

Electronic Accounting and Its Impact On Rationalizing Administrative Decisions (A survey study in Samarra Pharmaceutical Company)

Noor Amer Fadhil Al-Doori

Northern Technical University/ Iraq

College of Health and Medical Technologies –Al-Dour

Accounting technologies department

Abstract: The study aims to identify the impact of electronic accounting on administrative decisions through the data provided to it to help it in making the company's detailed decisions. In light of the current competitive market, information has a major role in the company's continuity and distinction. The study relied on a sample of the Samarra Iraqi pharmaceutical company that uses electronic accounting programs. The questionnaire was distributed to employees and included (90) employees. The study also included two basic hypotheses that show the relationship of impact and association between electronic accounting and rationalization of administrative decisions. In order to reach the results, many appropriate statistical methods were used. Electronic accounting has a role and using the ready-made statistical program (SPSS) and the results of the questionnaire indicated a large role in rationalizing administrative decisions by providing reliable and credible financial data and appropriate timing, especially in light of the current competitive market. Accounting programs also have a large role in reducing the time gap between requesting data and providing it, as well as the accuracy of this data from a practical point of view, as the error rate in it is weak compared to manual accounting. One of the most important recommendations reached by the research is the need for companies to switch from the traditional accounting system to the electronic system because of its benefits For Economic Units.

Key words: Electronic Accounting, Rationalization Of Administrative Decisions



This is an open-access article under the [CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/) license

INTRODUCTION

In light of the rapid and tremendous developments in the business market, it has led to an increase in the intensity of competition between companies. One of the most important factors that help the company to continue in the competitive market is accounting information and the speed of its transmission, which affects the making of rational administrative decisions. The faster and more accurately the data is provided, the more positive the results of the decision will be and this will be reflected in the company's performance. Also, the growth and expansion of companies has led to the generation of a huge number of accounting data. Therefore, it is necessary to have electronic accounting that can classify and organize this huge number of data and present it at the appropriate time and place. The current research seeks to study the role of electronic accounting information in rationalizing administrative decisions.

The Study Problem:

The basis on which administrative decisions are based is the financial data provided by accountants, as the more reliable, dependable and timely this data is, the more it is reflected in these decisions, which in turn affects the growth and development of the company. Since the basis of these decisions is accounting, the more advanced accounting systems are in providing data, the more they lead to sound administrative decisions. This has prompted companies to move from traditional accounting systems to electronic systems in order to rationalize decisions. Hence, the research problem emerges, represented by the following question:

Is there an effective role for electronic accounting information in rationalizing administrative decisions?

Objectives of The Study:

- 1- Identify the concept of electronic accounting information.
- 2- Explain the role played by electronic accounting information in rationalizing administrative decisions.

The Importance Of The Study:

The importance of the study comes from the role played by electronic accounting in the current competitive market, as most companies with competitive ability use electronic accounting systems that help them provide financial data in light of the changing business market with objectivity, accuracy and high speed. It is worth noting that sound administrative decisions require financial data to be based on, and the importance of the research is highlighted in its treatment of the

basic qualitative characteristics of accounting data represented by reliability, financially and appropriate timing, which are of very high relative importance for data items of an accounting nature.

Study Hypotheses:

In light of the study problem, the following hypotheses were formulated:

- 1- There is no statistically significant relationship between the role of electronic accounting and rationalization of administrative decisions.
- 2- There is no statistically significant effect of the role of electronic accounting in rationalizing administrative decisions.

MATERIALS AND METHODS

Firstly :The Concept And Importance Of Electronic Accounting:

In our time and with the development of electronic commerce activities, the term electronic accounting appeared as one of the concepts of information technology, as this branch spread rapidly due to the professional role it plays in accounting. It was defined by (Tawfiq,2004:42) as the implementation of traditional accounting tasks, accounting research, and educational fields of accounting via computers and various components of the international information network (the Internet).(Al-Halabi, 2001:11) defined it as part of information technology in light of rapid technological progress and communication networks that can, through automated work, employ accounting data and transfer it completely to the computer to carry out accounting tasks accurately and quickly and with limited efforts as long as the system is programmed and its operating efficiency is verified, especially in the Internet environment. The computer plays a very important role in developing accounting and its applications at the level of all businesses. Accounting operations can be entered for each department separately, and the entered information can be processed, whether deleting or adding any previously entered information. Also, the electronic computer can display types of accounting reports on all operations that occur in an orderly manner and with very little effort. (Mustafa, 2008:4) also believes that electronic accounting is a group of electronic devices and programs that can be used and are called computers. It stores data and converts it into information, and this information is stored until it is needed and used in decision-making.

Secondly :Electronic Accounting Goals:

In order for this system to be effective, it must be linked to a set of goals, which are as follows (Fouda et al., 2019: 373)

- 1- Provide the necessary reports to achieve the company's goals, whether these reports are financial, statistical data, or daily or weekly operational reports.
- 2- Provide reports that contain a high degree of accuracy in numbers to obtain the best results.

3- Provide reports and submit them in a timely manner, in order to meet the management's needs to make the appropriate decision at the right time.

4- The system provides internal control conditions in order to protect all the company's assets and increase the efficiency of its activities by providing controls from the system.

Thirdly: Characteristics Of Electronic Accounting:

The characteristics of the electronic accounting system are highlighted through the following: - (Tamader, 2021: 17)

1- Flexibility in the system to provide the ability to meet the needs of management levels with new reports.

2- The system provides all the data the company needs easily and conveniently

3- Reliability: The information resulting from the system is correct, accurate and can be relied upon.

4- The system is characterized by comprehensiveness, as the information provided by the system is sufficient and covers aspects of work, and the system works to keep pace with technological developments and meet administrative needs

Fourth :The Concept Of Administrative Decisions:

The administrative decision is the conscious and conscious comparison between a set of solutions and alternatives available to the decision maker to choose one of them as the most appropriate means to achieve the goals desired by the decision maker (Al-Asttal,34:2016). After the administrative decision is the choice between different activity directions, the decision model is nothing but a formal method for choice, usually including descriptive, quantitative or qualitative analyses, and accountants work with management to display and analyze appropriate data to rationalize decisions (Homgren & Others,391:2012). Good decisions require data that can be converted into information and benefited from. This information must be characterized by a set of characteristics, which are: (Al-Nafar,2007: 26)

1- Accuracy: Providing information according to the user's requirement and the subject of research.

2- Comprehensiveness: The information must be characterized by the completeness that benefits the decision maker.

3- Clarity: The degree to which the information is largely understandable to its users and free of ambiguity.

4- Timing: Providing information at the right time for use in decision making.

5- Flexibility: The extent to which information can be adapted so that it can be used more than once.

6- Objectivity: Meaning that it is free from change or distortion for the purpose of influencing the user of the information.

Fifth: The Role Of Electronic Accounting In Administrative Decision-Making:

The decision-making process is considered the basic and most important function of management. The decision represents the choice of an alternative from the available alternatives to solve the problem. The more the decision alternatives are, the greater the need for accounting information and the necessity of presenting it in a logical framework and a systematic model that helps achieve the efficiency and effectiveness of decisions. The decision-making process is a human and mental process that can be rationalized to the extent that decision-makers have accurate, sound and sufficient information to rely on in the framework of comparing different alternatives. The decision-making process includes two parts, the first of which relates to the planning process and confronting the state of uncertainty surrounding the facility, which includes determining objectives and general policies, while the second part relates to monitoring and performance evaluation to follow up on the implementation of plans and verify the soundness of their practical application. (Ahmed, 2006:36) The success of the administrative decision depends on the validity and accuracy of this material and the method of organizing, securing, storing and transferring it to the centers that need it. The decision-making process is an ongoing process and does not end once a certain decision is made. The decision taken may result in certain situations that require new decisions. It is clear that there is a relationship represented in the fact that accounting provides the necessary information for planning, setting policies and contributing to the decision-making and control process. Thus, the management based on the development process becomes more efficient when accountants provide it with appropriate, accurate and complete information on the basis of which decisions are made. With the advent of the information age, major changes have occurred in the work environment of accounting specialists. The tools used by workers in the field in the past were records, notebooks, handheld computers and so on. Now, electronic computers, means of communication and software have replaced them. Therefore, it has become imperative for the accountant to have appropriate knowledge of accounting information technology and at a minimum to be a user of this technology to push for the development of the accounting information system to keep pace with the changes in the current business environment due to their repercussions on the performance and development of the company and to be more interactive with the external factors affecting the current business market in addition to the major role it plays in providing more accurate and appropriate financial data that reflects a true picture of the company's financial and economic status compared to other

companies so that management can make critical decisions correctly, effectively and decisively, i.e. there is a role in rationalizing these decisions through the electronic accounting data provided. (Hassoun, 2015: 122)

RESULTS AND DISCUSSION

Firstly :Testing The Normal Distribution Of Data:

By verifying that the study data is devoid of statistical issues that could impair the outcomes of testing the study hypotheses, the Kolmogorov-Smirnov test was utilized to guarantee the objectivity of the findings. For this test, the data must have a normal distribution. As demonstrated in Table (1), on the contrary, a fictitious relationship develops between the study's independent and dependent variables, and the correlation no longer has the capacity to describe or forecast the phenomenon being studied.

Table (1) Results of the normal distribution test for data

Variables	Normal Parameters		Test Statistic (Kolmogorov-Smirnov)	Sig.
	Std. Deviation	Mean		
Electronic accounting	0.585	4.043	1.110	0.170
Rationalization of administrative decisions	0.678	4.025	1.115	0.166

Source: Prepared by the researcher based on the outputs of program (SPSS V.28).

Table (1) shows that the data are normally distributed, with the normal distribution ratios for all answers being greater than the significance level $^{**}(0.05)$, which is required in the statistical processing of the current study.

Secondly :Cronbach Alpha Test For Internal Consistency:

In order to prove whether the questionnaire measures the factors or not, the researcher conducted an internal consistency test for the indicators, by calculating (Cronbach Alpha), as obtaining a value of $(0.60 \leq \text{Alpha})$ is generally acceptable in studies related to administrative sciences. Table (2) shows the results of the reliability of the current study tool adopted:

Table No. (2): Cronbach's alpha test results for the internal consistency scale

Variables	عدد الفقرات	معامل
Electronic accounting	10	0.798
Rationalization of administrative decisions	10	0.866

total	20	0.945
-------	----	-------

Source: Prepared by the researcher based on the outputs of program (SPSS V.28).

The results of Table (2) show that all the stability values (alpha) for the sub-variables whose values appeared greater than (0.60≤Alpha) are greater than the assumed value to indicate the stability of the measurement tool, as all the paragraphs of the questionnaire achieved a very high stability value of (0.945), and this result indicates the availability of high internal consistency for the questionnaire.

Thirdly :Testing The Research Hypotheses And Analyzing The Results.

- Analyzing the correlation between the role of electronic accounting and rationalizing administrative decisions.

Where the content of this relationship represents the choice of the first main hypothesis of the research, which states:

(There is no statistically significant relationship between the role of electronic accounting and rationalizing administrative decisions)

Table No. (3) Correlation coefficient between the role of electronic accounting and rationalization of administrative decisions

Variable Independent Dependent Variable	Electronic accounting	
	correlation coefficient	Sig.
Rationalization of administrative decisions	0.873*	0.000

**Statistically significant at significance level 0.01

Source: Prepared by the researcher based on the outputs of program (SPSS V.28).

With a total index that reached (0.873*) and at a significance level of (0.000), Table (3) shows a strong and positive correlation between the independent variable (the role of electronic accounting) and the dependent variable (the rationalization of administrative decisions). This suggests that the more interest there is in the role of electronic accounting, the more rationalization of administrative decisions occurs. Based on the results interpreted in Table (3) for the analysis, this shows that the alternative hypothesis (proof) that there is **(a statistically significant correlation between the role of electronic accounting and the rationalization of administrative decisions has been accepted)**, while the study hypothesis that there

is (no statistically significant relationship between the role of electronic accounting and the rationalization of administrative decisions at a statistical significance) level of $0.05 \geq$ in the company under study has been rejected.

The impact of the role of electronic accounting and rationalization of administrative decisions.

An examination of how computerized accounting contributes to the rationalization of administrative choices. (The use of electronic accounting to rationalize administrative choices has no statistically meaningful effect).

Table No. (4) Regression coefficient between the role of electronic accounting and rationalization of administrative decisions

Independent Variable	Electronic accounting				
	R ²	B	F	T	Sig.
Dependent Variable					
Rationalization of administrative decisions	0.876	1.24	1703.25	45.643	0.000

Source: Prepared by the researcher based on the outputs of program (SPSS V.28).

The results of a straightforward linear regression analysis are displayed in Table (4) above. At 98.1 degrees of freedom and a significance level of 0.05, the estimated F value reached 1703.25, which is higher than its tabular value of (3.28). Additionally, it is evident that the coefficient of determination R^2 value reached 0.876, meaning that changes in the role of electronic accounting (the independent variable) only account for 87.6% of the changes in the sample members' average responses to the dependent variable of rationalizing administrative decisions. These indicators show the extent of the variance of the effect, which confirms the rejection of the hypothesis that states (**there is no statistically significant effect of the role of electronic accounting in rationalizing administrative decisions at a statistical significance level of $0.05 \geq$ in the organization under study**) and the acceptance of the alternative hypothesis (proof), (**on the variance of the effect of electronic accounting in rationalizing administrative decisions**).

CONCLUSION

- 1- The huge amount of accounting data requires a system that can deal with the large flow of information and that electronic accounting systems were highly effective in solving this crisis.
- 2- There is a high level of persuasion and reliance on electronic accounting among employees and management.

- 3- Electronic accounting has the ability to retrieve quantitative and descriptive data when needed.
- 4- The integration of information technology within the framework of accounting information systems leads to increasing the efficiency and effectiveness of outputs.
- 5- The efficiency and quality of the financial data provided helps management facilitate the task of decision-making for management.
- 6- The speed of decision-making, especially in light of the current competitive market, bears fruit in the growth and success of the company.
- 7- Electronic accounting plays a major role in rationalizing administrative decisions by providing reliable and credible financial data that is presented at the appropriate time, especially in light of the current competitive market.

Recommendations:

- 1- Senior management should support the electronic accounting system due to its great importance in addressing the inflation in accounting data through an integrated database that works on the automatic preservation of accounting data.
- 2- The necessity for companies to switch from the traditional accounting system to the electronic system due to its benefits for economic units and raising the effectiveness and efficiency of outputs represented by reliable and highly credible financial and accounting reports.
- 3- Training courses and seminars should be prepared to explain to accountants how these programs work and how to process financial and accounting data in order to provide high-quality data to help management in making decisions, which is reflected in the company's performance.
- 4- Programming companies should adapt to the nature of the work of accountants and companies in order to be able to provide accounting programs of high benefit to them.
- 5- Programmers must have accounting awareness in order to communicate with companies and accountants and address programming problems on an ongoing basis.

References

1. Ahmed Bassam Mahmoud Ahmed, "The Role of Accounting Information Systems in Rationalizing Administrative Decisions in Palestinian Business Establishments - An Applied Study on Private Shareholding Companies Specified in the Gaza Strip," 2006.
2. Al Halabi, Riyad and others, Computer Applications in Accounting, Dar Al Fa for Publishing and Distribution, Jordan 2001.
3. Al-Asttal, Rand Imran Mustafa (2016), "Operations Research and Quantitative Methods in Decision Making" Master of Business Administration, University of Palestine, Faculty of Business and Finance.
4. Al-Naqqar, Hussam Naim Hassan (2007), The Ability of Administrative Decision Makers to Benefit from Financial Data, A Field Study on Non-

- Governmental Organizations in the Gaza Strip, Islamic University of Gaza, Faculty of Commerce.
5. Danuk, A. A., Zinal, W. S. J., & Gharbi, M. H., (2023), The knowledge partnerships strategy as an approach to activate the knowledge marketing tools: An analytical study of sample of Administrative Leaders University of Mosul. *Tikrit Journal of Administration and Economics Sciences*, 19(Special Issue part 2).
 6. Fouda, Shawky El-Sayed and others (2019), "The impact of the efficiency and effectiveness of electronic accounting information systems on improving performance evaluation in commercial banks with a field study, *Contemporary Commerce Journal*, Kafr El-Sheikh University, Faculty of Commerce, Issue (6), Egypt.
 7. Hassoun, Laith Naaman "The Role of Information Technology in Rationalizing Administrative Decisions". *Kirkuk University Journal of Economic Sciences*. 2017.
 8. Horngren, C. T., Datar, S. M., & Rajan, M. V. (2012), "Cost accounting A managerial.
 9. Mustafa Abdel Aziz Al-Sayed, *Using Computers in Financial Auditing and Review*, Cairo, 2000.
 10. Tamadur Ahmed Babiker Mohamed (2021). The role of internal auditing in evaluating electronic accounting systems "A field study on banks operating in Wad Madani city - PhD thesis, a thesis published in the *Journal of the Holy Quran University Repository and Digital Sciences Foundation*, Issue (1256), Sudan.
 11. Tawfiq, Muhammad Sharif, *Electronic Accounting - Using Computers and the Internet in Implementing Accounting Tasks*, Dar Al Nahda, Cairo, 2004.
 12. W. S. J. Zinal, "Financial leverage and its impact on the profitability rate of companies: An applied study of a number of companies listed on the Amman stock exchange for the period (2019-2022)," *Int. J. Financ. Manag. Econ.*, 2024.
 13. W. S. J. Zinal, "Predicting the financial failure of commercial banks using the Kida model and Sherrod model," *World Econ. Finance Bull.*, 2023, [Online]. Available: <https://www.scholarexpress.net/index.php/wefb/article/view/2476>