity based - costing

The cost approach based on time-oriented activities includes several steps to achieve cost access based on exploited resources, and there are steps ahead of these steps, i.e., they complement abc's steps (Everaert P., et al., 2008:175) and(ÖkerF.&gtıgüzel,2016:54-55) and(Dejnega O., 2011: 9)these steps are asfollows:

1- Determining the energy cost rate for each resource group as this step is complementary to the cost approach on the basis of activities and includes:

- Determine the total resources that complete theactivities.
- The costs of each resource set are calculated, and the costs of these groups are usually obtained from the economic unit's audit balance.
- Estimate the practical energy of each resource group, often the practical time energy
- Calculate energy cost rates for each resource group independently.

Estimating the time required for the variables required in ongoing activities is time-equivalent and includes:

- Analysis of operations within sections to activities
- - Identify factors that affect the duration of the activity appropriately drive the time and when the activities are not homogeneous and contain the tasks of different variables, each has its own engine

- Set up the time equation, which reflects the current time of activity on all factors and the value of those factors, so that the total time spent is the times of all variable tasks within the activity

3- Calculating the total cost of resources required by cost targets by multiplying the energy cost rates per resource group by the total energy consumed by the cost targets when passing through the variablesof current processes and how to distribute costs through its application (TDABC) and shows the figure(9-2)shows amethod mechanism of action in the industrial units form summarizing the steps of applying TDABC according to the above, It is clear that the application of cost-effective approach on the basis of time-oriented activities needs to:

- The presence of an independent accounting staff within the economic unit, where the staff have scientific qualifications to understand the implementation procedures.

- All department heads and those who determine the production mechanism have a good degree of experience and efficiency, and their ability to communicate and cooperate with the financial department of the unit, in order to provide the necessary information for the application of TDABC.

- The need for an electronic archiving data system, for example, ERPor otherwise, facilitates the application process (TDABC significantly), as a result of prior planning of operations for the economic unit.

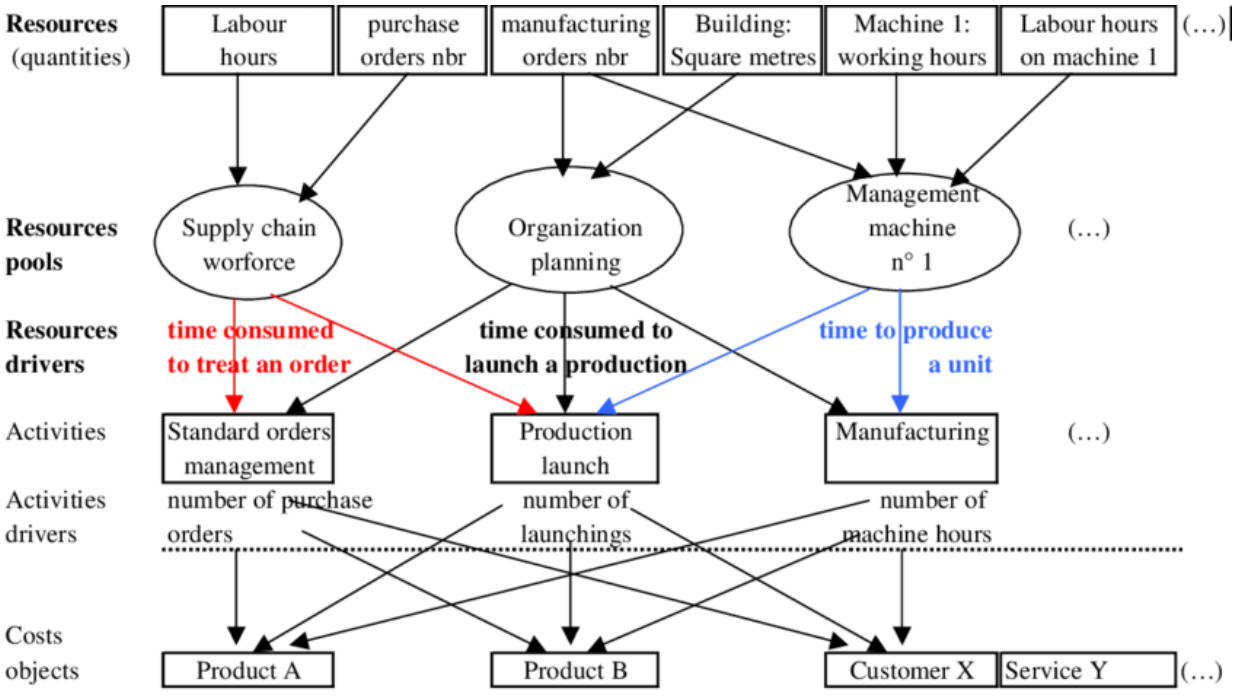


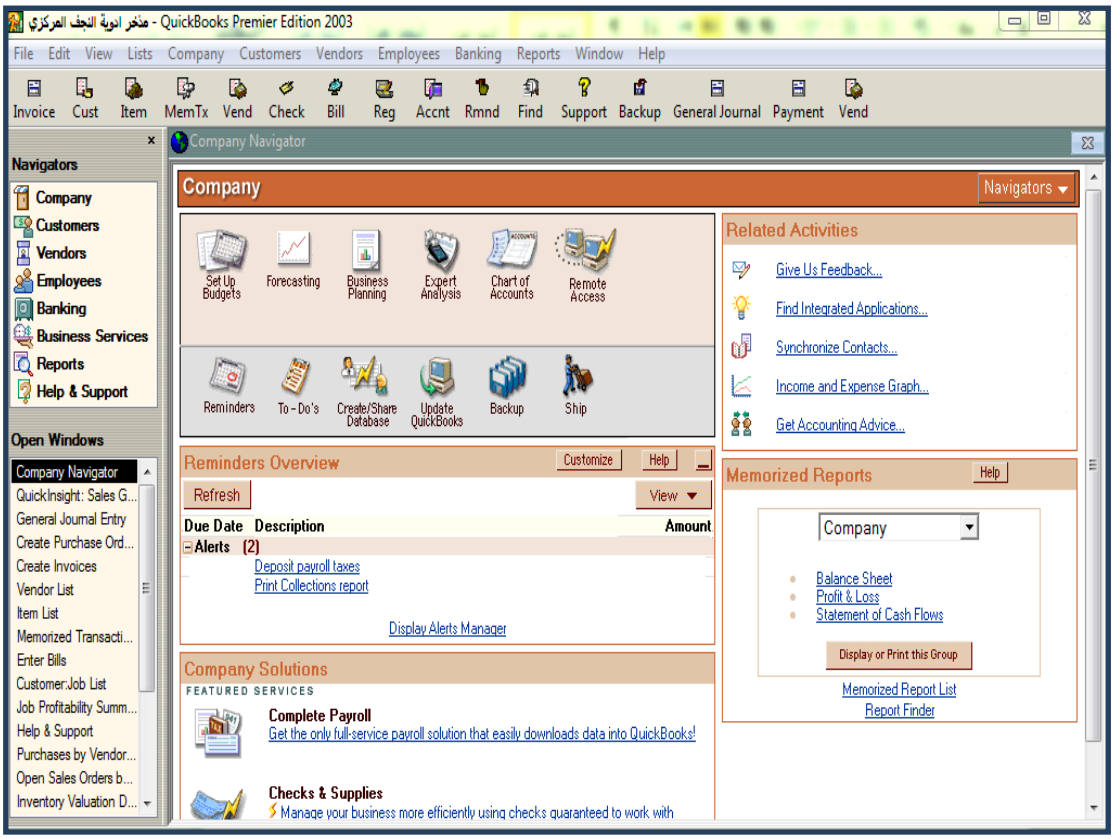
Figure (2). cost-based approach based on time-oriented activities
Soures: Szychta A., 2010,"Time-Driven Activity-Based Costing in ServiceIndustries", Social Sciences / Socialiniai Mokslai, Nr.1: 67. p54

The results

First:The main interface of the program and systems

The program contains a number of systems such as (daily restrictions, purchase orders, sales orders, invoice editing, seller's list, introduction of a new invoice, customer name, inventory evaluation, etc.) in order to die the necessary data on the search sample has been referred to income disclosure, budget, profits, losses, audit balances, financial statements, daily restrictions and account analyses, for non-financial data such as the number of hours processing order, number of employees, monthly and annual sales and other necessary data in the central Najaf medicines store.

Figure (3).The main systems of the program



It is distributed into several software systems and each application was conducted and it should be noted that the forms come from the accounting program Cookbox accounting and warehouses

We will clarify the systems contained in the program, which are as follows:

Inventory system: ERP provides several features, capabilities and software solutions to address the problem that economic units are going through in controlling their raw materials and inventory, i.e. it provides management of the material inventory in a flexible and easy way, as follows:

1. Where the material in the program can be defined by the material card which contains complete metadata about the material
2. Through the program you can set a maximum and minimum inventory of materials in warehouses as well as the expiration date, through this feature allows for careful inventory monitoring while sending prophetical messages about it.
3. Linking inventory to warehouses with the accounts section through invoices in the program, including entry invoices and exit invoices to and from warehouses, where they are proven and adjusted when conducting any transaction related to the balance of materials in warehouses:

When receiving the order to process an order for the purchase of one of the pharmaceutical products, a manual analysis of this order and its preparation order and processing time is issued, thus issuing

an order to complete and deliver the final order to the customer, and this process is usually at the store manager, i.e. he who calculates and deals with the costs stored in the warehouse, while those who do so are the cost division, but the obstacle here is that they do not have a rule of evidence concerning the costs and needs of one unit of products in order to The student's costs and the time they are completed are calculated.

In the case of the application of ERPand the additional costs agreed upon, the order is issued directly (within the system to thewarehouses processing the goods unlike the traditional system, it is subject to the daily work routine and may be delayed to days for processing.

Therefore, processing the order in record time by providing and processing information manufacturing, financial departments and stores at the same time as data entry has an impact on deciding whether to accept or reject the order, so ERP is in order to obtain real-time information and show how it affects strategic performance in important and timely decisions.

4. The possibility of distributing materials to warehouses (entering materials into the warehouse that is determined by the user), and as a result the user can distribute a particular material to more than one warehouse, with the possibility of identifying the warehouse from which the material will be taken out in the invoices.

5. Various total and detailed inventory reports, such as material inventory reports, material movement and profits, stagnant and validity material reports, types of storage reports provided by the system that relate to all details of the materials and can be provided at the moment of request, including all operations carried out on them.

When requesting inventory inventory in detail or with multiple raw materials that may amount to hundreds of types of materials, the process takes a long time, and according to the research, the problem of inventorying raw materials or inventory of warehouses is a problem and a dilemma suffered by economic units in general and is due to the lack of control over the entry and exit of materials or the science of seizing the item cards of those materials.

Therefore, one of the advantages of ERP is to control the inventory of materials through purchases, procurement returns, sales and returns, and all these and other processes occur within the program with the possibility of being monitored by a specialized staff member, in addition, the program provides integrated information on raw materials i.e. provides an integrated class card for each material, in addition to providing a complete movement of the material.

The information provided by ERP can be used if the materials are requested and gives the possibility to communicate with suppliers to process the raw materials needed by the supplier in its service operations.

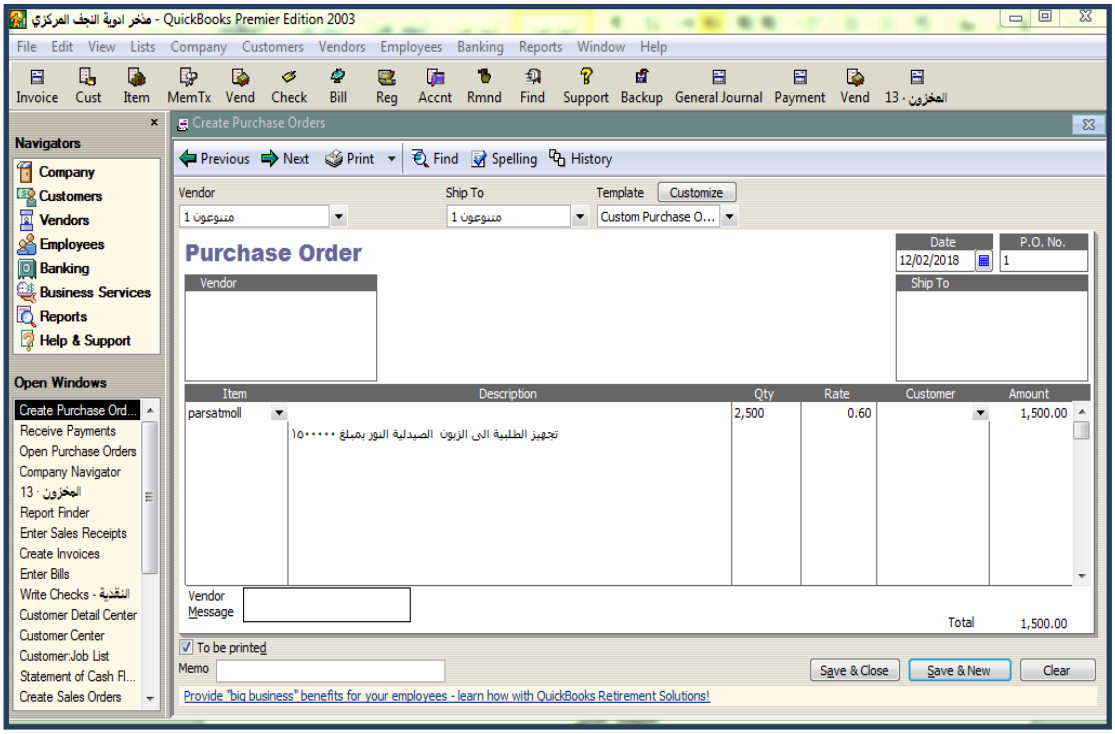
The impact of ERP is therefore clear in its ability to provide management with the necessary, necessary and accurate information and to quickly process it for the purpose of implementing a decision in a timely manner.

Second:Daily procedures

(From selling, buying, returning sale, returning purchase, first-term goods, .. Etc.), as well as buying and selling currencies, settling remittances, and when creating any invoice, the program automatically supplies the attached registration document without user intervention.

- ❖ Purchase orders

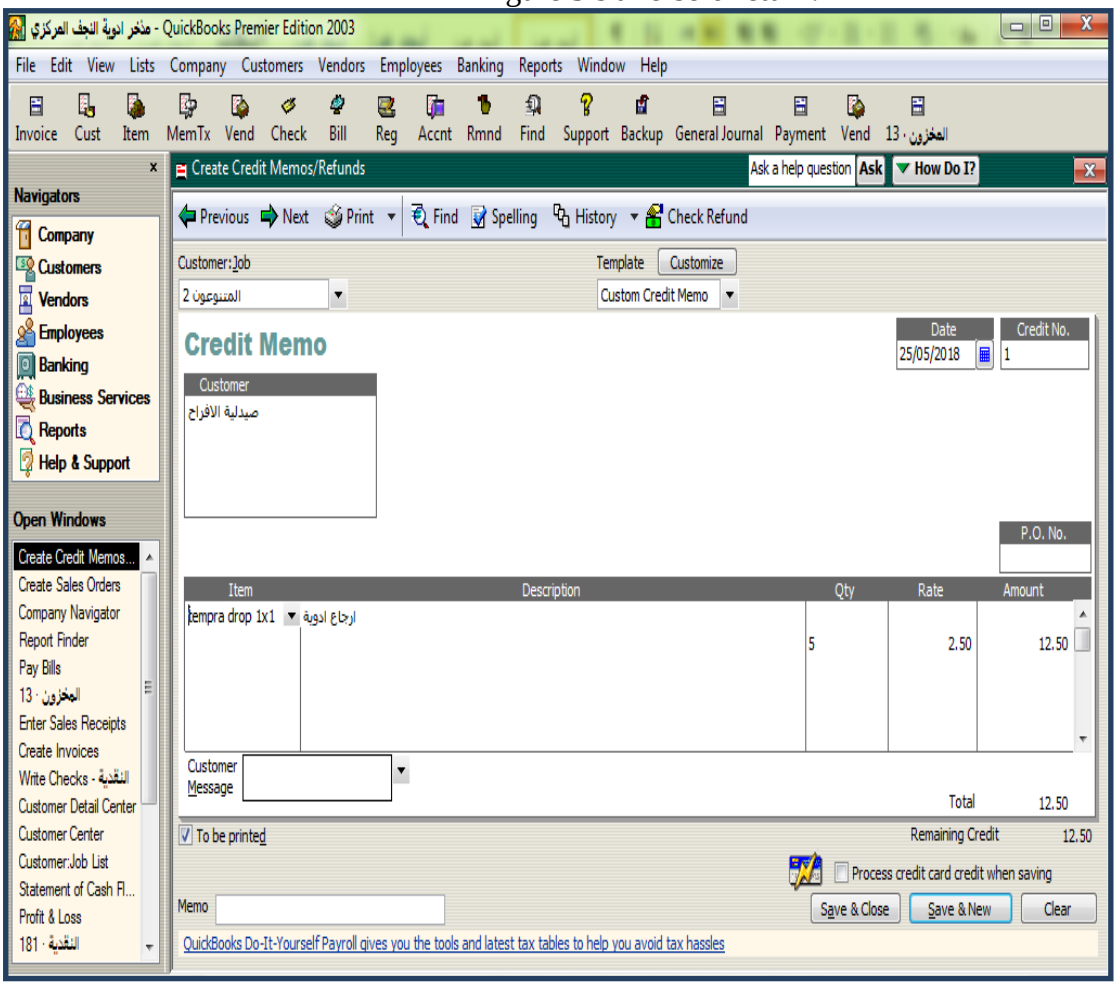
The seller's name, date, quantity and price include a description of the goods and the link and feature here are printed that the invoice can be sent via email. It is the same model in the program but the difference in accounts, the invoice contains the amount of raw materials to be purchased or sold as well as their prices and the student cost center for raw materials and financial accounts that enter the process as suppliers in the event of purchase or customers in the event of sale as well as other information that may be necessary in the financial process such as discounts and others, and form (4)shows the form ofa purchase invoice or sale of raw materials.



Return order sold

The invoice for the return of the sale or return of the purchase contains information about the process of returning raw materials from the buyer or returning them to the seller, and form (5) shows the return of drugs that have already been purchased.

Figure 5is a re-sold return.



Here we do in the name of the customer who returns the goods or the returned material in addition to the quantity of material that is intended to be returned as well as the prices on which they are returned and can also change the prices of the inventory that has been entered in advance.

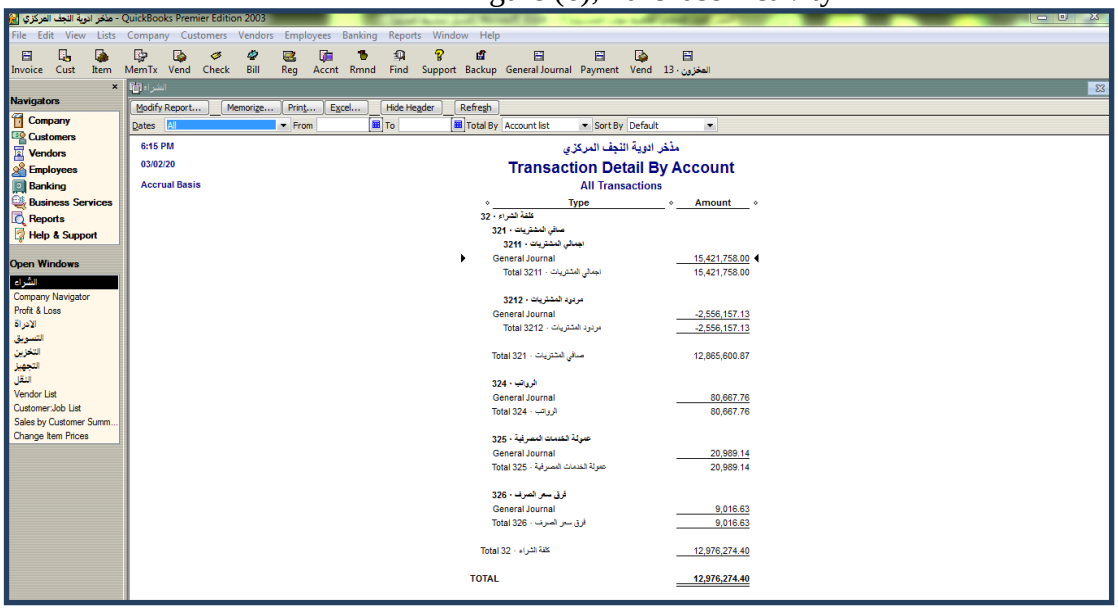
Third: The costs of activities for the **ammunition**

Each activity shows the costs allocated to each activity based on the plans prepared to identify the resources of the activities of the resource to be the basis for measuring costs and performance and we will offer costs for each activity

Activity 1: Purchase cost

The tasks of the purchase activity are to search the economic units for medicines and negotiate with the units on prices and when the agreement is completed the purchase process, the program explains the costs for the purchase activity where itpresents all the purchases, salaries, commission and others

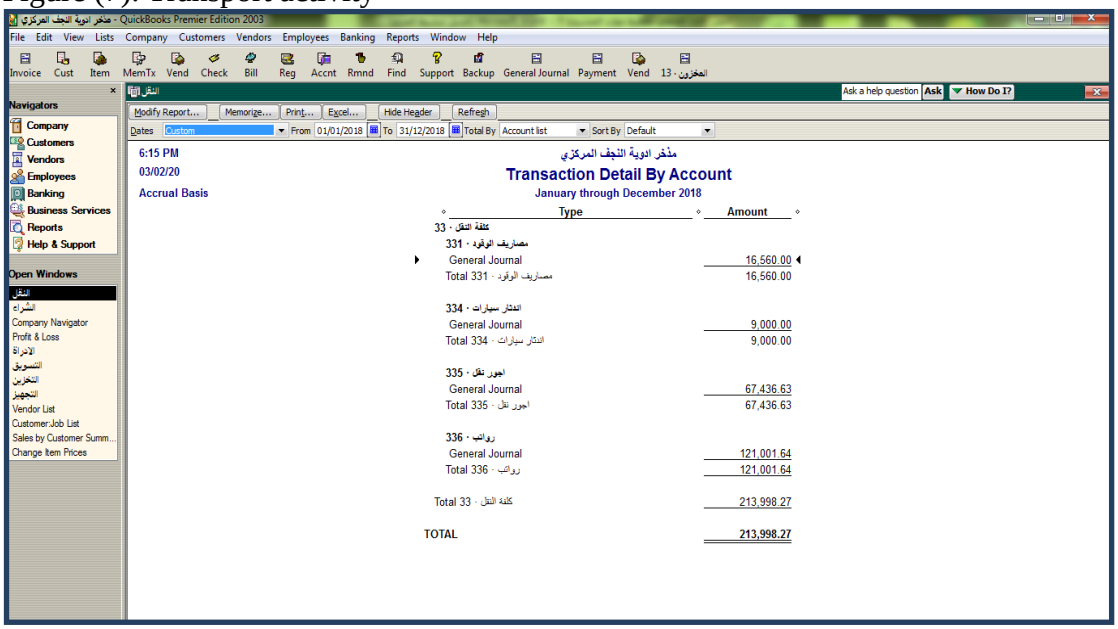
Figure (6), Purchase Activity



Activity 2: Transport cost

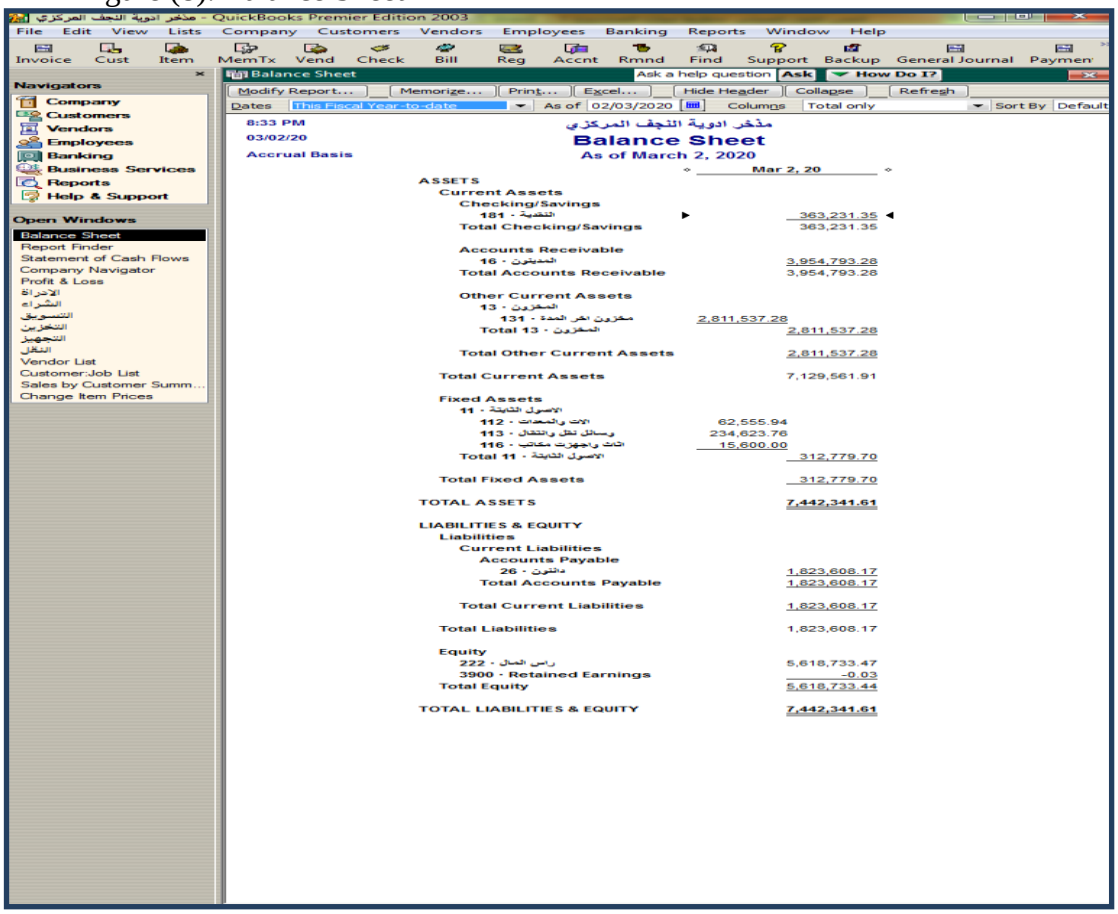
Includes all operations related to the cost of transportation, which is from the processing of cars prepared for transportation and then the transportation to the car and then the transfer takes place and the cost of transport includes the salaries of the workers and fuel expenses and also includes the transportation aguilar, including the disappearance of cars, which were allocated to him according to certain criteria

Figure (7). Transport activity



Balance Sheet: It is a presentation and statement of the company's financial position and contains asset balances, liabilities and property rights, and form(8)explains the presentation of this model andthrough this system can achieve and apply strategic performance by providing accounting information and closing accounts in real time without delaying its preparation to a long time, in light of which appropriate and appropriate decisions can be made according tothe information provided by thissystem.

Figure (8). Balance Sheet



It is a presentation and statement of the company's financial position and contains asset balances, liabilities and property rights, and form (3-19) explaining the presentation ofthis form. Through this system, strategic performance can be achieved and applied by providing accounting information and final accounts in real time without delaying their preparation to a long time, and in light of this decisions can be made appropriate and appropriate according to the information provided by this system.

Conclusions

In the light of what has been researched in the theoretical and practical aspects, a set of conclusions has been formed. As an integral part of cost management based on time-oriented operations, 1ERP provides ready-to-use information while also improving the usage of electronic software. ERP aids in the more precise estimation of expenses by reducing operational costs and eradicating expenditures associated with unused resources. By charging it to period expenditures, ERP's untapped energy may be excluded or reduced, resulting in more objective cost data for cost allocation than with previous techniques. The goal of project resource planning is to monitor and regulate the expenses associated with the resource by displaying time data for all of the resource's operations based on theoretical and practical energies. Costs based on time-oriented activities depend on project resource planning outputs that contribute to discovering untapped energy and reallocate the resources available to the resource to achieve more cost-efficient management. Since time-oriented activities derived

from project ERP outputs are easier to apply the cost technique to than discrete activities, this is a significant benefit when compared to the difficulties of doing time equations for all activities. My agency's suggestions should be based on the findings and help economic units improve their long-term performance by enhancing their approach. In a competitive market, businesses must use accounting information systems as a first step in their cost control efforts. The management of economic units should pay attention to the provision of training and development courses and field visits to international units to develop administrative and technical cadres to contribute to improving the skills and ability of their employees, which reflects on achieving the objectives of economic units to survive and continue in the business environment. As a means of addressing the issue of inaccurate data utilized in cost assessment methodologies, ERP outcomes in Iraqi economic units must be widely distributed and disseminated.

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