

THE IMPACT OF BUSINESS ETHICS ON ENHANCING SERVICE QUALITY BY APPLYING E-BUSINESS TECHNOLOGIES IN HEALTH INSTITUTIONS

¹Assist. Prof. Dr. Hakim Ihsouni Al-Mayali, ²Yahya Habib Shaneen Al-Ardawi

ABSTRACT--- *The study aims to show the effect of business ethics as an independent variable by its dimensions (individual ethics, leadership ethics, activities ethics, organizational structures ethics) on the quality of service as an approved variable through its dimensions (reliability, time, response, assertion) through the application of electronic business technologies as an intermediate variable with its dimensions (Electronic infrastructure, application of hospital electronic business systems, health information systems), Given the importance of the topic in the health sector and its impact on the lives of most people, therefore the research was conducted in (3) government hospitals in the Najaf Al-Ashraf, as the opinions of a sample of (200) individuals working in health institutions were explored, and this was done through the questionnaire as a main tool in Obtaining data and information, as well as personal interviews, as well as Arab and foreign sources and references.*

Key words--- *business ethics, e-business technologies, quality of service.*

I. INTRODUCTION

Due to the increasing ethical scandals in hospitals, the issue of work ethics has become an issue that has received increasing attention for recent years (Oyvind, 2019: 13). Therefore, these hospitals take targeted measures in a proactive manner in order to achieve a desired level in the performance of health personnel who have knowledge of the criteria that satisfy customers 2019: 2 (etalJatinder). Work ethics help individuals working to provide quality services that satisfy customers (Nia et al., 2015: 921). Moreover, work ethics are concepts that support the application of modern technologies in hospitals (Eileen et al., 2000: 6). . Thus, highlighting the concept of ethics in terms of quality of service is mainly related to the result that the institutions are interested in. Accordingly, determining the proportion of people with serious diseases (cancer) has an ethical dimension more important than controlling chronic diseases such as monitoring blood pressure, which is also related to the customer's life, but it can be subject to monitoring (Donaldson, 2000: 5). Especially when there is benefit from business technologies such as the capabilities of Internet technology and focus on it or developing effective methods and practices that increase quality in investing lower levels of effort and cost (Berkley, 1994: 111).

¹ University of Kufa, Faculty of administration and economics, Department of the Business Management, Najaf-Iraq, Hakem.almaialy@uokufa.edu.iq,

² University of Kufa, Faculty of administration and economics, Department of the Business Management, Najaf-Iraqyahyaha129@gmail.com

II. THE FIRST TOPIC: RESEARCH METHODOLOGY

II.I. First: research methodology

II.I.I. Cognitive problem:

Business ethics are considered to be one of the basics of growth in companies of different nature and business due to the violations and widening of the circle of crime and administrative corruption related to embezzlement, bribery, and the exploitation of powers and influence that companies witness in the world, and the need of societies to find more sophisticated standards and work ethics that They influence the decisions of actors or the organization in general (Blickle, 2001: 4793).(Antoni, 2017) study stated that the main determinant of the quality of labor relations within the organizational context is framed by caring for coworkers. In the field of studying e-business technologies, Clay (2000) study emphasized that employees must enjoy technological competencies as they affect change and development in work and organizations.

II.I.II. The applied problem:

As a result of the challenges faced by organizations in our contemporary world, and changes in the customer's need, the issue of business ethics is receiving increasing attention for recent years, in a number of reasons, at the forefront of which is the increasing ethical scandals that result from the organizations' practices and behaviors (Nasser, Al-Khader, 2013: 55). The challenge that organizations face today is the result of an exchange that meets the needs and expectations of customers between the organization and the customer, and can be seen as demand by customers towards the quality of services that meet customer acceptance, (Low et al., 2016: 13).

II.I.III. Research Objective:

The aim of the current study is focused (the impact of work ethics on enhancing the quality of service through the application of e-business technologies in health institutions) and the following tasks arise:

- Knowing the basic dimensions of work ethics and the role that quality of service plays in health institutions.
- Knowing the reality of work ethic levels in health institutions.
- Knowing the impact of work ethics on the quality of service in health institutions.
- Knowing the impact of business ethics on the quality of service in the presence of e-business technologies.
- Knowing the importance of e-business technologies in health institutions.
- Highlighting the impact of e-business technologies on the quality of service.

II.I.IV. Research importance:

II.I.IV.I Cognitive importance: it includes

- The study of the importance of work ethics is an important concept that reflects the behavior of individuals working in the performance of their work.
- There are positive effects of the importance of studying e-business technologies, as the application of e-business technologies plays an important role in reducing costs and completing business accurately and quickly in

light of technological and scientific progress and competition among organizations for the purpose of obtaining the largest market share.

- This study deals with one of the important issues which is the quality of service, as it is a measure of the scope of service with the customer, and in order to reach the highly competitive advantage and increase the profitability of organizations, the organizations should try to provide high-quality services that obtain customer satisfaction.

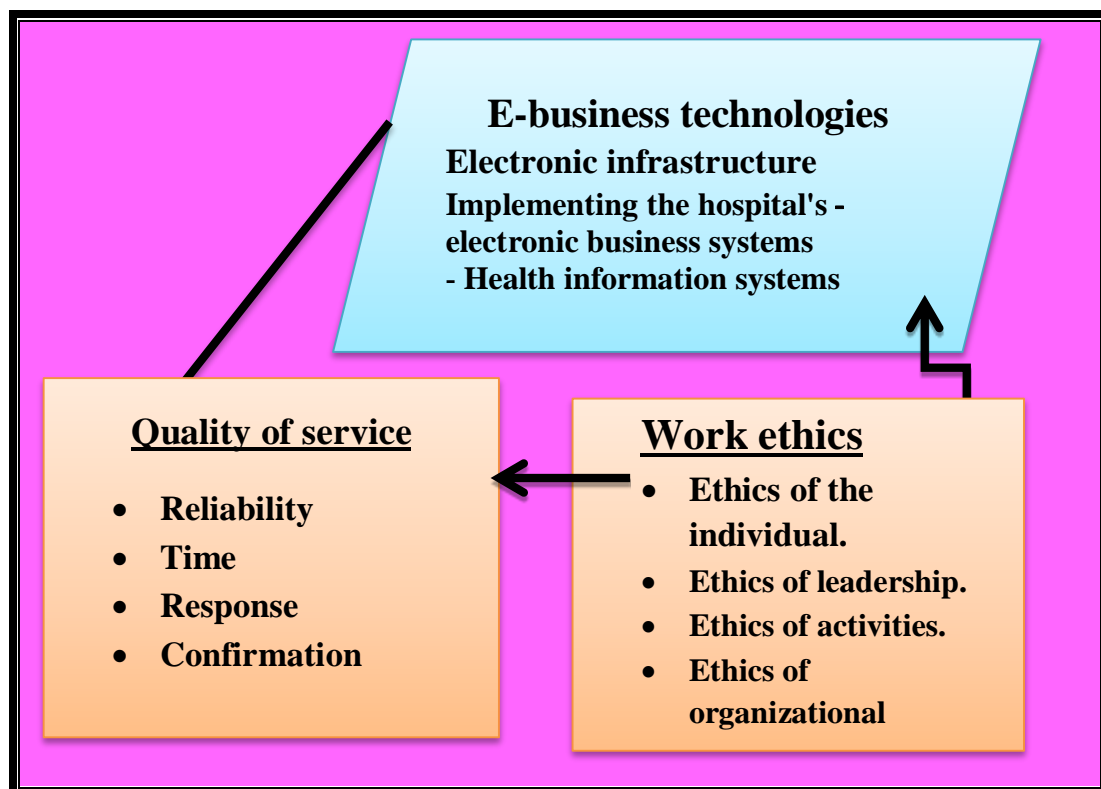
Applied Importance: It includes

- Interest in studying work ethics in Arab countries is considered complementary to global interest, as we see that there is a growing interest in Arab countries in studying work ethics, related to the impact of work ethics in economic development processes as well as at the level of employee performance.

- That institutions in the Arab countries pay attention to studying e-business technologies because the institutions in these countries work on applying e-business technologies, due to their importance in the national economy.

- The interest in studying the quality of service comes from the institutions due to their importance in the economy. Moreover, the institutions in the Arab countries work in this direction. Therefore, the Arab countries pay attention to this study.

II.I.V. Default search form:



Source: prepared by the researcher

Figure 1: Hypothesis study scheme

II.II. Second: Study hypotheses:

Consistent with the study's questions and a rather than a model test, the study adopted the following main assumptions:

II.II.I. The first main hypothesis:

There is a significant effect of business ethics on e-business technologies at the macro level in the health institutions of the study sample.

II.II.II. The second main hypothesis

There is a significant effect of work ethics on the quality of service at the macro level in the health institutions of the study sample.

II.II.III. The third main hypothesis

There is a significant effect of e-business techniques on the quality of service at the macro level in the health institutions of the study sample.

II.II.IV. The fourth main hypothesis:

There is a significant effect of work ethics on the quality of service through the intermediate role of e-business technologies at the macro level in the health institutions of the study sample.

III. THE SECOND TOPIC: THEORETICAL SIDE:

III.I. First: The concept and dimensions of work ethics:

There are several definitions of ethics where ethics (2019: 3David) is defined as the use of rules that direct individuals to distinguish between right and wrong forms. (Al-Hamdi, 2006: 58) believes that ethics is to define the standards of an individual's behavior, what is good and bad, and what is right or wrong for that behavior.

The dimensions of work ethics are:

III.I.I. Individual ethics: The individual's ethical behavior is the product of one's moral values (Elango *et al.*, 2010: 544).

III.I.II. Leadership ethics: Ethical leaders ensure that their behaviors are common to their organizations, and it is an important way to influence the behavior of individuals who work positively (Mihelic *et al.*, 2010: 36).

III.I.III. Activities ethics: Managers use a set of tools to shape values and encourage the ethical behavior of the organization as well as programs for training ethical behavior (Daft, 2003,155).

III.I.IV. Ethics of Organizational Structures: (Daft, 2001: 32) sees that the formation of a set of symbols, choice, policies, ethical structures, ethical codes, rewards, and training are important forces of organizational ethics that guide the behavior of individuals

III.II. Second: The concept and dimensions of electronic business technologies:

Electronic business technologies help information systems and technologies from change jobs for daily work in the hospital, and this is done through the Internet and the website. This facilitates the process of information exchange and is more interactive with patients and provide services to them (Al-Awasa, 2018: 341).

As for the dimensions of electronic business technologies, they are:

III.II.I. Electronic infrastructures: These are the software, supplies, databases and networks that serve the hospital's business (Al-Thunaibat, 2014: 546).

III.II.II. Application of hospital electronic business systems: Use of all electronic applications in the hospital that work to coordinate the various activities in the hospital and the decisions and knowledge that exist during the different organizational processes (Mikalef *et al.*, 2011: 164).

III.II.III. Health information systems: It is the integration that takes place between individuals, elements, information, overlapping equipment and procedures, which operate in a coordinated form within the framework of a group of operations pertaining to the hospital where the results are presented in various forms of decision support and also in improving health performance (Mikalef *et al.*, 2011: 164).

III.III. Third: The concept and dimensions of quality of service:

Quality of service can be interpreted as the customer's overall impression and judgment about the service provided, and the quality of service is affected by the expected service and the perceived service, and if services are received according to what is expected, this will be reflected on the happiness of customers (Hussain *et al.*, 2015: 168).

The dimensions of the quality of service are:

III.III.I. Reliability: (Stevenson, 2005: 387) explained that reliability means fulfilling the achievement of services with credibility, as it is considered one of the most important indicators in evaluating the quality of services, and also indicates the performance of services with conformity, reliability and accuracy towards high performance.

III.III.II. Time: (DaRen, 2018: 726) defines time as the customer receives the service on time and meets his requirements within a high-quality service. In this regard, (Li, 2010: 23) believes that organizations work to provide services in a timely and efficient manner. He also mentioned (Golovinsky, 2006: 2) that the provision of services is timely and it is acceptable to customers, therefore service providers must adhere to the time specified when providing services, which is very important for customers.

III.III.III. Response: Response means the ability of the organization to provide services easily, and this is evidenced by the speed of achievement and the deal way in which matters relating to customers are concerned (Kheng *et al.*, 2010: 59).

III.III.IV. Confirmation: (Nataly, 2017: 560) explained that this dimension is one of the important pillars in the quality of service

IV. THE THIRD TOPIC: IMPACT ANALYSIS OF STUDY HYPOTHESES

IV.1. First: The first main hypothesis:

The researcher assumes that there is a relationship effect morale is obliged for work ethics in the application of electronic business technologies, and thus it is assumed that electronic business techniques are a true function of the independent variable of work ethics, and the simple regression between the two variables will be tested using the statistical program (Amos v.20) The results are as shown in Figure (28) and Table (31):

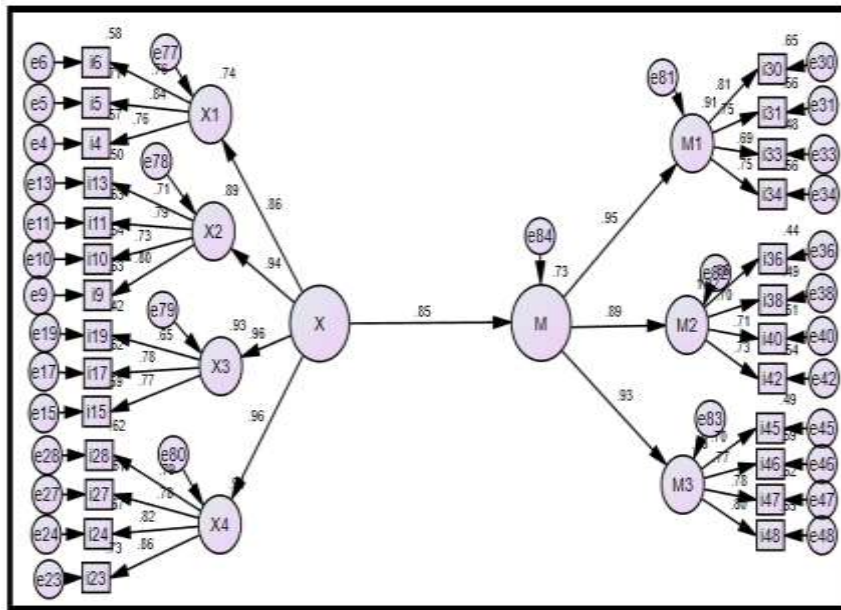


Figure (28): Relationship of the impact of business ethics on e-business technologies

Source: prepared of the researcher by relying on the (AMOS.20) program

Table 31 : Results of the relationship of the impact of business ethics on e-business technologies

E-business technologies						The intermediate variable
P.Value	F	R ²	C.R.	S.E.	Estimate	Independent variable
Level of significance	Calculated		Calculated	Standard error		
0.000	568.18	0.73	9.16	0.0927	0.85	Work ethics

Source: prepared of the researcher by relying on the (AMOS.20) program

According to the results of Figure (28) and Table (31), work ethics have shown an effect in e-business technologies and have reached (0.85) which is positive, that is, when work ethics increase, e-business technologies will increase by (0.85), and they are significant because the level of significance was less than (0.05), And that work ethic is explained by a ratio of (0.73) of the variance in e-business techniques which is significant because its calculated value (F) is greater than its tabular value of (4.00), and according to these results this hypothesis is accepted at the level of this study.

IV.II. Second: The second main hypothesis:

The researcher assumes that there is a relationship effect morale is obliged for work ethics in applying the quality of service, and thus it is assumed that the quality of service is a real function of the independent variable of work ethics, and the simple regression between the two variables will be tested using the statistical program (Amos v.20). As in Figure (30) and Table (33):

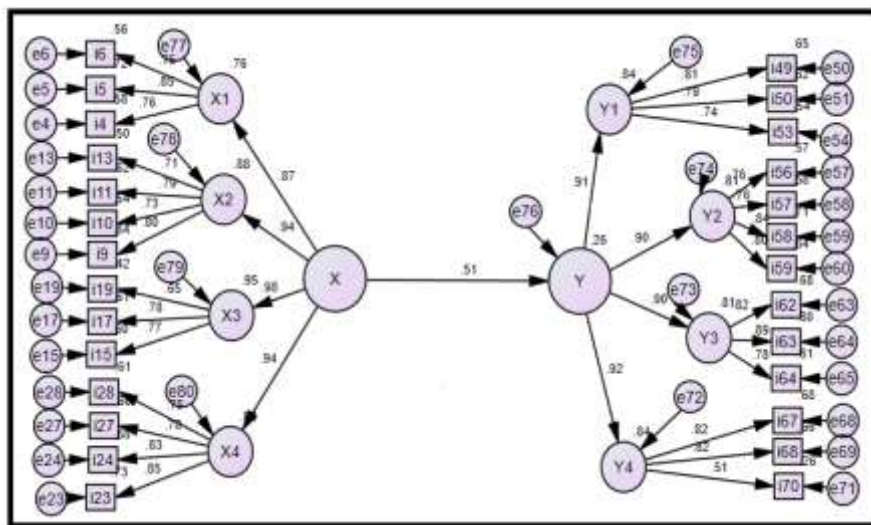


Figure 30: Relationship of the impact of business ethics on quality of service

Source: Prepared by the researcher using the AMOS.20 program.

Table 33 : Results of the relationship of the effect of business ethics on quality of service

Quality of service						Dependent variable
P.Value Level of significance	F Calculated	R ²	C.R. Calculated	S.E. Standard error	Estimate	Independent variable
0.000	69.91	0.26	7.083	0.072	0.51	Work ethics

Source: Prepared by the researcher using the (AMOS.20) program.

According to the results of Figure (30) and Table (33) showed that work ethics have an impact on the quality of service and have reached (0.51) which is positive, that is, when work ethics increase, the quality of service will increase by (0.51), and it is significant because the level of significance was less than (0.05) , And that work ethic is explained by (0.26) of the variation in the quality of service, which is significant because the calculated value of (F) is greater than its tabular value of (4.00), and according to these results, this hypothesis is accepted at the level of this study.

IV.III. Third: The third main hypothesis:

The researcher assumes that there is morale effect relationship is obliged for electronic business techniques in the quality of service, and thus it is assumed that the quality of service is a real function of the intermediate variable, electronic business technologies, and the simple regression between the two variables will be tested using the statistical program (Amos v.20). The results are as shown in Figure (32) and Table (35):

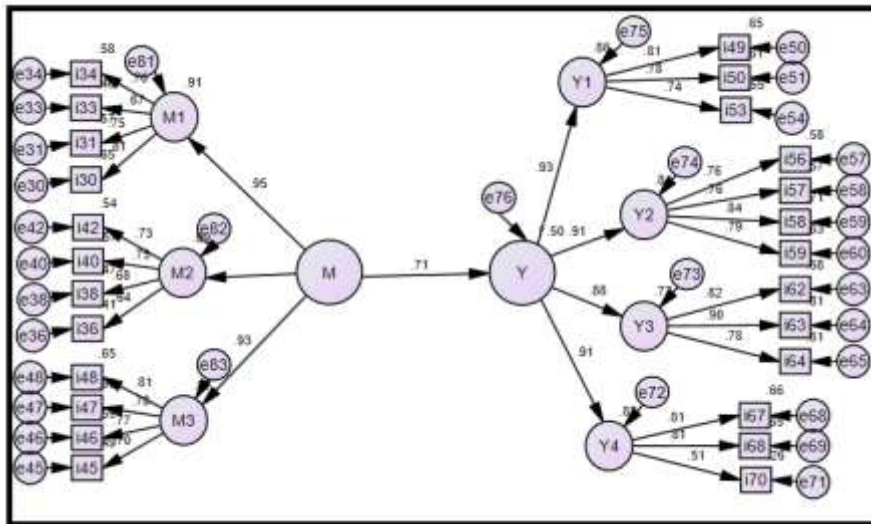


Figure 32: The relationship of the impact of e-business technologies on quality of service

Source: Prepared by the researcher using the (AMOS.20) program.

Table 35: Results of the relationship of the impact of e-business technologies on quality of service

Quality of service						Subordinate variable
P.Value	F	R ²	C.R.	S.E.	Estimate	The intermediate variable
Level of significance	Calculated		Calculated	Standard error		
0.000	199.01	0.50	7.930	0.089	0.71	E-business technologies

Source: Prepared by the researcher using the (AMOS.20) program.

According to the results of Figure (32) and Table (35) showed that electronic business technologies have an impact on the quality of service and have reached (0.71) which is positive, when increasing electronic business technologies, the quality of service will increase by (0.71), and it is significant because the level of significance was less than (0.05), and that electronic business techniques are explained by a ratio of (0.50) of the variance in the quality of service, which is significant because the calculated value of (F) is greater than its tabular value of (4.00), and according to these results, this hypothesis is accepted at the level of this study.

IV.IV. Fourth: The fourth main hypothesis:

It was assumed that there is a moral impact relationship for work ethics and positive in the quality of service through e-business techniques, as the direct relationship between work ethics and quality of service will be analyzed, and the indirect effect of business ethics and positive quality of service will be tested through e-business technologies,

He mentioned (Hair et al., 2013: 224) the path analysis method (Preacher & Hayes, 2008) consists of two conditions first, the indirect effect of work ethics on quality of service through electronic business techniques must be significant, and the second condition: determining the upper and lower limits of confidence, and that these limits do not intersect with zero, and the test results are as in Figure (34) Table (37):

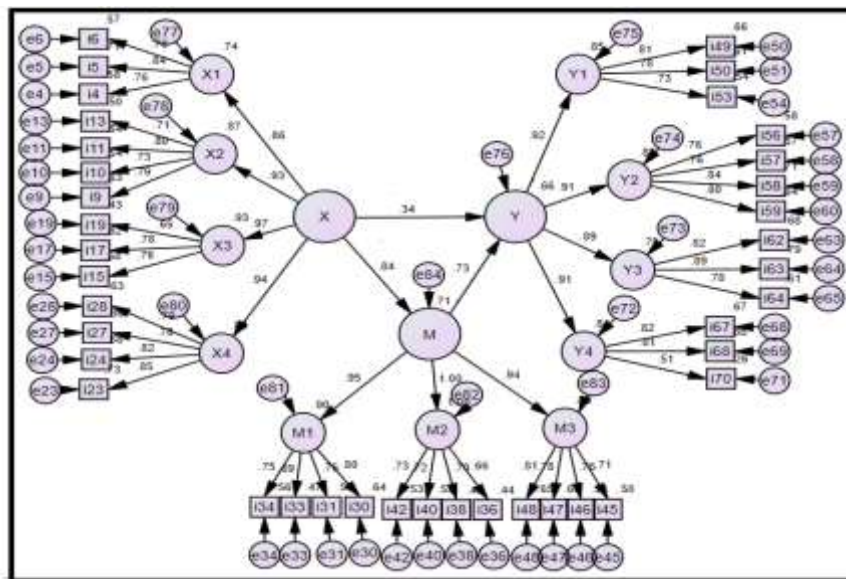


Figure 34: has a relationship tendency to affect work ethics in the quality of service through e-business technologies

Table 37: pathway analysis of the relationship of work ethics to quality of service through e-business technologies

Lower and upper limits of confidence	Calculated (t) value	Standard deviation	The overall effect of the intermediate variable e-	Path of the impact of electronic business	Impact of business ethics

				business technologies	technologies on quality of service	on quality of service
Bootstrapped Confidence Interval		t-value	SE	Indirect Effect	path b	path a
95%UL	95%LL	21.14	0.029	0.61	0.73	0.84
0.67004	0.55636					

It is noted from Table (37) that the relationship directly to work ethics in the quality of service amounted to (0.34), while the indirect impact relationship has reached (0.61), which showed the influence of the variable e-business technologies that mediated the impact relationship between work ethics and quality of service, which was through Track (a) between work ethics and e-business technologies, which amounted to (0.84), while path (b) that showed the relationship of the impact of e-business technologies on quality of service, which reached (0.73), and the value of (T) that tested the significance of the indirect effect (21.14) It is significant when compared to its scale of (1.96), and on the basis of these results it is accepted This hypothesis is at the level of this study.

V. THE FOURTH TOPIC: CONCLUSIONS AND RECOMMENDATIONS

IV.V. First: the conclusions

- That the topic of work ethics is acquiring great importance and wide attention by researchers, writers and business organizations, because of its importance at the individual, organization and society level, and despite this, (French & Raven) contributions remain as they are the main pillar of most contemporary theoretical propositions regarding work ethics.
- E-business technologies are distinguished by they work to improve business procedures and activities that increase the benefits of shareholders for organizations, and e-business technologies are integrated in terms of procedures and technology required by business to bring them to the world.
- Keeping pace with technological changes is one of the main pillars that can be relied upon to improve the profitability of institutions, through the quality of service provided to the customer, which increases the organization's acquisition of a good reputation.
- Through statistical analysis, it was found that there is a statistically significant effect of work ethics on e-business techniques at the macro level in health institutions under study.
- Through statistical analysis, it was found that there is a statistically significant effect of e-business techniques on the quality of service at the macro level in the health institutions under study.
- Through the intermediate role of e-business technologies at the macro level in the health institutions under study, there is a significant effect of work ethics on the quality of service.

- Service quality is affected by strengthening work ethics at the macro level in the health institutions under study.

V.II. Second: Recommendations

- The study recommends to holding of scientific seminars and conducting seminars to guide individuals working on the negative effects of disturbing public order and altering their ethical behaviors in light of this.
 - The need for ethical codes regulating the work of individuals working in health institutions under study.
 - The necessity of spreading the spirit of electronic work for working individuals, as well as training and preparing them in activating the shift towards applying electronic business technologies.
 - The necessity of adopting the application of electronic business technologies in the health institutions under study because of its importance to cover all activities.
 - The hospital administration under study must provide a network of (Internet) communication with high specifications, as it is considered a major component in carrying out the work.
 - The study recommends that the hospital administration under study should pay attention to preparing to help patients and provide real and fast services in enhancing dimension of responding to the quality of the services provided.
 - The hospital administration under study seeks to provide reliable services and to meet the customers need in enhancing dimension of responding the quality of the provided service.
 - Strengthening and supplying the hospital administration under study with modern training systems that are in harmony with the positive role that these hospitals provide to reach the highest levels of work reliability and provide services.

REFERENCES

1. Al-Awasa, Saleh Ibrahim Suleiman, (2018). The Impact of Electronic Customs Business Applications on Investigations of Strategic Objectives: The Jordanian Journal of Business Administration, Volume 14, No. 3, 2018.
2. Al-Hamdi, Fouad Mohammed Hussein. (2006). Marketing dimensions of the social responsibility of organizations and their implications for costmer satisfaction, unpublished doctoral dissertation, College of Administration and Economics, Al-Mustansiriya University, Baghdad. Iraq.
3. Antoni Anne. (2017). On relationship quality and ethical issues at work: navigating between care and instrumentality, Doctoral dissertation, University of Warwick, England.
4. Clay. M. (2000). Technology Competencies of Beginning Employee: Challenge and Opportunity for Employee Preparation Programs". DissertatioAbstracts International, 55 (5), 1244A.
5. Daft, Richard L , (2003) , Management , south – western & college publishing – co , Canada .
6. Daft , Richard L.(2001). Organization Theory and Design, 7th ed , south western college publishing , U.S.A.
7. DaRen Chen.(2018). A real-time streaming control for quality-of-service coexisting wirelessbody area networks, Applied Soft Computing volume 86,pages 719-732.

8. David J. Bevan & Regina W. Wolfe & Patricia H. Werhane. (2019). *Systems Thinking and Moral Imagination: Rethinking Business Ethics* with Patricia Werhane, Georges Enderle, University of Notre Dame, USA, p.3.
9. Donaldson, Mollis. (2000). *Faulkner Hospital participates in Lland Mark, patient satisfaction*, p.5.
10. Elango, B., Paul, K., Kundu, S. & Paudel, S. (2010). *Organizational Ethics, Individual Ethics, and Ethical Intentions in International Decision-Making*", *Journal of Business Ethics*, Vol.97, pp.543–561.
11. Elham Hady Nia & Jamaliah Said. (2015). *Assessing Fraud Risk Factors of Assets Misappropriation: Evidences from Iranian Banks*, *Procedia Economics and Finance* 31 (2015) 919 – 924, *International Accounting and Business Conference 2015, IABC 2015*.
12. Golovinsky, E. (2006). *Real-time Application Quality-of-Service Monitoring (RAQMON) Framework, Request for Comments Romascanu Category: Standards Track Avaya*.
13. Jatinder Kumar Jha & Manjari Singh. (2019). *Exploring the mechanisms of influence of ethical leadership on employment relations, india*.
14. Jatinder Kumar Jha & Manjari Singh. (2019). *Exploring the mechanisms of influence of ethical leadership on employment relations, Review Article, IIMB Management Review (2019), pp.1–11*.
15. Kheng, Lo Liang & Mahamad, Osman & Ramayah T. & Mosahab, Rahim. (2010). *The Impact of Service Quality on Customer Loyalty: A study of Banks in Penang, Malaysia*, *International Journal of Marketing Studies*, Vol. 2, No. 2, pp:55-62.
16. Mikalef, P. & Batenburg, R. (2011). *Determinants of IT Adoption in Hospital IT Maturity Surveyed in an European Context*. In the *Proceedings of the International Conference on Health Informatics, Rome, Italy., 26-29 January*.
17. Nasser, Muhammad Jawad and Al-Khader, Ali. (2013). *Social responsibility and work ethics*. University of Damascus, Syria.
18. Nataly Podolyakina. (2017). *Estimation of the Relationship between the Products Reliability, Period of Their Warranty Service and the Value of the Enterprise Cost*, *16th Conference on Reliability and Statistics in Transportation and Communication, Procedia Engineering* 178 (2017) 558 – 568.
19. Oyvind Kvalnes. (2019). *Moral Reasoning at Work: Rethinking Ethics in Organizations*, Second Edition, Melisa Hasan, Gewerbestrasse 11 · 6330 Cham.
20. Stevenson, William J. (2005). *Operations Management*, 8th. ed McGraw Hill, New York.
21. Sultan, A. A. and S. M. Noor (2017). "Absorptive Capacity, Civil Conflict and E-Commerce Adoption Among Iraqi Firms." *Advanced Science Letters* 23(8): 7992-7995.
22. Sultan, et al. (2019). "Factors Influencing the Adoption of Mobile Banking Service among Cihan Bank Customers in the Kurdistan Region of Iraq." *International Journal of Advanced Science and Technology* 27(1): 289-301.
23. Thunaibat, Muath Youssef (2014), *the extent to which Saudi hospitals adopt effective e-business technologies: an applied study on hospitals operating in the Makkah Al-Mukarramah region, the Jordanian Journal*. 568- in *Business Administration*, Volume 010) No. (4), p. 533.