

The Role of Human Resource Information Systems in Enabling Effective Knowledge Management at Tabuk University

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تاريخ النشر: 2023/12/31

تاريخ القبول: 2023/09/08

تاريخ الاستلام: 2023/08/31

Abstract; The study aims to explore how HRIS facilitates effective knowledge management at Tabuk University. It uses a questionnaire and SPSS for data analysis to examine the relationship between HRIS effectiveness and its impact on knowledge management. The results highlight HRIS's significant influence on knowledge management and its potential to improve various university operations.

HRIS plays a crucial role in knowledge management at Tabuk University by improving data management, communication, and knowledge exchange, leading to a supportive work environment for continuous development.

Tabuk University shows a strong commitment to HRIS utilization, emphasizing accuracy. To maximize benefits and enhance work performance, the study recommends well-defined training mechanisms to ensure effective HRIS utilization by all employees.

The study emphasizes the significance of comprehensive HRIS utilization in all administrative and cognitive processes, including recruitment, training, development, and human resources management. To achieve university goals effectively, continuous improvement in HRIS efficacy through innovation and development is encouraged. By doing so, Tabuk University can fully harness HRIS's potential to support knowledge management and enhance organizational performance.

Keywords : Information Systems Human Resource, Knowledge Management

تصنيف JEL : XN1 , XN2

Introduction:

The Human Resources Information System (HRIS) plays a critical role in managing knowledge management processes by providing knowledge to the Department (Al-Emran, 2018, p. 173). This system facilitates the transfer and storage of knowledge for reuse by management, contributing to the realization of a knowledge economy.

While many organizations possess vast knowledge (Zaki, 2023, p. 71), they need to understand how to effectively utilize HRIS to manage, access, use, and apply knowledge processes appropriately (Sambamurthy, 2005, p. 1). This topic demands a comprehensive approach, considering modern concepts and techniques to enhance knowledge management and construct information systems that support organizational operations.

Problem and Research Questions:

The study addresses the challenge of establishing the link between the effectiveness of knowledge management and the ability of the University of Tabuk to achieve seamless integration between HRIS and other university systems. Achieving this integration and harnessing the capabilities of HRIS to support knowledge management processes can significantly impact the university's ability to harmonize systems and promote effective knowledge management. The primary problem can be formulated as follows:

What role does HRIS play in enabling effective knowledge management at the University of Tabuk?

What are the benefits of using HR information systems at the University of Tabuk, and how do they contribute to improving knowledge management and fostering strategic development?

How can HR information systems facilitate the sharing of knowledge among university employees and cultivate an effective knowledge management culture?

Objectives of the Study:

This study highlights the crucial role of HR information systems in enabling effective knowledge management at the University of Tabuk. By improving HR information, fostering a knowledge-sharing culture, and leveraging data for strategic decisions, these systems enhance work efficiency, productivity, and the university's overall progress and development.

Importance of the Study:

The study assesses HRIS effectiveness in enabling knowledge management at Tabuk University. It explores the relationship between HRIS and knowledge management processes. HRIS organizes employee data and manages human resource processes, while knowledge management involves collecting, storing, and exchanging knowledge within the university, leading to improved performance and strategic development.

Hypotheses of the Study:

High effectiveness in HRIS and knowledge management at Tabuk University with a significant correlation between the two. Investigating differences in HRIS responses based on gender, age, and educational level.

The study aims to verify hypotheses, understand HRIS's role in enabling effective knowledge management at Tabuk University, and identify influencing factors. Findings will lead to recommendations for developing HRIS and enhancing their role in achieving synergy between HRIS and knowledge management.

Conceptual Framework:

In the era of information and rapid knowledge development, the business environment has undergone radical transformations and continuous challenges (Martins, 2019, p. 489). These changes have led organizations to focus on collecting and processing information and data for round-the-clock decision-

making. Information has become a strategic resource for managing organizations (Youssef, 2009, p. 1623). Effective and efficient information handling requires a capable human element that can leverage the organization's resources and capabilities (Martins, 2019, p. 207), including physical, technical, and information resources. This chapter aims to highlight the theoretical literature related to HR information systems and knowledge management.

First: The concept of Human Resources Information Systems (HRIS)

HRIS is an integrated system used to store and analyze information related to an organization's human resources. It goes beyond computer equipment and software to encompass people, policies, procedures, and data required for managing all aspects of human resources functions (Hendrickson, 2003, p. 381-394). The HRIS includes physical facilities such as computers and accessories, information elements like databases and software management systems, as well as individuals such as employees, users, and programmers. The system functions integratively to support decision-making at all administrative levels of human resources management within the organization (Muhammad, 2013, pp. 255-372).

An HRIS can be defined as an integrated system comprising physical, human, and information resources aimed at supporting decision-making processes related to human resources management.

Components of the HR Information System:

The HR information system encompasses six elements from a system's workflow perspective: input, process, output, control, feedback, and organizational memory (Babiker, 2023, p. 39).

Input: This component includes data related to employees, jobs, and other relevant information (Babiker, 2023, p. 39).

Process: It involves operational activities such as analytical and statistical calculations that transform inputs into clear and easy-to-understand information, facilitating effective human resources management (Ali, 2023, p. 127).

Output: The result of performing transformational operations on input data (Ali, 2023, p. 127).

Feedback: Enhances the control of the human element and allows for tracking changes in personnel procedures. It also addresses problems hindering the system's effective use, contributing to overall performance improvement (Ali, 2023, p. 127).

Control: This element is responsible for monitoring and controlling the progress of the steps, alerting when any malfunction, vulnerability, or errors occur in the program engines or data usage (Gottschalk, 2007, p. 27).

Memory: It acts as the container for storing the system's outputs and inputs, serving as the system's memory (Ahmed, 2023, p. 135).

Second: The concept of knowledge and knowledge management

The concept of knowledge:

Knowledge represents a set of structured and understandable information used to solve specific problems or applied in real-world scenarios. It encompasses both tacit and explicit knowledge, which individuals leverage to enhance business performance or make informed decisions (Al-Kubaisi, 2005, p. 46). Knowledge is often defined as the combination of information, experience, and understanding, making it a key factor in individuals' and organizations' success (Al-Najjar, 2010, p. 48).

Knowledge Management Concept:

Knowledge management refers to the organizational process of collecting information from internal and external sources, analyzing and interpreting it, and deriving indicators and semantics used to guide and enrich processes. Its goal is to enhance organizational performance by measuring past performance, comparing it with competitors, making strategic decisions, and adapting to changes in the competitive environment (Refaiy, 2011, p. 247-263). It can also be defined as a process involving identifying, collecting, retrieving, storing, disseminating, and implementing activities aimed at achieving organizational goals, thereby enabling the organization to better value its outputs (Amin, 2020, p. 235).

Elements of knowledge management:

Many researchers identify strategy, people, and technology as the basic elements of knowledge management. These elements interact to transform information from external sources into knowledge, processes, and structures that produce goods and services. The nature and need for knowledge are influenced by the interaction of these elements (Technical, 2021, p. 1142).

Strategy: It represents the organization's long-term vision to face threats and opportunities, considering internal and external strengths and weaknesses to achieve its goals (Technical, 2021, p. 1142).

Human Resources: This element forms the foundation for transferring individual knowledge to organizational knowledge. Individuals play a critical role in knowledge management processes, contributing to transforming information into valuable knowledge for organizational tasks (Jad, 2014, p. 3).

Technology: It plays a vital role in knowledge management, facilitating knowledge generation, acquisition, dissemination, and retention. Various technological applications, including document processing, decision support systems, expert systems, and the internet, contribute to efficient knowledge management (Mohammed, 2015, p. 30).

Third: Previous Studies

- Studies related to knowledge management processes:

Yahyaoui, Naima (2017) conducted a study titled "The Role of Knowledge Management Operations in Developing and Building Creative Leadership: A Case

Study." The research explored knowledge management and its applications, with a focus on challenges related to achieving creativity in various fields. The study used a case study approach, supported by a questionnaire distributed to a sample of employees, to investigate the relationship between knowledge management processes and creative leadership. The results showed a statistically significant relationship between knowledge management processes and creative leadership.

Al-Nuaimi, Salah Abdul Qader, and Atheeb, Amer Fadous (2016) conducted a study titled "The Role of Knowledge Management Operations in Innovative Marketing: An Analytical Research of a Sample of Managers of the State Company for the Manufacture of Vegetable Oils." The research aimed to measure the impact of knowledge management processes on innovative marketing and diagnose the reality of knowledge management processes in achieving innovative marketing dimensions. The results indicated the company's interest in adopting knowledge management processes to achieve its goals.

In addition, Sharif, Omar, and Life, Lunar (2016) conducted a study titled "The Role of Knowledge Management Operations in Achieving Sustainable Competitive Advantage: A Field Study at Saidal Pharmaceutical Complex." The research aimed to identify the role of knowledge management processes in sustaining the competitive advantage of Saidal Pharmaceutical Complex. The results showed a positive relationship and impact between knowledge management processes and sustainable competitive advantage.

- Studies related to the human resources information system

The study by Al-Roussan and Al-Amoush (2013) aimed to assess the Human Resources Information System's role in organizational loyalty in the Jordanian hotel sector. The researchers used questionnaires to collect data from personnel responsible for HR management in Jordanian hotels. The study found a statistically significant relationship between the HRIS and organizational loyalty, highlighting deficiencies in aspects related to determining wages, salaries, and bonuses due to insufficient information.

The study by Angular, Tommy, and Miloud (2015) focuses on the role of HRIS in human resources training, particularly in organizations operating in constantly changing environments. It emphasizes the need for organizations to keep up with technological and knowledge-related developments to maintain a competitive advantage. The study aims to investigate the relationship between knowledge management processes and HRIS, especially in the fast-paced service sector, including the University of Tabuk. The research aims to identify key aspects related to HRIS and its determinants, as well as explore knowledge and knowledge management concepts in alignment with administrative work.

RESEARCH METHODOLOGY:

First: Research Procedures

The study used a descriptive, analytical, and inductive approach to explore the subject. It described the phenomenon, analyzed questionnaire data, and drew logical inferences. It referenced primary sources and scientific research to support its analysis.

II. Research Methods

- Population and Sample of the Study

The study's population comprised faculty members and administrative staff at the University of Tabuk. Two hundred questionnaires were distributed among the participants, out of which 152 were valid and used for data analysis.

- Study Variables

Table 1: Study Variables

Study Variables	University of Tabuk
Dependent Variable	Knowledge Management
Independent Variable	Effective HR Information Systems

The table illustrates the study variables, with the HR information system representing the independent variable and knowledge management serving as the dependent variable at the University of Tabuk.

- Research Tools

1. Statistical Tools Utilized

In order to address the research questions and validate the hypotheses, the study employed various descriptive statistical methods. The data was coded and entered into the computer using the Statistical Package for the Social Sciences (SPSS) version 22. The questionnaire data was first exported to Excel and then transferred directly to SPSS. The following statistical tools were utilized to achieve the study objectives:

- Descriptive Statistics: This involved using measures such as arithmetic mean and standard deviations to describe the study sample, revealing its characteristics, and organizing the variables in descending order.
- Spearman Correlation Matrix: This method was employed to examine the correlations between independent and dependent variables in the study.
- Multiple Regression Analysis: To test the validity of the study model and assess the impact of independent variables on the dependent variable (knowledge management processes), multiple regression analysis was performed.
- Analysis of Variance (ANOVA): Specifically, One Way ANOVA was employed to assess the effects of independent variables on the dependent variable.

2. Data Collection Tools

The primary data collection instrument utilized in the study was a questionnaire. It aimed to evaluate the effectiveness of the human resources information system

and the efficiency of knowledge management at the University of Tabuk. The questionnaire was structured into three sections:

Section I: Personal Information - This section gathered demographic data from the respondents.

Section II: Human Resources Management Information Systems Dimensions - In this section, respondents were asked about various dimensions related to human resources management information systems.

Section III: Knowledge Management Processes - The third section focused on assessing different aspects of knowledge management processes.

Within Sections II and III, the Licart scale (5 degrees) was employed based on previous studies. The "Licart pentathlon" scale was utilized, and the weighted arithmetic mean range for each level was determined as follows in Table (2)

Table 2: displays the weighted arithmetic mean range for each level on the Licart scale:

Weighted arithmetic mean range	Corresponding level
1 to 1.79	Very little
1.8 to 2.59	A little
2.6 to 3.39	medium
3.4 to 4.19	High
4.2 to 5	Very high

- Validity and Reliability of the Questionnaire

Several tests were conducted on the questionnaire to ensure its validity and stability. This included the review of the questionnaire by subject matter experts to assess its appropriateness. Additionally, honesty and stability were verified through necessary tests. The stability of the instrument was confirmed using the Cronbach alpha coefficient, which indicated a correlation coefficient of 98.2% at the University of Tabuk, as demonstrated in Table (3) below. This high value indicates excellent stability, ensuring that the resolution's results remain consistent when applied to individuals.

Table 3: Stability Coefficients at the University of Tabuk Using Alpha Cronbach Method

Institution	University of Tabuk
Alpha Cronbach Laboratories	98.2%

As evident from the table, the Cronbach alpha coefficient reaches 98.2%, signifying an exceptional level of stability and a high degree of reliability in the resolution's results, even when applied to different individuals.

ANALYSIS AND RESULTS

First: Analysis of Research Results and Hypothesis Testing Study Results and Discussion

Following the field study, data collection, analysis, and subsequent discussions, the study aimed to confirm or refute the hypotheses. The results of the data analysis revealed several noteworthy features that can be illustrated through the following table:

Table 4: Distribution of Sample Members by Gender Variable

Sex	Iteration	Ratio
male	97	63.8%
female	55	36.2%
Total	152	100%

This table reveals the gender distribution within the sample population, indicating that there are 97 males, constituting approximately 83.8% of the total, and 55 females, representing approximately 36.2%. It is worth noting that the percentage difference between the two groups is considerable; however, from our perspective, this variation does not significantly impact the overall study findings.

Table (5): Shows the distribution of sample members by age variable

lifetime	Iteration	Ratio
Less than 30	16	11.8%
30 - 40	81	42.8%
41 -50	21	37.5%
More than 51	34	7.9%
Total	152	100%

This table provides valuable insights into the distribution of participants across different age groups. Notably, the lowest representation is observed in the category aged (30 years), accounting for only (11.8%) of the total sample. Conversely, the highest percentage is attributed to the age group (30-40), making up an impressive (81%) of the participants. This substantial proportion aligns logically with the notion that individuals in this age range are actively engaged in seeking knowledge and professional development.

Table (6): Distribution of respondents by educational level

Fully qualified	Iteration	Ratio
Less than high school	16	10.5%
Bachelor	81	53.3%
Master	21	13.8%
Doctor	34	22.4%
Total	152	100%

The data presented in Table (6) provides clear evidence of the University of Tabuk's strong commitment to enhancing its human resources. A closer

examination of the table reveals that individuals holding a doctorate degree, as indicated by questionnaire respondents, amount to (34), accounting for (22.4%) of the total. Meanwhile, those with a master's degree constitute (21) individuals, representing (13.8%) of the sample. The largest proportion, comprising (81) participants, holds a bachelor's degree, making up (53.3%) of the total.

Interestingly, the lowest percentage is attributed to those with qualifications below a master's degree, totaling (16) individuals and constituting merely (10.5%) of the sample. This significant emphasis on educational qualifications underscores the University of Tabuk's unwavering dedication to fostering a highly skilled and competent workforce.

Second: Analyzing the data contained in the questionnaire according to the study questions

- 1- What role does the Human Resources Information System (HRIS) play in facilitating effective knowledge management at the University of Tabuk?
- 2- What are the advantages of implementing HR information systems at the University of Tabuk, and how do they enhance knowledge management and foster strategic development?
- 3- How can HR information systems facilitate knowledge exchange among employees at the university and cultivate a culture of effective knowledge management across diverse groups?

Regarding to point (1) the Role of Human Resources Information Systems in Enabling Effective Knowledge Management at the University of Tabuk (Q1)

To discern the significance of the Human Resources Information System (HRIS) in fostering effective knowledge management at the University of Tabuk, the study employed the Likert scale, encompassing five dimensions of the HRIS: accuracy/precision, comprehensiveness, timing, speed, flexibility, and relevance.

The subsequent table presents a thorough analysis of the responses pertaining to this independent variable, including the arithmetic mean and standard deviation, in accordance with the **various dimensions** of the HRIS.

- Precision/Accuracy dimension:

Table (7): The arithmetic mean and standard deviation of the accuracy dimension:

figure	Statement	Average	Standard deviation	Level	Order
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1	The information you use about HR is characterized by a high level of accuracy.	4.15	0.84	High	2
2	You can get concise and useful information about human resources.	4.16	0.84	High	1
General average of the accuracy dimension		4.15	0.79	High	-

Based on the data presented in the above table, it is evident that respondents highly appreciate the dimension of accuracy in the Human Resources Information System (HRIS) and its significant role in reducing errors. The arithmetic mean for this dimension was calculated to be (4.15), with a standard deviation of (0.79), indicating a notably high level of agreement with the content of the statements.

Statement No. 2: "You can obtain brief and useful information about human resources" ranked first among the phrases, with an arithmetic mean of (4.16) and a standard deviation of (0.84). This result highlights the system's effectiveness in providing concise and valuable information to users.

Following closely, statement No. 1: "The information you access about human resources is characterized by a high level of precision" received a high average score of (4.15), with a standard deviation of (0.84). This finding emphasizes the HRIS's capability to deliver accurate and reliable information, ensuring a high level of precision.

The data unequivocally demonstrates that the HRIS plays a crucial role in reducing errors and attaining the desired level of accuracy, ultimately contributing to an efficient and effective knowledge management process at the University of Tabuk

- **Comprehensiveness dimension:**

Table 8: The arithmetic mean and standard deviation of the accuracy dimension are shown

figure	Statement	Average	Standard deviation	Level	Order
1	HRIS outputs cover all HR management functions	4.05	0.88	High	2
2	HR information system provides you with the necessary statistics in the different areas you need to make your decisions	4.05	0.90	High	1
Overall average of the Comprehensiveness dimension		4.05	0.82	High	-

Upon analyzing the above table, it becomes evident that the dimension of inclusiveness in the Human Resources Information System (HRIS) holds a high value, as indicated by a general mean of (4.05) and a standard deviation of (0.82). Statement No. 2: "Provides you with the necessary statistics in the different areas you need to make your decisions" emerged as the top-ranking statement, with an arithmetic mean of (4.05) and a standard deviation of (0.90). This finding substantiates the pivotal role of the HRIS in furnishing managers with essential data, facilitating informed decision-making processes.

Following closely, statement No. 1: "The outputs of the human resources information system cover all human resources management functions" attained an arithmetic mean of (4.05) and a standard deviation of (0.88). This observation underscores the comprehensive nature of the HRIS's outputs, encompassing all aspects of human resources management and thereby providing managers with the necessary statistics to guide their decisions effectively.

The data unequivocally demonstrates that the HR information system's inclusiveness and its provision of relevant statistics across various domains significantly contribute to empowering managers in their decision-making processes.

- Timing and speed dimension:

Table 9: presents the arithmetic mean and standard deviation for the timing and speed dimension.:

figure	Statement	Average	Standard deviation	Level	Order
1	HR information can be obtained in as short a time as needed	4.10	0.85	High	2
2	HR information system helps to send information to the right person at the right time and place	4.15	0.87	High	1
Overall average timing distance and speed		4.12	0.81	High	-

Based on the data presented in the above table, it is evident that the dimension of timing and speed in the Human Resources Information System (HRIS) is rated highly, with a general average of (4.12) and a standard deviation of (0.81). This observation confirms the substantial contribution of the HRIS in efficiently delivering information to the appropriate recipients at the right time and place.

Statement No. 2: "Helps the human resources information system to send information to the right person at the right time and place" received an impressive arithmetic mean of (4.15) and a standard deviation of (0.87). This finding

elucidates the HRIS's effectiveness in ensuring timely and accurate delivery of relevant information to the intended recipients.

Following closely, statement No. 1: "Can get HR information in as short time as needed" received a commendable arithmetic mean of (4.10) and a standard deviation of (0.85). This indicates that the HRIS is adept at swiftly providing human resources information, catering to the specific time requirements of users.

- Flexibility Dimension:

Table 10 presents the arithmetic mean and standard deviation for the flexibility dimension.

figure	statement	Average	Standard deviation	Level	Order
1	The information provided by the HRIS is adaptable to the requirements of its beneficiaries.	4.09	0.89	High	4
2	The information provided can be used for a variety of purposes by decision makers.	4.13	0.83	High	3
3	HRIS provides information in several forms (reports, statistics, graphics...)	4.14	0.83	High	1
4	HRIS provides information that can be used by multiple individuals	4.14	0.85	High	2
Overall average of the flexibility dimension		4.12	0.76	High	-

Throughout the analysis of Table 10, it is evident that the flexibility dimension is prominent, with a substantial overall average of (4.12) and a standard deviation of (0.76). This observation indicates that the information provided by the Human Resources Information System (HRIS) adeptly adapts to diverse requirements, showcasing its versatility within the organizational context.

Statement No. 3: "The human resources information system provides information in several forms of reports, statistics, graphics..." emerged as the top-ranking statement, garnering an impressive arithmetic mean of (4.14) and a standard deviation of (0.83). This result emphasizes the high level of approval among the study sample regarding the content of this statement, attesting to the HRIS's capacity to present data in varied and user-friendly formats.

Following closely, statement No. 4: "Provides a human resources information system that can be used by multiple individuals" obtained an equally noteworthy arithmetic mean of (4.14) and a standard deviation of (0.85). This finding reinforces the HRIS's role in accommodating the information needs of various stakeholders within the university.

Statement No. 2: "Information provided can be used for several purposes by decision-makers" also received a commendable arithmetic mean of (4.13) and a standard deviation of (0.83). This indicates that the HRIS delivers data that can be leveraged for diverse decision-making purposes.

Finally, statement No. 1: "The information provided by the human resources information system is characterized by its ability to adapt according to the requirements of its beneficiaries" received a favorable arithmetic mean of (4.09) and a standard deviation of (0.89). This affirms the HRIS's responsiveness to the specific needs and demands of its users.

Table 11: Average Dimensions of the HRIS System

figure	Dimensions	Average	Standard deviation	Level	Order
1	Accuracy	4.15	0.79	High	1
2	Inclusion/ comprehensiveness	4.05	0.82	High	4
3	Timing and speed	4.12	0.81	High	3
4	Flexibility	4.12	0.76	High	2
Overall average of HRIS		4.11	0.73	High	-

Based on the data presented in the above table, it is evident that all dimensions of the Human Resources Information System (HRIS) scored highly, indicating a positive perception and confidence in the system's capabilities at the University of Tabuk.

The accuracy dimension achieved the highest arithmetic mean of (4.15) with a standard deviation of (0.79). This noteworthy result demonstrates that the information provided by the HRIS is characterized by a high degree of precision and reliability, instilling trust among users.

Following closely, the flexibility dimension secured the second-highest position with an arithmetic mean of (4.12) and a standard deviation of (0.76). This outcome highlights the HRIS's adaptability to meet the changing requirements of its beneficiaries, enhancing its value in a dynamic organizational environment.

The timing and speed dimension closely followed with an arithmetic mean of (4.12) and a standard deviation of (0.81). This finding confirms the HRIS's ability to deliver information promptly and efficiently, supporting timely decision-making processes.

Inclusion dimension ranked next with an arithmetic mean of (4.05) and a standard deviation of (0.82). This result signifies that the HRIS provides essential facts required for effective decision-making, underscoring its valuable contribution to the university's operations.

Overall, the positive outlook on the HRIS among educational and administrative staff affirms the first hypothesis, demonstrating a high level of interest in the system at the University of Tabuk. The HRIS's effectiveness in meeting user

needs and fostering a culture of efficient knowledge management has been well-established through the study.

Regarding Point (2): The Reality of Knowledge Management Processes at the University of Tabuk (Q2)

In this section, we delve into the examination of knowledge management processes at the University of Tabuk. The focus is on identifying the benefits of utilizing Human Resources Information Systems (HRIS) at the university and how they contribute to enhancing knowledge management practices and promoting strategic development.

The knowledge management processes encompass several critical aspects, namely knowledge diagnosis, knowledge planning, knowledge modernization, dissemination of knowledge sharing and distribution, generation and acquisition of knowledge, organization of storage and retrieval of knowledge, implementation of knowledge, and follow-up and control of knowledge.

To gain a comprehensive understanding, we present the analysis of the statements related to these knowledge management processes. The data includes the arithmetic mean and standard deviation for each dimension, offering valuable insights into the level of agreement and effectiveness of the HRIS in supporting knowledge management practices at the University of Tabuk.

Knowledge Diagnosis Dimension:

Table 12: presents the arithmetic mean and standard deviation for the knowledge diagnosis process

figure	Ferry	Average	Standard deviation	Level	Order
1	The university has the tools that enable it to discover knowledge.	4.24	0.81	Very high	1
2	The university has the ability to identify its employees who possess knowledge related to its field of activities.	4.13	0.98	High	2
3	The university focuses on diagnosing the types of knowledge required for each of its different levels.	4,07	0.91	High	3
General average of the dimension of knowledge diagnosis		4.14	0.79	High	-

Upon analyzing the above table, it becomes evident that the knowledge diagnosis process holds a prominent position, with a significantly high overall average of (4.14) and a standard deviation of (0.79). This observation highlights the University of Tabuk's commitment to effectively diagnosing knowledge needs and gaps within its organizational framework.

Statement No. 1: "The university has the tools that enable it to discover knowledge" emerged as the top-ranking statement, garnering an impressive arithmetic mean of (4.24) with a standard deviation of (0.81). This result signifies that the University possesses the necessary tools and resources to effectively

uncover and harness knowledge, demonstrating a strong emphasis on knowledge discovery.

Following closely, statement No. 2: "The university has the ability to identify its workers who possess knowledge related to its field of activities" obtained an equally noteworthy arithmetic mean of (4.13) and a standard deviation of (0.98). This finding confirms the University's capability to recognize and leverage the expertise of its workforce in alignment with its specific field of activities.

Statement No. 3: "The university focuses on diagnosing the types of knowledge required for each of its different levels" ranked last with an arithmetic mean of (4.07) and a standard deviation of (0.79). Nevertheless, this still indicates a considerable emphasis on identifying the various types of knowledge required across different levels within the organization.

The majority of averages scoring at a high level reaffirms the University's significant commitment to the knowledge diagnosis process, recognizing its pivotal role as one of the most crucial knowledge management processes. This dedication highlights the University's strategic approach in harnessing and utilizing knowledge effectively to achieve its organizational goals.

• Dimension of the knowledge planning process:

Table 13: Shows the arithmetic mean and standard deviation of the knowledge planning process

figure	statement	Average	Standard deviation	Level	Order
1	The university sets itself goals that help spread knowledge at the university.	4.14	0.86	High	1
2	The university uses multiple methods in building the necessary knowledge in all its units.	4.10	0.90	High	2
3	The university rewards its employees for their efforts to gain new knowledge that supports its activities.	3.85	1.09	High	3
Overall average of the knowledge planning dimension		4.03	0.88	High	-

Based on the data presented in the above table, it is evident that the knowledge planning process holds a significant position, with a notable overall average of (4.03) and a standard deviation of (0.88). This result indicates a high level of importance placed on knowledge planning within the University of Tabuk's organizational framework.

Statement No. 1: "The university sets itself goals that help in spreading knowledge at the university" emerged as the top-ranking statement, achieving an impressive arithmetic mean of (4.14) with a standard deviation of (0.86). This finding highlights the University's strategic approach in establishing clear goals that foster the dissemination of knowledge throughout its academic community.

Following closely, statement No. 2: "The university uses multiple methods in building the necessary knowledge in all its units" obtained an equally commendable arithmetic mean of (4.10) with a standard deviation of (0.90). This result emphasizes the University's commitment to employing diverse approaches to build essential knowledge across various units and departments.

Statement No. 3: "The university rewards its employees for their efforts to gain new knowledge that supports its activities" ranked last with an arithmetic mean of (4.03) and a standard deviation of (0.88). Nevertheless, this still reflects the University's recognition of the value of incentivizing and rewarding employees for their innovative ideas and efforts to acquire new knowledge, which ultimately benefits the University's overall activities.

The high overall average in the knowledge planning process reinforces the University's commitment to developing effective plans that promote knowledge dissemination, utilizing diverse approaches to build knowledge, and encouraging continuous learning among its employees. This strategic focus underscores the University's dedication to fostering a knowledge-driven environment that supports its academic and operational endeavors

●Dimension of the process of updating knowledge:

Table (14): It shows the arithmetic mean and standard deviation of the knowledge update process

figure	Statement	Average	Standard deviation	Level	Order
1	The university is working to update knowledge related to its activities.	4.15	0.85	High	1
2	The university works to refine knowledge in order to achieve efficient use	4.09	0.87	High	2
3	The university forms specialized staff(s) to update the knowledge related to its activities	4.05	0.93	High	3
Overall average of the knowledge update dimension		4.09	0.83	High	-

Based on the data presented in the above table, it is evident that the University of Tabuk places significant importance on the process of updating knowledge, as indicated by the high overall average of (4.15) and a standard deviation of (0.85). This finding highlights the University's strong commitment to continually improving and staying up-to-date with relevant knowledge in its field of activities. Statement No. 1: "The university is working to update knowledge related to its activities" emerged as the top-ranking statement, with an impressive arithmetic mean of (4.15) and a standard deviation of (0.85). This result confirms the University's proactive approach in continuously updating knowledge relevant to its academic and operational domains.

Following closely, statement No. 2: "The university is working to refine knowledge to achieve efficient use" obtained an equally commendable arithmetic mean of (4.09) and a standard deviation of (0.87). This finding indicates the University's dedication to refining knowledge resources, ensuring their efficient and effective utilization across various aspects.

Statement No. 3: "The university is forming specialized staff to update knowledge related to its activities" ranked last, with an arithmetic mean of (4.05) and a standard deviation of (0.93). While this result suggests a slightly lower emphasis on forming specialized staff for updating knowledge, it still indicates the University's recognition of the importance of skilled personnel in maintaining and updating relevant knowledge.

- Dimension of the process of spreading, sharing and distributing knowledge:

Table 15: Shows the arithmetic mean and standard deviation of the process of disseminating, sharing and distributing knowledge.

figure	statement	Average	Standard deviation	Level	Order
1	The university is interested in transferring knowledge related to its activities from multiple sources to its various units.	4.09	0.88	High	3
2	The university uses written and electronic bulletins to disseminate knowledge related to its activities.	4.14	0.92	High	2
3	The university has means of communication to ensure the achievement of professional contacts that disseminate knowledge related to the activities among the employees of the institution at all levels	4.21	0.88	High	1
4	Employees share knowledge through the (work teams) method	4.03	0.96	High	4
Overall average dimension of knowledge dissemination and sharing		4.11	0.82	High	-

Based on the data presented in the above table, the responses from the study sample indicate that the University of Tabuk places significant emphasis on disseminating, sharing, and distributing knowledge as integral components of its knowledge management processes. The general average for this dimension reached (4.11) with a standard deviation of (0.82), signifying a high level of approval among participants regarding the importance of these practices in the University's operations.

Statement No. 3: "The university has means of communication that ensure the achievement of professional communications that spread knowledge related to activities among the employees of the institution at all levels" emerged as the top-

ranking statement, with an impressive arithmetic mean of (4.21) and a standard deviation of (0.88). This finding highlights the University's robust communication channels that facilitate the spread of knowledge among employees at all organizational levels.

Following closely, statement No. 2: "The university uses written and electronic bulletins to disseminate knowledge related to its activities" obtained an equally commendable arithmetic mean of (4.14) and a standard deviation of (0.92). This result emphasizes the University's use of various channels, including written and electronic bulletins, to effectively disseminate knowledge relevant to its activities.

Statement No. 1: "The university is interested in transferring knowledge related to its activities from multiple sources to its different units" achieved an arithmetic mean of (4.09) with a standard deviation of (0.88). This result underscores the University's commitment to transferring knowledge from diverse sources to different units, promoting a comprehensive understanding of various aspects within the organization.

Statement No. 4 ranked last with an arithmetic mean of (4.03) and a standard deviation of (0.96). While this result indicates a slightly lower emphasis on knowledge exchange, it still reveals that the University fosters a culture of knowledge sharing and collaboration among its employees, encouraging an environment where insights and expertise are freely exchanged.

- Dimension of the process of generating and acquiring knowledge.

Table (16): It shows the arithmetic mean and standard deviation of the process of generating and acquiring knowledge

figure	Statement	Average	Standard deviation	Level	Order
1	The university encourages its employees to seek knowledge related to its activities in scientific publications.	4.09	0.99	High	1
2	The university focuses on extracting the knowledge inherent in the minds of its members to benefit from it in the development of the university	4.02	1.06	High	2
3	The staff of the university show positive interaction to transform the knowledge in their minds into clear knowledge that enhances the performance of the university's activities.	4.01	1.20	High	3
Overall average dimension of knowledge generation and acquisition		4.04	0.95	High	-

Based on the data presented in the above table, it is evident that the University of Tabuk places great emphasis on the process of generating and acquiring knowledge. The general average for this dimension is (4.04) with a standard deviation of (0.95), indicating a high level of approval and recognition among the

study sample regarding the importance of these practices in the University's knowledge management endeavors.

Statement No. 1: "The university encourages its workers to search for knowledge related to its activities in scientific publications" emerged as the top-ranking statement, with an impressive arithmetic mean of (4.09) and a standard deviation of (0.99). This finding underscores the University's active encouragement of its employees to seek knowledge from scientific publications, fostering a culture of continuous learning and staying abreast of the latest developments in their field of activities.

Following closely, statement No. 2: "The university focuses on extracting the knowledge inherent in the minds of its members to benefit from it in the development of the university" obtained an equally commendable arithmetic mean of (4.02) and a standard deviation of (1.06). This result highlights the University's proactive approach in recognizing and leveraging the expertise and knowledge possessed by its members to drive the institution's development and growth.

Statement No. 3: "University employees show positive interaction to transform the knowledge in their minds into clear knowledge that enhances the performance of the university's activities" ranked last with an arithmetic mean of (4.01) and a standard deviation of (1.20). Despite the slightly lower score, this statement still indicates the University's commitment to encouraging positive interactions among employees to effectively transform tacit knowledge into explicit knowledge, thereby enhancing the University's overall performance.

- Dimension of the knowledge implementation process

Table (18): It shows the arithmetic mean and standard deviation of the knowledge implementation process

figure	Statement	Average	Standard deviation	Level	Order
1	The university works to transform knowledge into action plans.	4.11	0.95	High	3
2	The university employs knowledge by transforming it into new services.	4.13	0.89	High	2
3	The university uses available knowledge in a way that enhances its performance.	4.19	0.92	High	1
Overall average dimension of knowledge implementation		4.14	0.89	High	-

Based on the data from the table above, we can observe that the University of Tabuk effectively implements knowledge management. The overall average for this dimension is 4.14, with a standard deviation of 0.89. This indicates a high level of consensus on the content of this dimension.

Statement 3, "The university uses available knowledge to enhance its performance," shows the highest average score of 4.19, with a standard deviation of 0.92, making it the most distinctive statement. It is followed by Statement 2,

"The university works to leverage knowledge by transforming it into new services," with an average score of 4.13 and a standard deviation of 0.89. Finally, Statement 1, "The university works to transform knowledge into action plans," has an average score of 4.11 and a standard deviation of 0.95.

This indicates that the University of Tabuk effectively utilizes available knowledge to enhance its performance and works on leveraging this knowledge by transforming it into new services and action plans.

- The dimension of the knowledge follow-up and control process:

Table (19): It shows the arithmetic mean and standard deviation of the knowledge follow-up and control process

figure	Statement	Average	Standard deviation	Level	Order
1	The university administration evaluates the interest of employees in acquiring new knowledge related to its activities.	4.11	0.91	High	1
2	The university monitors the level at which employees apply what they learn in training.	4.05	0,91	High	2
Overall average of the knowledge follow-up dimension		4.08	0.88	High	-

Based on the data presented in the above table, it is evident that the University of Tabuk places significant importance on the process of knowledge follow-up and control. The general average for this dimension is (4.08) with a standard deviation of (0.88), indicating a high level of approval among the study sample regarding the significance of these practices in the University's knowledge management endeavors.

Statement No. 1: "The university administration evaluates the interest of employees in acquiring new knowledge related to its activities" emerged as the top-ranking statement, with an impressive arithmetic mean of (4.11) and a standard deviation of (0.91). This finding highlights the University's commitment to monitoring and evaluating its employees' interest in acquiring new knowledge that aligns with the University's activities and goals.

Statement No. 2: "The university follows the level of application of employees to what they learn in training" obtained an equally commendable arithmetic mean of (4.05) and a standard deviation of (0.91). This result emphasizes the University's proactive approach in monitoring the practical application of knowledge gained through training, ensuring that learning outcomes translate into real-world improvements in employees' performance.

Table 20: Average knowledge management processes

figure	Dimensions	Average	Standard deviation	Level	Order
1	Knowledge Diagnosis Process	4.14	0.79	High	1

2	Knowledge Planning Process	4.03	0.88	High	8
3	Knowledge Update Process	4.09	0.83	High	5
4	The process of disseminating, sharing and disseminating knowledge	4.11	0.82	High	4
5	The process of generating and acquiring knowledge	4.04	0.95	High	7
6	The process of organizing, storing and retrieving knowledge	4.12	0.82	High	3
7	Knowledge Implementation Process	4.14	0.89	High	2
8	Knowledge Pursuit Process	4.08	0.88	High	6
Overall average knowledge management		4.09	0.80	High	-

Based on the data presented in the above table, it is evident that the University of Tabuk demonstrates a positive and high level of engagement in various dimensions of knowledge management. The general average for these dimensions is (4.09) with a standard deviation of (0.80), indicating a strong endorsement and recognition among the study sample regarding the significance of these practices in the University's knowledge management endeavors.

The highest arithmetic mean was observed in the dimension of knowledge diagnosis, with an impressive average of (4.14) and a standard deviation of (0.79). This result underscores the University's dedication to effectively diagnosing and identifying knowledge needs and requirements, setting the foundation for a well-informed knowledge management strategy.

Following closely, the process of implementing knowledge also obtained an equally commendable arithmetic mean of (4.14) and a standard deviation of (0.89). This highlights the University's proactive approach in converting knowledge into action and practical applications, emphasizing the importance of knowledge utilization to drive positive outcomes.

The process of organizing, storing, and retrieving knowledge received a strong endorsement as well, with an arithmetic mean of (4.12) and a standard deviation of (0.82). This result reinforces the University's efficient and organized approach to managing and accessing its knowledge assets for enhanced decision-making and problem-solving.

Likewise, the process of disseminating, sharing, and distributing knowledge received high approval, with an arithmetic mean of (4.11) and a standard deviation of (0.82). This indicates the University's commitment to fostering a collaborative and knowledge-sharing culture, enabling the seamless flow of information and expertise across its organizational units.

The process of updating knowledge also received a positive rating, with an arithmetic mean of (4.09) and a standard deviation of (0.83). This emphasizes the University's emphasis on staying current and relevant by continually refreshing and enhancing its knowledge base.

The process of following up knowledge received a strong endorsement with an arithmetic mean of (4.08) and a standard deviation of (0.88), reflecting the University's proactive approach in monitoring and evaluating the application and effectiveness of knowledge management initiatives.

While the process of generating and acquiring knowledge received a slightly lower score compared to other dimensions, it still obtained a favorable arithmetic mean of (4.04) with a standard deviation of (0.95). This signifies the University's dedication to encouraging knowledge generation and fostering a culture of continuous learning.

Finally, the knowledge planning process received a positive rating, with an arithmetic mean of (4.03) and a standard deviation of (0.88). This result highlights the University's commitment to strategic planning and decision-making, driven by a knowledge-based approach.

Overall, the high average scores in all dimensions of knowledge management demonstrate the University of Tabuk's strong commitment to promoting a culture of knowledge sharing, utilization, and continuous improvement. These findings strongly support the second hypothesis, confirming that the University has a high level of knowledge management processes

Statistical answer to the second question:

- Correlation between study variables:

Table 21: Shows the correlations between the dimensions of the HR information system and knowledge management processes

Dimensions of Human Resources Information Systems			Knowledge Management
Spearman's rho	Flexibility	Correlation Coefficient	.830**
		Sig. (1-tailed)	.000
		N	152
	Inclusion/comprehensiveness	Correlation Coefficient	.794**
		Sig. (1-tailed)	.000
		N	152
	Speed	Correlation Coefficient	**.000
		Sig. (1-tailed)	.000
		N	152
	Accuracy	Correlation Coefficient	.745**
		Sig. (1-tailed)	.000
		N	152

The correlation table presented earlier reveals several noteworthy observations regarding the relationship between the independent variable, HRIS (Human Resources Information System), and the dependent variable, knowledge management, at the University of Tabuk. The majority of correlations observed

are statistically significant and exhibit positive associations between these variables.

Of particular interest is the dimension of flexibility, which demonstrates the highest correlation with knowledge management at an impressive rate of (83%) and a level of significance of (0.000). This finding suggests that the University's emphasis on flexibility in its HRIS plays a crucial role in supporting and enhancing knowledge management practices.

Following closely is the speed dimension, with a correlation of (80%) and a level of significance of (0.000). This highlights the importance of quick and efficient information delivery facilitated by the HRIS in driving effective knowledge management processes.

Additionally, the inclusion dimension exhibits a significant correlation of (79.4%) with a level of significance of (0.000). This indicates that the HRIS's ability to comprehensively cover and include various aspects of human resources management contributes significantly to the overall knowledge management efforts at the University.

Moreover, the accuracy dimension, although slightly lower in correlation compared to the aforementioned dimensions, still demonstrates a substantial positive association of (47.5%) with a level of significance of (0.000). This reinforces the significance of accurate and precise information provided by the HRIS in supporting and enhancing knowledge management practices.

- Linear regression analysis using the method of least squares is a powerful statistical tool to investigate the relationship between variables. In this study, we conducted a linear regression analysis to explore the connection between the independent variable, the human resources information system (HRIS), and the dependent variable, knowledge management. The significance level was set at 0.05 to ensure the statistical validity of the results.

Table 22: Shows the linear correlation between the independent variables and the dependent variable.

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.851	.724	.722		.42412

a. Predictors: (Constant), Independent Variable HRIS

b. Dependent Variable: Dependent Variable Knowledge Management

Based on the data presented, there is a strong positive correlation of 85.1% between the HRIS (independent variable) and knowledge management (dependent variable), indicating a close relationship between the two. The HRIS accurately estimates approximately 72.4% of the variation in knowledge management, highlighting its significant role in explaining and predicting improvements in this area at the University of Tabuk.

However, it's essential to consider that the remaining 27.6% of variation may be influenced by other factors, such as organizational culture, leadership, individual capabilities, and external influences. These additional factors contribute to the overall impact on knowledge management beyond the HRIS. Therefore, while the HRIS is a crucial driver of knowledge management success, other factors also play a role in shaping the overall outcomes.

- Variation of the regression line:

Table 23: Regression line variance analysis

ANOVA

Model	Sum of Squares	Push	Mean Square	F	Sig.
1 Regression	70.837	1	70.837	393.799	Per Month
Residual	26.982	150	.180		
Total	97.819	151			

a. Dependent Variable: Knowledge Management

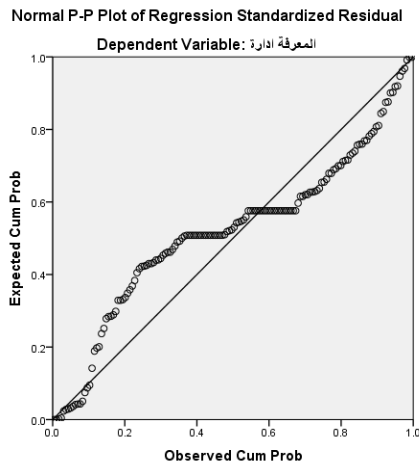
b. Predictors: (Constant), HR Information System

From the data presented in the previous table, we can draw several important conclusions:

- The sum of the squares of regression is calculated to be 70.837, the sum of the squares of the remainders is 26.982, and the total sum of squares is 97.819. These values are crucial in assessing the goodness of fit for the regression line.
- The degrees of freedom for regression is 1, and the degrees of freedom for the residuals is 150. These degrees of freedom are essential in calculating the mean squares for regression and residuals.
- The average regression squares is 70.837, and the residual squares rate is 0.180. These values help in understanding the spread of data around the regression line and the model's effectiveness in explaining the variance in the dependent variable.
- The value of the variance analysis test for the regression line is 393.799. This test evaluates the significance of the regression model and its ability to explain the variance in the dependent variable.
 - The significance level of the test is 0.000, which is significantly lower than the significance level of the null hypothesis (0.5). As a result, we reject the null hypothesis, indicating that the regression line fits the data well.

The regression analysis confirms the statistically significant and reliable relationship between the independent variable (HRIS) and the dependent variable (knowledge management) at the University of Tabuk. The model effectively explains the variations in knowledge management within the organization.

Figure 4 Regression line.



Based on the graphical representation of the data, it is evident that there are no anomalies or issues with the results. The data points are well-distributed along the regression line, and they follow a normal distribution pattern. This normal distribution indicates that the relationship between the independent variable (HRIS) and the dependent variable (knowledge management) is statistically sound and consistent

- Study of regression line coefficients:

The following table shows the values of the regression line coefficients
University of Tabuk

Table 24: Regression line coefficient values

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.282	.195		1.441	.003
HR Information System	.927	.047	.851	19.844	.000

a. Dependent Variable: Knowledge Management

The regression analysis showed that the HRIS has a statistically significant impact on the knowledge management process at the University of Tabuk. For every one-unit improvement in the HRIS, the knowledge management process improves by 0.927 units. These findings highlight the crucial role of HRIS in enhancing knowledge management practices within the organization. Investing in and optimizing the HRIS can yield substantial benefits in knowledge management and

organizational efficiency. The low significance values reinforce the reliability of the regression model, supporting the strong relationship between HRIS and knowledge management outcomes.

The third point is to explore is how human resources information systems can facilitate knowledge exchange among university employees and foster an environment that promotes effective knowledge management within diverse groups (Q3)

- The T-test was conducted to examine the influence of gender on knowledge management, and the results are presented in Table 25.

Table 25: T TEST shows the influence of gender on knowledge management (KM)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
K M	Equal variances assumed	.555	.457	-3.116	150	.002	-.41164	.13210	-.67265	-.15062
	Equal variances not assumed			-3.217	123.293	.002	-.41164	.12795	-.66489	-.15838

Based on the data presented in the table, there are no significant differences in the responses of the study sample regarding knowledge management concerning gender.

- Analysis of Single Variance (One Way ANOVA to test the effects of independent variables on the dependent variable:

Firstly, concerning the age variable, Table 26 displays the results of the single variance analysis, aiming to examine any variations in the average perceptions of knowledge management among the study sample members.

ANOVA

knowledge management

	Sum of Squares	Push	Mean Square	F	Sig.
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Between Groups	3.032	3	1.011	1.578	.197
Within Groups	94.787	148	.640		
Total	97.819	151			

Based on the findings from the previous single variance analysis table, the statistical value for the age variable is (0.197), surpassing the significance level of (0.05). Consequently, no significant statistical relationship exists between the age variable and knowledge management. This indicates that the age variable of the study sample does not have a discernible impact on knowledge management.

- Educational level variable

Table (27): Single variance analysis to study the differences in the average view of the study sample members shows knowledge management

ANOVA

knowledge management

	Sum of Squares	Push	Mean Square	F	Sig.
Between Groups	.570	3	.190	.289	.833
Within Groups	97.249	148	.657		
Total	97.819	151			

The table presents the results of the single variance analysis for the educational level variable, yielding a value of (0.833), which exceeds the significance level of (0.05). Consequently, there is no statistically significant association between the educational level variable and knowledge management. In other words, the educational level of the study sample does not influence knowledge management

Conclusion:

In summary of this study, the following conclusions and recommendations have been drawn:

First, the study reveals that the human resources information system (HRIS) significantly impacts knowledge management operations at Tabuk University. This efficient system plays a vital role in enabling knowledge management and enhancing employee performance by organizing critical data and optimizing essential processes.

Second, Tabuk University demonstrates a strong commitment to the human resources information system, with a particular focus on key aspects such as accuracy, flexibility, timing, and speed. This emphasis highlights the system's importance and its positive influence on knowledge management within the university.

Third, the HRIS proves to be a crucial and effective tool in advancing knowledge management at Tabuk University. Its contributions to improved communication and knowledge exchange positively impact the work environment, fostering continuous improvement and development across the institution.

In light of these findings, the following recommendations are proposed:

Provide clear and comprehensive training mechanisms for staff to effectively utilize the human resources information system and understand its benefits in enhancing the university's overall performance.

The University of Tabuk is encouraged to embrace an ongoing process of enhancing the HRIS and knowledge management practices. Develop mechanisms to foster innovation

and continuous improvement, aiming to enhance the system's performance and effectively achieve the university's objectives.

References:

1. Ahmed, Muhammad Mukhtar Ibrahim, Ibrahim, Mujahid Abdul Qadir Fadl Al-Sayed, and Bashir, Zubaida Ibrahim Omar. (2023). The impact of the management information system on the development of human resources by application to the Bank of Khartoum. *Scientific Journal of Al-Qazm*.
2. Al-Emran, M., Mezhyuev, V., Kamaludin, A., & Shaalan, K. (2018). The impact of knowledge management processes on information systems: A systematic review. *International Journal of Information Management*, 43.
3. Ali, Muhammad al-Bashir al-Badawi, and al-Hadi, Othman Abdullah Muhammad. (2023). The impact of management information systems on the quality of administrative decisions in commercial banks in the localities of Atbara and Al-Damer. *International Journal of Economics and Business*, vol. 13.
4. Al-Kubaisi, Saladin. (2005). Knowledge management and its impact on organizational innovation, Arab Republic of Egypt, Cairo, Arab Administrative Development Organization.
5. Al-Nuaimi, Salah Abdul Qader. Atheeb, Amer Fadous (2016) entitled: The Role of Knowledge Management Operations in Innovative Marketing: An Analytical Research of a Sample of Directors of the State Company for Vegetable Oil Industry, *Journal of Economics and Administrative Sciences*, Volume 22.
6. Al-Najjar, Fayez Jumaa (2010). *Management Information Systems Contemporary Perspective*, Jordan, Amman, Dar Al-Hamid for Publishing and Distribution.
7. Al-Roussan, Mahmoud Ali. Al-Amoush, Muthanna Mohammed (2013) entitled: The Role of the Human Resources Information System in Organizational Loyalty: A Field Study in the Jordanian Hotel Sector, *Journal of the Baghdad College of Economic Sciences*.
8. Amin, Mohamed Amr, Mohamed, Enayat Ibrahim Mohamed, and Rifai, Mamdouh Abdel Aziz Mohamed. (2020). The impact of knowledge management on human resource information systems: a field study on the hotel sector. *Scientific Journal of Economics and Trade*, vol. 2.
9. Angular, Soria, and Tommy, Miloud. (2015). The role of the human resources information system in human resources training. *Economic and Administrative Research*.
10. Artistic, rich. (2021). Knowledge Management: A Study in the Mechanisms and Challenges of Application in the Organization. *Tabna Journal for Academic Scientific Studies*, Volume 4, Volume 3.
11. Babiker, Mehmed the Conqueror Osman. (2023). The impact of management information systems on employee performance: a case study of the Sudanese Mining Company 2016-2021. *Scientific Journal of Al-Qazm*.
12. Hendrickson, R.A., 2003, Human resource information systems backbone: technology of contemporary human resources *Journal of Labor Researc* 24 (3).

13. Gad, Jihan Abdel Rahman. (2014). Knowledge Management? Administrative Development, S. 30.
14. Gottschalk, P. (2007). Knowledge management systems. In Knowledge Management Systems: Value Shop Creation.
15. Martins, V. W. B., Rampasso, I. S., Anholon, R., Quelhas, O. L. G., & Leal Filho, W. (2019). Knowledge management in the context of sustainability: Literature review and opportunities for future research. Journal of cleaner production.
16. Muhammad, Al-Mu'taz Billah Al-Prince. (2013) The Impact of Using Human Resources Information Systems on the Efficiency of Human Resources Management at Taif University, Journal of Contemporary Business Research, Volume 27, Volume 2.
17. Muhammad, Kamal al-Din al-Siddiq. (2015). Knowledge management: and its role in promoting the creativity of business organizations. Money and Economics.
18. Refaiy, Momdouh (2011), the effect of tacit Knowledge characteristics on tacit Knowledge transfer, An empirical study within Egypton industry, the journal of American science. Vol.7, No.1.
19. Sambamurthy, V., & Subramani, M. (2005). Special issue on information technologies and knowledge management. MIS quarterly.
20. Sharif, Omar. Life, lunar. (2016) entitled: The Role of Knowledge Management Operations in Achieving Sustainable Competitive Advantage, A Field Study at Saidal Pharmaceutical Industry Complex, Journal of Industrial Economics.
21. Shawabkeh, Khaled Mahmoud Suleiman, and Najjar, Fayez Juma Saleh. (2013). Knowledge management and its impact on human resources management strategies in Jordanian commercial banks (unpublished doctoral thesis). University of World Islamic Sciences.
22. Yahyaoui, Naima, Shoshan, Siham. (2017) entitled "The Role of Knowledge Management Processes in Developing and Building Creative Leadership: A Case Study. Condor Bordj Bou Arreridj Complex", Journal of Financial, Accounting and Administrative Studies, vol. 7.
23. Zaki, Nevin Samuel. (2023). Management Information System at Ain Shams University in Egypt: An Analytical Study. Journal of Educational Administration, Q10.