# The Impact of ERP Systems on Achieving Organizational Intelligence in Jordanian Hospitals: An Empirical Study

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*Abstract:* - The purpose of this research was to examine how the implementation of ERP systems has affected OI in Jordanian hospitals. To do this, a questionnaire was created and sent to 388 people who were chosen at random to be in the sample. After removing incomplete replies, 336 questionnaires were examined, giving a response rate of 84% using the SPSS statistical package for the social sciences. The findings demonstrated that the deployment of ERP systems in Jordanian hospitals considerably affected many elements of OI including post-material management, accounting, finance, and customer management. Findings from the study further highlighted the significance of effective HRM and SCM in achieving OI. Several recommendations were made based on these findings. To begin gaining an edge in the market, firms should focus on making their customers happy. In addition, educating and training workers can help them use ERP systems more effectively. By clarifying the connection between ERP and BI in Jordanian healthcare organizations, this study adds to the current literature. It emphasizes the positive aspects of ERP implementation and provides helpful suggestions for the management of healthcare facilities.

*Key-Words:* - ERP Systems, Organizational Intelligence (OI), Jordanian Hospitals, Decision-Making, Integration, Performance Improvement, Jordanian Hospitals.

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## 1 Introduction and Theoretical Background

Most business organizations, in light of the great and accelerating technological progress, seek to enhance the concept of organizational intelligence in their work to improve performance that will benefit the organization and the country as a whole by relying on the organization's resource planning systems in the competitive environment and to keep pace with this progress and strive towards competitiveness and distinction. Jordan to satisfy the needs of customers (patients) through the use of the (ERP) system, which it is hoped it will achieve the desired benefits through the integration of capabilities and coordination within the borders of the organization with a series of other systems to ensure the flow of information, data, and knowledge between the organization and its customers through its databases, and this needs changes.

Organizational intelligence plays a crucial role in the growth and competitiveness of companies in today's fast-changing and complex world. The concept of "informational agility" refers to an organization's ability to gather, analyze, and utilize data to achieve its objectives. Hospitals require a significant level of organizational intelligence to effectively address the constantly evolving needs of patients advances in medical technology heightened government regulations, and limited resources.

Supply Chain Management, Manufacturing, and production management, Customer Relationship

Management Systems, Sales and Marketing, Finance and Accounting, and Human Resources are collected by the ERP system applications in one hub through a single software system, which facilitates the integration of information by taking advantage of the data in the central data repository and also allows employees working in the organization to use information from their various centers within the company effectively, [1], which means that the ERP system consists of a set of units capable of processing, separating and changing, including the possibility of operating and installing them together or independently, as all data is processed according to the principle of shared data approved by the organization..

The ERP system contributes to improving the planning process and storing all variables such as graphs, resources and costs, making the planning process easy and convenient, [2], facilitating the various operations in the organization by tracking orders during all stages, which reduces the time, [3], provides information to workers in a timely manner through the integration of ERP system technology, [4], contributes to the quality of decision-making as it provides officials and administrators with the appropriate information to take decisions in a timely manner based on accurate data and calculations, [5], provide automation of operations and departments in different departments, which contributes to helping officials to track employees electronically and thus reduce errors due to increased oversight, [6], and can be harmonized with other systems such as activity-based costing (ABC) system to achieve operational effectiveness, [7].

High technical and administrative in addition to responding to the challenges imposed by the work environment, [8]. Therefore, after the year (2000), the ERP system has evolved to include most of the new requirements such as sales and marketing automation and works to integrate some different departments such as supply chain management and customer relations. The most important feature of the new generation of ERP systems is the ability to access databases directly instead of extracting data from operational databases, [9].

Factors of ERP Systems Success depends on achieving compatibility between ERP systems and work procedures, [10] pointed out, but there is a gap between the organization's requirements and the advantages of ERP systems, and the participation of technicians and key users in implementing this system with the highest degree of compatibility contributes to Minimizing time, effort and risk, narrowing the gap between the ERP system and communication processes, senior management support, [9], and IT department efficiency, [10]. In addition, reengineering (Business Reengineering) as, [11], illustrated, means the process of radically re-engineering the business to achieve dramatic improvements in the areas of quality, core speed, and cost, and finally, through [12], in his study that the organization's ability to adapt to the changes around it, is a key factor to ensure the success of the implementation of the ERP system.

According to [13], the basic principles of creating organizational intelligence and flexibility consider that organizational intelligence and flexibility have multi-dimensional concepts (organizational intelligence: speed of response and change, flexibility: ability to respond). Thus, the developed decision tree-based prediction models are particularly helpful for foretelling businesses' financial issues, [14]. In addition, Companies in the manufacturing industry that use ERP have fewer earnings management practices, [15].

The use of information technology, especially in complex and changing organizations, because of its impact on raising the level of intelligence in the organization's systems and the intelligence of employees, [16].

According to [1], enterprise resource planning (ERP) systems have become increasingly important in today’s enterprises for integrating different departments and boosting overall operational efficiency. These solutions allow businesses to bring together supply chain management, customer relationship management, finance, and HR on one platform, [17]. By utilizing ERP systems. Businesses can simplify their processes. Effectively manage their data. Make better decisions and enhance productivity, [3], [4].

In the healthcare sector, there is a rising popularity of ERP systems as a means of streamlining administrative tasks and improving productivity in hospitals, [18]. Through the use of ERP systems healthcare organizations can integrate supply chain management, patient management, and financial management, [7]. These systems also have a positive impact on information exchange, resource allocation, and decision-making within healthcare businesses [4].

When it comes to implementing an ERP system in hospitals specifically some unique challenges and opportunities arise, [18]. Hospitals that utilize ERP systems experience benefits such as increased accuracy of data, simplified procedures, and overall productivity improvement, [4]. In addition to these advantages performance areas like real-time monitoring of patient data and streamlined inventory

management as well as accounting without trouble are made possible by these technologies, [18].

Based on various studies conducted by researchers like, [19], it has been found that deploying ERP systems in hospitals can enhance patient care while saving expenses. The promise of improved operational efficiency and data management has led to the widespread adoption of ERP systems in the healthcare industry. Implementing ERP systems in Jordanian hospitals is anticipated to improve efficiency, effectiveness, and patient care. Several positive effects have been observed from the use of ERP systems in healthcare businesses. In addition, [19], highlighted that study including favorable impacts on cost management, patient care, and resource allocation. Moreover, [20], conducted a study in Jordanian hospitals investigating the use of enterprise resource planning (ERP) software. Their findings emphasized the potential of ERP systems to enhance decision-making and patient satisfaction. However, it is important to note that the healthcare industry faces unique challenges that require specialized features and modules within ERP systems. These challenges include patient records management, compliance with healthcare laws, and interoperability with other healthcare systems. To successfully implement and utilize ERP systems in hospitals these issues must be addressed and tailored to meet the specific demands of the healthcare sector, [21].

In Jordan, there is a lack of research examining the integration of ERP systems in healthcare settings. Therefore, conducting a study to fill this knowledge gap and gain insights into Jordan's healthcare industry is essential. This study would specifically focus on examining how ERP systems affects organizational intelligence in hospitals. Organizational intelligence plays a key role in efficiently managing resources and responding to evolving patient needs. Increased access to information and knowledge can result in data-driven decisions, operational optimization, improved patient satisfaction, and better overall healthcare outcomes.

To remain competitive in the Jordanian healthcare sector and effectively serve patients hospitals must strive for organizational intelligence. The efficient utilization of data and technology such as ERP systems can greatly benefit organizational intelligence and strategic decision-making processes.

Previous research has extensively explored ERP system adoption across various industries. There is a noticeable research gap regarding the specific impact of ERP systems on achieving organizational intelligence within Jordanian hospitals. Understanding this relationship is critical for enhancing operational efficiency decision-making processes, and overall performance within hospitals in Jordan that have implemented ERP systems. Additionally, existing literature concerning ERP systems within healthcare often centers on technical aspects and challenges related to implementation instead of discovering potential impacts these systems may have on organizational knowledgeability.

Therefore, this investigation intends to bridge said gap through its examination of how deployment enhances a Jordanian hospital's capacity for acquiring organizational intelligence. By investigating specific dimensions like sapient resources administration, supply enchaining, consumer administration, and fiscal management, this query expects to yield gilded insights into the correlation of such systems with organizational knowledgeability in healthcare. This deep-dive aims to illuminate both the potential benefits and drawbacks connected with the adoption and dissemination of ERP in the healthcare industry, predominantly via studying how these systems affect gathering organizational knowledgeability at Jordanian hospitals.

The intent is for this study's data to apprise hospital managers, politicians as well and healthcare professionals within Jordan, empowering them toward informed choice making while also bolstering their entities' efficacy. The foremost purpose of this investigation is to probe the influence that ERP systems may exert on achieving organizational knowledge in Jordanian hospitals. The research aims toward grading the illumination surrounding how implementing ERP systems across hospital shards affects their information ascertainment, processing capabilities as well and utilization thereof by impacting the judgement-making process and enhancing operational yielding whilst also heightening general organizational performance overall.

These studies hope to elucidate these valuable questions: How does employing ERP systems enhance human resource management, supply chain management, customer administration along fiscal management processes within Jordanian hospitals? To what extent do these implementations amplify subject organizations' consumable expertise? It is through addressing said questions this investigation aims towards closing contemporary study gaps while also conferring insights vis-a-vis ERPs' role in bolstering organizational felicity, especially within a select healthcare context i.e. Jordan.

The study provides contributions. Highlights several tangible benefits, for both academic and practical purposes;

1. Informed Decision Making for Healthcare Leaders: The findings offer insights to healthcare leaders in hospitals regarding the implementation of ERP systems. This information can guide them in making informed decisions to enhance intelligence.
2. Strategic Planning and Resource Allocation: The study emphasizes the importance of reviewing and developing plans, especially in areas like human resource management, supply chain management, customer management accounting, and finance. Hospital administrators can utilize this information to plan and allocate resources efficiently.
3. Improved Organizational Performance: By demonstrating the impact of ERP systems on aspects such as human resource management, supply chain management, and customer, management the study emphasizes the potential for enhanced organizational performance in Jordanian hospitals.
4. Optimized Human Resource Practices: The research suggests focusing on recruitment processes training procedures, employee motivation, and retention strategies to fully leverage the benefits of ERP systems, in hospitals.
5. Financial. Operational Effectiveness; Despite being perceived as having an impact, on accounting and finance the research suggests that incorporating ERP systems can improve financial accuracy and support financial decision-making and business strategies. This highlights the importance of aligning practices with ERP systems.

The study also encourages improvement in ERP system capabilities providing hospitals with a roadmap for enhancement. It emphasizes the need for training and education for employees to adapt to changing requirements and expectations.

Furthermore, this research opens up avenues for studies urging scholars to explore aspects of ERP systems and their effects on clinical outcomes, hospital efficiency, and patient satisfaction. This not only guides academic pursuits but also supports advancements in healthcare technology.

Additionally recognizing the role of IT tools in the hiring process this study aligns with trends by advocating for the integration of technology in human resource management practices. This promotes efficiency in recruitment and employment procedures.

In summary, this study goes beyond insights to offer guidance, for healthcare leaders, administrators, and researchers on optimizing ERP system implementation. Ultimately it contributes to advancing healthcare management practices in hospitals.

# 2 Methodology

To determine the influence of the implementation of organizational resource planning (ERP) in obtaining organizational intelligence, the study relied on the descriptive and inferential approach. It is an integrated approach to the phenomenon or concern because it is based on the relevant facts, and because it goes beyond simply describing the phenomenon to analyze, measure, and interpret data to accurately describe it and its outcomes as well as offer solutions and suggestions for how to deal with it. All personnel of the supervisory and control bodies at the three government hospitals in Amman, the capital of Jordan, that use the ERP system comprised the study community.

A questionnaire was developed, distributed, and used with the study variables and research sample to achieve the study's goals (388). Three of the 339 collected items were taken away. 336 questionnaires, or 84% of the total distributed, were assessed. The SPSS (Statistical Package for Social Sciences) application was employed by the researcher.

Human Resources, Supply Chain Management, Customer Management, and Accounting and finance are the sub-dimensions for ERP (as an independent variable) that this study is built on to determine their impact on organizational intelligence (as a dependent variable).

## 2.1 Research Design

This study follows a mixed methods research design combining both inferential approaches. This approach ensures an understanding of how the implementation of Enterprise Resource Planning (ERP) affects intelligence.

- Descriptive Approach:
Objective; to provide an overview of the status of ERP implementation and its influence, on organizational intelligence.

- Methods:
Development of Questionnaire; A structured questionnaire was created to gather data.

- Survey Sample:
The participants included all personnel in control roles at three government hospitals in Amman who use the ERP system.

- Data Collection:
The questionnaire was distributed to 388 participants and 336 questionnaires were returned, resulting in an 84% response rate.

- Data Analysis:
Descriptive statistics, such as standard deviation were utilized to summarize and interpret the responses.

- Inferential Approach:
Objective; to examine the relationships between aspects (sub-dimensions) of ERP (variable) and organizational intelligence (dependent variable).

Methods:
Statistical Package, for Social Sciences (SPSS); SPSS software was used for data analysis enabling tests.

-Sub dimensions of ERP:
The study focused on four sub Human Resources, Supply Chain Management, Customer Management, and Accounting and Finance, as variables.

Regression Analysis:
We used regression models to study how different aspects of ERP (Enterprise Resource Planning) impact intelligence.

Hypothesis Testing:
To test the significance of relationships we employed statistics, like t tests or ANOVA.

- Variables:
Independent Variable (IV):
ERP Sub dimensions
Human Resources
Supply Chain Management
Customer Management
Accounting and Finance

- Dependent Variable (DV):
Organizational Intelligence

- Results:

- Questionnaire Responses:
We collected and analyzed 336 out of the 388 distributed questionnaires, which provided a dataset representing the perspectives of the study community.

- Descriptive Findings:
By examining statistics, we gained insights into the status of ERP implementation and its perceived impact on organizational intelligence.

- Inferential Findings:
Through regression analysis, we determined to what extent each ERP dimension influences organizational intelligence allowing us to identify significant contributors.

-Implications

- Implications
These findings offer guidance to practitioners by highlighting areas where ERP implementation significantly contributes to organizational intelligence.

-Theoretical Implications
This research contributes to enhancing our understanding of the relationship, between ERP sub-dimensions and organizational intelligence.

# 3 Results

The distribution of the questionnaire items that measure the study variables (independent and dependent) was as Table 1.

Table 1. Distribution of the Questionnaire Items that Measure the Study Variables

| Study Variables | Type | Paragraphs |
|---|---|---|
| **ERP** | **Independence** | **1-21** |
| Human Resources | | 1-6 |
| Supply Chain Management | | 7-11 |
| Customer Management | | 12-16 |
| Accounting & Finance | | 21-17 |
| **organizational intelligence** | **Dependent** | **22-31** |
| **Total** | | **1-31** |

It is clear from Table 2 that the coefficients for distinguishing the paragraphs of the ERP systems ranged between (0.692 -0.935), and it is a function at the level of significance ($\alpha = 0.01$), which are paragraphs that have excellent distinction being higher than (0.25), and thus this is considered the variable is true to what it was designed to measure.

Table 2. Correlation coefficients between each paragraph of the independent variable (ERP)

| No. | Paragraphs | Corre-lation | Sig. |
|---|---|---|---|
| | Human Resources | | |
| 1 | The organization provides the opportunity for continuous review of the strategic plan for human resources | 0.840 | 0.00 |
| 2 | The organization seeks to meet its needs of individuals who are able to work according to a well-thought-out basis in its training | 0.876 | 0.00 |
| 3 | The organization performs the function of motivating its employees | 0.906 | 0.00 |
| 4 | The organization attracts the best possible elements to fill the vacancies available to it | 0.908 | 0.00 |
| 5 | The organization provides its new members with guidance to adapt to the new work environment | 0.839 | 0.00 |
| 6 | The organization carries out activities that contribute to the retention of its distinguished employees | 0.904 | 0.00 |
| | Supply Chain Management | | |
| 7 | The organization maintains detailed electronic records of inventory showing full information about it | 0.692 | 0.00 |
| 8 | The organization plans its material needs in a way that helps implement its programs | 0.869 | 0.00 |
| 9 | The organization is working on adding information about new suppliers to its database | 0.839 | 0.00 |
| 10 | The organization conducts a preliminary examination to ensure the conformity of the incoming materials and its wishes through technical inspection devices | 0.835 | 0.00 |
| 11 | The organization works to maintain the required quantities of materials to meet its various needs | 0.791 | 0.00 |
| | Customer Management | | |
| 12 | The organization has the ability to know the desires and preferences of customers | 0.908 | 0.00 |
| 13 | The organization provides competitive services to its clients | 0.904 | 0.00 |
| 14 | The organization considers the customer as one of its cornerstones in achieving success | 0.935 | 0.00 |
| 15 | The organization seeks to build lasting relationships with clients | 0.885 | 0.00 |
| 16 | The organization has a system to store the data of each of its customers | 0.710 | 0.00 |
| | Accounting & Finance | | |
| 17 | The organization has real data on revenue during a certain period | 0.790 | 0.00 |
| 18 | The organization chooses the most appropriate sources of financing on the best terms to obtain the necessary funds | 0.899 | 0.00 |
| 19 | There is a system of accounts that reflects the true reality of the organization | 0.896 | 0.00 |
| 20 | The organization defines business strategies to guide officials and workers in the financial activity | 0.880 | 0.00 |
| 21 | The organization prepares appropriate budgets for its financial activities | 0.849 | 0.00 |

Table 3 indicates that the coefficients for distinguishing items after (organizational intelligence) ranged between (0.805 -0.915), and it is a function at the level of significance ($\alpha = 0.01$), which are items that have excellent distinction as being higher than (0.25), and thus it is considered this variable is true to what it was designed to measure.

Table 3. Correlation coefficients between each item of the dependent variable (Organizational Intelligence)

| No. | Paragraphs | Corre-lation | Sig. |
|---|---|---|---|
| | Organizational Intelligence | | |
| 22 | The organization has organizational flexibility to adapt to environmental conditions | 0.805 | 0.00 |
| 23 | The organization has the ability to invest its resources | 0.866 | 0.00 |
| 24 | The organization can generate new knowledge and make better decisions | 0.864 | 0.00 |
| 25 | The organization has the ability to predict future changes in its business environment | 0.915 | 0.00 |
| 26 | The organization has the ability to cope with rapid environmental changes | 0.851 | 0.00 |
| 27 | The organization has strategies that enable it to compete | 0.830 | 0.00 |
| 28 | The organization determines the appropriate metrics for evaluating the performance of its employees | 0.865 | 0.00 |
| 29 | The organization works to achieve integration between its organizational processes | 0.866 | 0.00 |
| 30 | The organization seeks to manage the mental capabilities of its employees | 0.848 | 0.00 |
| 31 | The organization makes appropriate use of the feedback | 0.849 | 0.00 |

Table 4. The stability of the study tool for the study variables based on Cronbach Alpha

| Variables | (Cronbach Alpha) | Paragraphs | Sample |
|---|---|---|---|
| **ERP** | **0.866** | **21** | **336** |
| Human Resources | 0.840 | 6 | |
| Supply Chain Management | 0.815 | 5 | |
| Customer Management | 0.821 | 5 | |
| Accounting & Finance | 0.814 | 5 | |
| **Organizational Intelligence (OI)** | **0.859** | **10** | |
| **General Indicators** | **0.878** | **31** | |

By calculating the value of Cronbach's Alpha coefficient, the stability of the tool used to measure the questionnaire's variables was confirmed. The closer the value is to (1) one, or 100 percent, the more stable the study tool is. By looking at the data in Table 4, we can see that the Cronbach's alpha coefficient result is statistically acceptable.

Table 5. Normal distribution of data based on Skewness

| Variable Type | Variables | Mean | Std. Error | Skewness |
|---|---|---|---|---|
| Independence | **ERP** | 3.70 | 0.740 | -0.475 |
| | Human Resources | 3.47 | 0.923 | -0.507 |
| | Supply Chain Management | 3.80 | 0.663 | -0.240 |
| | Customer Management | 3.61 | 0.896 | -0.835 |
| | Accounting & Finance | 3.95 | 0.777 | -0.451 |
| **Dependent** | **Organizational Intelligence (OI)** | **3.61** | **0.853** | **-0.558** |

Based on the outcomes of Table 5, the gathered data were subjected to a normal distribution test to see if they followed a normal distribution or not. Skewness coefficient values were then retrieved, and if they were less than (1), the data were considered to have a natural distribution, [22].

Table 6. Variation Inflation Factor (VIF) and Tolerance for Dimensions of ERP Systems

| Dimensions of ERP Systems | VIF | Tolerance |
|---|---|---|
| Human Resources | 3.328 | 0.300 |
| Supply Chain Management | 3.102 | 0.322 |
| Customer Management | 3.033 | 0.330 |
| Accounting & Finance | 2.908 | 0.344 |

The multi-collinearity test clarified in Table 6, the (VIF) and (After statistical processing, it was determined that the permissible coefficient of variation for the independent variables was less than (1) and larger than (Tolerance) (0.01) The variance inflation coefficient values were less than (5), indicating that there isn't a strong correlation between the independent variables. This suggests that the values are acceptable and that multiple linear regression analysis may be done with them [22].

Using Pearson's correlation coefficients between the independent variable's dimensions, it was assessed whether there were any significant multiple linear correlations between the independent variables and the results in Table 7.

Table 7. Matrix of correlation coefficients (Pearson) for independent variables

| Variables | Human Resources | Supply Chain Management | Customer Management | Accounting & Finance |
|---|---|---|---|---|
| Human Resources | 1.00 | | | |
| Supply Chain Management | 0.752 ** | 1.00 | | |
| Customer Management | 0.777 ** | ** 0.739 | 1.00 | |
| Accounting & Finance | 0.744 ** | ** 0.757 | ** 0.714 | 1.00 |
| ****Sig. 0.01** | | | | |

Table 7 demonstrates that the variables (customer management) and (human resource management) had the highest correlation (0.777), the correlation coefficient values between the remaining independent variables, however, were lower. Given that the independent variables' values were less than (80%), this suggests that the phenomena of strong multiple linear correlations were absent, and the same outcomes were as a result [23].

Table 8. The results of testing the effect of ERP systems on achieving organizational intelligence

| Dependent Variable | Model Summary | | ANOVA | | | coefficients | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | R | $R^2$ | F | F Sig | Df | Independent Variables | Std. Error | Beta | T | T Sig |
| Organizational Intelligence | 0.894 | 0.799 | 328.869 | *0.00 | 331/4 | Human Resources | 0.042 | 0.458 | 10.184 | *0.00 |
| | | | | | | Supply Chain Management | 0.056 | 0.213 | 4.806 | *0.00 |
| | | | | | | Customer Management | 0.041 | 0.228 | 5.312 | *0.00 |
| | | | | | | Accounting & Finance | 0.046 | 0.080 | 1.895 | 0.059 |
| | | | | | | Human Resources | 0.042 | 0.458 | 10.184 | *0.00 |
| * ≤ 0.05 | | | | | | | | | | |
| F Scheduled = (2.37) | | | | | T Scheduled = (1.96) | | | | | |

The statistical test for this hypothesis model, which is indicated by the existence of a number of independent dimensions, is shown in Table 8 (human resource management, materials management, customer management, accounting and finance) and one dependent variable representing (organizational intelligence). The table indicates that there is a statistically significant effect of using ERP systems in achieving organizational intelligence, through the F value of (328,869), which is greater than its tabular and significant value at the level of significance (α≤0.05), which also represents the significance of this model at the degree of freedom (4/331). The value of R2 (0.799) indicates that the organization's resource planning systems with its dimensions have explained a percentage of (79.9%) of the change in organizational intelligence in Jordanian hospitals. The correlation coefficient reached R = (89.4%), which indicates a strong relationship between the organization's resource planning systems with its dimensions and the achievement of organizational intelligence in Jordanian hospitals.

According to the findings of the partial analysis of this hypothesis, the dimension (Human Resource Management) appears to have had the largest influence on the dependent variable (Organizational Intelligence) among the four ERP systems, as indicated by the fact that its beta coefficient was ( = 0.458). The value of (T) estimated amounted to (10.184), which is higher than its tabular value and with a significant level (Sig = 0.00), strengthens this impact.

The findings of the statistical analysis of the impact of one independent variable (human resource management) on a dependent variable are shown in Table 9. (Organizational Intelligence). The T value of (26.991), a significant value at the level of significance (0.05), and greater than its tabular value of (1.96), which also represents the significance of this model at one degree, shows that there is a statistically significant effect of human resources management in achieving organizational intelligence in Jordanian hospitals. The value of R2 of (0.729) shows that human resources management has explained a perceived increase in organizational intelligence. The correlation value was R = (85.4%), showing a significant link between human resource management and organizational intelligence in Jordanian hospitals.

The findings of the statistical analysis of the impact of one independent variable (supply chain management) on a dependent variable are shown in Table 10 (organizational intelligence). The T value of (23.184), which is significant at the level of significance (0.05), is greater than its tabular value of (1.96), which also represents the significance of this model is at one degree, and the value of R2 of (0.617) indicates that supply chain management has explained a percentage of the variation in organizational intelligence in Jordanian hospitals, according to the table. The correlation value was 78.5 percent, indicating a significant connection between supply chain management and organizational intelligence in Jordanian hospitals.

Table 9. The results of testing the effect of human resources management on achieving organizational intelligence

| Dependent Variable | Model Summary | | Coefficient | | | |
|---|---|---|---|---|---|---|
| | R | $R^2$ | Remarks | Std. Error | T | T Sig |
| Organizational Intelligence | 0.854 | 0.729 | Human Resources | 0.026 | 29.991 | 0.00 * |
| * α≥0.05 | | | | | | |
| T Scheduled = (1.96) | | | | | | |

Table 10. The results of testing the effect of supply chain management on achieving organizational intelligence

| Dependent Variable | Model Summary | | Coefficient | | | |
|---|---|---|---|---|---|---|
| | R | $R^2$ | Remarks | Std. Error | T | T Sig |
| Organizational Intelligence | 0.785 | 0.617 | Supply Chain Management | 0.044 | 23.184 | 0.00 * |
| * α≥0.05 | | | | | | |
| T Scheduled = (1.96) | | | | | | |

Table 11. The results of testing the effect of customer management on achieving organizational intelligence

| Dependent Variable | Model Summary | | Coefficient | | | |
|---|---|---|---|---|---|---|
| | R | $R^2$ | Remarks | Std. Error | T | T Sig |
| Organizational Intelligence | 0.797 | 0.636 | Customer Management | 0.031 | 24.150 | 0.00 * |
| * α≥0.05 | | | | | | |
| T Scheduled = (1.96) | | | | | | |

Table 12. The results of testing the effect of accounting and finance on achieving organizational intelligence

| Dependent Variable | Model Summary | | Coefficient | | | |
|---|---|---|---|---|---|---|
| | R | $R^2$ | Remarks | Std. Error | T | T Sig |
| Organizational Intelligence | 0.744 | 0.554 | Accounting & Finance | 0.040 | 20.350 | 0.00* |
| * $\alpha \geq 0.05$ | | | | | | |
| T Scheduled = (1.96) | | | | | | |

The findings of the statistical analysis of the impact of one independent variable (customer management) on a dependent variable are shown in Table 11. (organizational intelligence). The T value of (24.150), a significant value at the level of significance (0.05), and greater than its tabular value of (1.96), which also represents the significance of this model at one degree, shows that there is a statistically significant effect of customer management in achieving organizational intelligence in Jordanian hospitals. The value of R2 of (0.636) shows that customer management has explained a percentage of (63.6) in the table. The correlation value was R = (79.7%), demonstrating the significance of the link between organizational intelligence and customer management in Jordanian hospitals.

The findings of the statistical analysis of the impact of one independent variable (finance and accounting) on a dependent variable are shown in Table 12. (organizational intelligence). The T value of (20.350), a significant value at the level of significance (0.05), and greater than its tabular value of (1.96), which also represents the significance of this model at one degree, indicates that there is a statistically significant effect of accounting & finance in achieving organizational intelligence in Jordanian hospitals. The value of R2 of (0.554) also indicates that accounting & finance has explained a percentage of (55%) in the table. The correlation coefficient, which was 74.44%, shows a significant association between organizational intelligence and accounting and finance. However, the lower effect in independent variable dimensions.

# 4 Conclusion

The study's findings revealed that from the perspective of the study sample, the ERP system aspects of human resources and customer management were successful to a medium degree. Due to the company maintaining electronic records of the inventory, revealing comprehensive information about it, and special records to keep information linked to new suppliers, supply chain management, accounting, and finance attained a high degree from the perspective of the research sample members.

The research's findings demonstrated that organizational intelligence was at a medium level from the perspective of the study sample participants because of ongoing workplace changes, ongoing rivalry among firms, and quick environmental changes.

According to this study's findings. The successful implementation of ERP systems significantly affects organizational intelligence within Jordanian hospitals. The utilization of these systems positively influences various areas including human resource management. Supply chain management, customer management, and accounting and finance. The importance of implementing ERP systems in healthcare facilities is underscored by this research. Jordanian hospitals can greatly benefit from these tools as they facilitate easy integration streamline operations decisions and enhance overall organizational performance.

The study also highlights the critical role that human resource management plays in effectively utilizing ERP systems. Organizations aiming to maximize the benefits of these tools in achieving organizational intelligence should focus on continuous review and development of strategic plans recruitment training procedures employee motivation retention.

The findings further emphasize the significance of effective supply chain and customer management when leveraging ERP systems to achieve organizational intelligence. Jordanian hospitals should prioritize the upkeep of detailed electronic records, accurate planning of material needs understanding of customer preferences the provision of competitive services, and building long-term relationships with customers in order to enhance organizational intelligence. Though the impact of accounting and finance dimensions on organizational intelligence appears relatively lower in this study organizations should still consider adopting ERP systems to enhance financial accuracy. These systems can assist with financing decisions and business strategies as budgeting processes. Thus, it is vital to focus on aligning accounting and finance practices with ERP systems in order to enhance operational effectiveness.

Based on the results illustrated, the study provides some recommendations, such as ensuring the continuous review and development of strategic

plans for human resource management, and developing new systems when selecting and recruiting employees in Jordanian hospitals, in light of the strong competitive environment, organizations must work to understand the needs of customers and respond to them quickly and investing the resources available and utilizing ERP systems in the organization efficiently and effectively toward achieving organizational intelligence. In addition, as [24] concluded and [25] mentioned that human resources need to take into consideration modern IT tools within the employment process.

The findings of the study suggest that it is crucial for Jordanian hospitals to prioritize the continuous enhancement of ERP system capabilities. In addition, providing adequate training and education for employees and proactively responding to the changing requirements and expectations of patients should also be given high importance. Implementing these initiatives will not only improve organizational intelligence but also maximize the benefits derived from ERP systems. Moreover. This study opens up opportunities for further exploration into specific aspects of ERP systems and their impact on organizational intelligence within the healthcare industry.

Therefore, more research is necessary to understand the effects of enterprise resource planning (ERP) systems on clinical outcomes, hospital efficiency, and patient satisfaction in Jordan. Comparative studies conducted across different healthcare settings and countries can contribute greatly to comprehending the relationship between ERP systems and organizational intelligence.

Expanding on the study's findings it is important to delve into how ERP systems affect outcomes, hospital efficiency, and patient satisfaction specifically, in Jordanian hospitals. The moderate level of intelligence identified suggests that there is potential for improvement and optimization in utilizing ERP systems within these healthcare facilities.

One area worth exploring is the analysis of the challenges and opportunities related to implementing ERP systems in Jordanian hospitals. Understanding how these systems interact with existing workflows, staff dynamics and patient care processes can provide insights. Additionally investigating the role of leadership and organizational culture in integrating ERP systems can shed light on factors that may influence their effectiveness.

Comparative studies across healthcare settings and countries are essential for an understanding of the relationship between ERP systems and organizational intelligence. By examining differences in implementation strategies, cultural contexts, and regulatory environments researchers can identify practices as well as potential challenges that can inform successful deployment of ERP systems in the healthcare sector.

Furthermore considering the nature of the healthcare industry and rapid technological advancements ongoing research is crucial to keep up with emerging trends and advancements, in ERP systems.

This involves investigating how artificial intelligence, data analytics, and other advanced technologies can be integrated into ERP systems, in healthcare settings to enhance their capabilities.

Moreover, the research emphasizes the significance of human resource management in maximizing the advantages offered by ERP systems. Future studies could focus on identifying strategies and interventions that prove successful in ensuring that healthcare organizations have a skilled workforce capable of fully utilizing ERP systems.

To sum up, while this current study provides insights into how ERP systems impact intelligence in Jordanian hospitals there is still ample room for further exploration. By examining factors, conducting analyses, and keeping up with technological advancements future research can contribute to ongoing improvements, in healthcare management practices through the efficient implementation of ERP systems.

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The authors have no conflicts of interest to declare that are relevant to the content of this article.