

**The rapport of information systems in evaluating the performance of human resources ;Case : Directorate of the National Fund for Social Security for Wage Workers (Tindouf)**

علاقة نظم المعلومات في تقييم أداء الموارد البشرية ، حالة الصندوق الوطني للتأمينات الاجتماعية للعمال الاجراء (تندوف)

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**Abstract:** Through this study, an insight was given about the rapport of information systems in evaluating the performance of human resources by answering questions that represent the problematic of the research, and to answer them, we divided our research into two parts, a theoretical part and the other practical. We first tried to capture the research problem from its theoretical point of view the role of information systems in evaluating the performance of human resources at Directorate of the National Fund for Social Security for Wage Workers (Tindouf), finally we reached we present in the following :The absence of a statistically significant relationship between the unavailability of the human resources information system (the independent variable) and the failure to evaluate the performance of human resources (the dependent variable).Although the institution provides the necessary resources and qualified personnel to establish an effective information system.

**Keys words:** Information System ; Human Resources Information System, Evaluation Process; Performance.

**JEL classification codes:** C67; C87 ;C82 ;P47; C52,H11

**ملخص:** من خلال هذه الدراسة، تم إعطاء نظرة حول علاقة نظم المعلومات بتقييم أداء الموارد البشرية من خلال الإجابة على الأسئلة التي تمثل إشكالية البحث ، وللإجابة عليها ، قمنا بتقسيم بحثنا إلى قسمين ، جزء نظري وجزء نظري. الآخر تطبيقي. حاولنا أولاً الاطاحة باشكالية البحث من وجهتها النظرية فنطرقنا الى دور نظم المعلومات في تقييم أداء الموارد البشرية على مستوى مديرية الصندوق الوطني للتأمينات الاجتماعية للعمال الاجراء (تندوف) ، وأخيراً توصلنا إلى ما يلي : عدم وجود علاقة ذات دلالة إحصائية بين عدم توفر نظام معلومات الموارد البشرية (المتغير المستقل) وال فشل في تقييم أداء الموارد البشرية (المتغير التابع) على الرغم من أن المؤسسة توفر الموارد اللازمة والموظفين المؤهلين لتأسيسها نظام معلومات فعال.

**الكلمات المفتاحية:** نظام المعلومات. نظام معلومات الموارد البشرية ، عملية التقييم ، أداء.

**تصنيف JEL:** C67، C87، C82، P47، C52، H11.

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**1-Introduction**

Information systems in any organization of different types and sizes are the main nerve connecting its activities with each other, in the wake of the challenges in an era characterized by continuous change that imposed the necessity to keep pace with the tremendous technical progress. An information system that allows it to adapt the surrounding environment in order to achieve its goals and link its different parts through the production and transmission of information to those who need it in order to create quality in decisions and options.

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Where there is a group of fields and fields in which information systems are used and in several main and sub-forms, and one of the most important systems that the institution has taken care of in order to increase the effectiveness and efficiency of the human resource and achieve the goals of the ruled institution to raise its level of performance, which undoubtedly contributes to securing organizational goals are systems Human resource information.

Thus, human resources information systems, the subsystem of information systems in general, related to the management of human resources and some activities: recruitment, employment, compensation and salaries, training, qualification, formation, promotion ... provided complementary support to improve performance and raise productivity. Based on the above, the study problem can be summarized to the extent of the contribution of information systems in evaluating the performance of human resources?

### **A. The problematic of the study :**

Based on the above, the study problem can be summarized to the extent of the *contribution of information systems in evaluating the performance of human resources In the National Fund for Social Security for Wage earners, Tindouf branch?* To clarify the problematic , the following sub-questions were asked:

- What is the concept of human resource information systems?
- What is the importance of evaluating the performance of the human resources of the institution?
- What is the role of information systems in the process of evaluating the performance of human resources?

**B. Study hypotheses:** In order to answer the questions, the following hypotheses can be put forward:

*There is a statistically significant effect between the human resources information system and the evaluation of human resources performance.*

### **C. The importance of the study:** lies in the following:

- Highlighting and separating the main and sub-information systems forms and their use in the various functions and tasks of the institutions.
- To emphasize the importance and effectiveness of the process of evaluating the performance of human resources.
- The position of the human resources information system in establishing and controlling the objectivity of evaluating the performance of the human resource.

### **D. Objectives of the study:** are as follows:

- Show how important an information system is and how effective it is in achieving the goals of the individual and the organization together.
- Highlighting the relationship between information systems and its impact on employee performance.
- Measuring and analyzing the impact of developing the process of evaluating the performance of human resources based on the human resources information systems in the National Fund for Social Security for

Wage Workers and its role in evaluating the performance of the human resource.

#### **E. Study curriculum and structure:**

In order to study our topic, we relied on a descriptive approach to study the terms of the study. We also adopted a case study approach based on the tools of collecting and analyzing information on a random sample of workers from the National Fund for Social Security for Wage Workers and the Tindouf Agency to find out the extent of the contribution of information systems to the evaluation of human resources performance.

As for the structure of the study, the study was divided into two axes: First, we point out the most basic concepts about information systems first, then its subsystem for human resources and its role in evaluating the performance of the human resource. Second we drop that on the National Fund for Social Security for wage workers, Tindouf branch.

#### **F. Previous studies**

The first study of Role of Information Systems in Human Resource Management By Marlene Sofia Alves e Silva and Carlos Guilherme da Silva Lima ,which she submitted: May 18th 2017 Reviewed: June 4th 2018 Published: December 21st 2017 about the extended use of information systems has a deep effect in the way HRM is managed nowadays. As a major transformation of human resources (HR) processes and practices within organizations, namely on how they collect, store, use, and share information. that have become more efficient and the impact of this service level improvement allowed a greater involvement of HR in the business strategy.

The second study by Abu Arefin and Sajjad hosain titled , submitted in March 24 ,2019. Published in June 18,2019. the study about of the Role of Human Resource Information System on Organizational Performance: Evidence from Bangladeshi Pharmaceutical Industry ;The study adopts four HRIS applications: Job analysis, recruitment & selection, performance appraisal and communication as independent variables and considers profitability as the dependent variable. Data were collected from 464 respondents who are working as the top HR executives in different pharmaceutical firms in Dhaka and Chittagong cities using convenience sampling method. For testing the relationship between independent and dependent variables, Pearson's correlation coefficient technique; and for testing the validity of hypotheses, linear regression analysis has been used. Results: Results indicate that all the four independent variables have positive and strong relationship with organizational performance supporting most of the previous literatures Originality/value: The findings of this study are expected to be beneficial for HR departments in adopting and understanding the conductive results of HRIS applications at organizations as well as for academicians to study the impact of HRIS further in this area.

## **2- Information systems**

Information systems are considered one of the basic systems in the establishment as they assist senior management in planning, organizing, controlling and decision-making processes. The information system can be likened to the production system with which the raw material deals with to convert it into the final product that is used by the beneficiaries. Information systems use the raw data as inputs and then convert it into information (output) that is used by the beneficiaries or reused again as input to obtain new information. The information system is also defined as: the set of human elements and the mechanism needed to collect and process data for the purpose of converting it into information that helps in making decisions, Lucas defined it as: some of the tangible and intangible units that are used to reduce the degree of uncertainty in the future of events. (RANISAVL & Predrag et al., 2012, pp. 184-188) and the information system receives primary data (inputs), processes it and converts it into information (outputs) that we can benefit from, and the outputs of the system and information are used to make decisions. And the processes of organization and control within the organization. Components of Information system Depending upon the nature of the job work (and also on the frequency of reporting or retrieval), we may need various types of information systems (IS). These information systems (IS) are conventionally classified into following three categories: **Operational level IS, Managerial level IS and Executive level IS.**

In the traditional approach we have, for above purposes, some function-specific information systems (IS) like: (RANISAVL & Predrag et al., 2012)

- Transaction Processing Systems (TPS),
- Management Information System (MIS)
- Executive Information Systems (EIS).

In modern approach, we have :

- Decision Support Systems (DSS),
- Expert Systems, Office Automation System and the like. (Rabi Narayan , Jan 2013)

The main components of information systems are computer hardware and software, telecommunications, databases and data warehouses, human resources, and procedures.: (Anil , 2020)

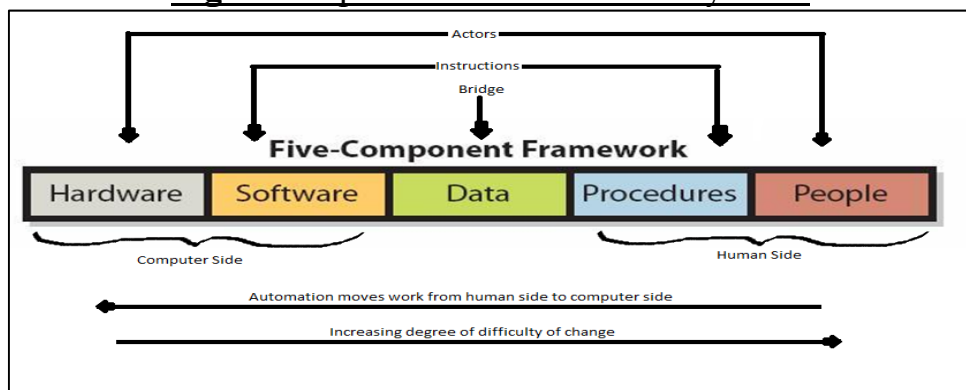
- **Hardware** : It includes all physical devices and material used in information processing. It includes not only machines, such as computers but also all data media, i.e. tangible objects on which data is recorded. Ex : COMPUTER SYSTEM : consist of central processing units containing micro processors and a variety of interconnected devices such as printers , scanners etc. COMPUTER PERIPHERALS: are devices such as keyboard, electronic mouse for the input of data and commands , a video screen or printers for

the output of the information. This is the physical technology that works with information for computer equipment used to perform input, processing, and output activities. (Rudi & Patrice , 2003)

- **Software** : The hardware needs to know what to do, and that is the role of **software with** Computer programs that govern the operation of the computer, It includes all sets of information processing instructions. This generic concept includes not only the sets of operating instructions called programs which direct and control computer hardware but also the set of information processing instruction called procedure that people need. For example: System software , Application software and procedures.
- **Data base** : the data constitute valuable organizational resources. It resulted in variety of changes in modern organization. Under this data can take many forms including traditional numeric data composed of numbers etc. The data resources of information system are typically organized, stored, accessed by a variety of data resource management technologies into: Data base that hold processed and organize data, Knowledge bases that hold knowledge in a variety of forms such as facts.Organized collection of facts and information
- **Procedures** : Strategies, policies, methods, and rules for using a CBIS Electronic transmission of signals for communications and Connect computers and equipment in a building, around the country, and around the world.
- **People resource** : People are the essential ingredient for the successful operation of all information system. It includes end users and IS specialist ,Manage, run, program, and maintain the system

all work together to bring value to an organization. The first three are technology. The last two components, people and processes, separate the idea of information systems from more technical fields, such as computer science.

**Fig.1. Components of information systems**



**Source :** (James & O'Brien, 2011)

The use of information systems to add value to the organization can also give an organization a competitive advantage :

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- Identify the value-added processes in the supply chain and describe the role of information systems within them .
- Identify some of the strategies employed to lower costs or improve service .
- Define the term competitive advantage and discuss how organizations are using information systems to gain such an advantage.
- Define the types of roles, functions, and careers available in information systems.

Information systems have other strategic roles to play: (Mahfouz & and others, 2004, p. 278)

- **Participation in the formulation of the strategic vision in the organization:** Information systems work to support in making the strategic vision clear, comprehensive and simple, and to achieve the highest possible participation in the process of formulating the vision.
- **Supporting the process of formulating the organization's mission:** This is done by identifying the types of basic business activities, providing information on the markets targeted by the organization, as well as analyzing the strategic competitive advantages.
- **Formulating the organization's strategic objectives:** This is done by assisting organizations in pairing internal strengths and weaknesses with opportunities and threats in the external environment, whether present or anticipated in the future.
- **Supporting the process of differentiation between strategic alternatives:** Information systems provide valuable and comprehensive quality information that helps the organization to make a comparison between strategic alternatives and choose strategic actions that fit the organization's potential and its competitive position in the markets involved in it.
- **Achieving strategic competitive advantage:** This is done by providing information and good characteristics about the forces of competition.

### 3- Human resources information systems :

The human resource information system has many importance and objectives, and it also achieves many advantages and requirements for the success of this system.

There have been many definitions for many researchers, and we will deal with some of them

- **First definition:** Kovach sees human resource information systems as : a systematic procedure for collecting, storing, maintaining, retrieving and verifying the validity of the information required of the organization regarding

its human resources, the activities they perform and the characteristics of the organizational unit. (Adel & Saeed , 2006, p. 266).

- **The second definition:** It is a system designed to carry out the human resource function and strive to provide managers with information to make decisions related to the efficient and effective use of the human element and raising the level of its performance in achieving the objectives of the institution. (Kovach, cathcart, & charles, 1999, p. 272)

- **The third definition:** The human resource information system is a group of components that operate in a regular and interactive manner, including collecting, storing, analyzing and retrieving data and information related to human resources, managing and preparing them for the beneficiaries of managers and decision makers, to assist them in making decisions in the field of resource planning. Humanity, its recruitment, appointment, compensation, training, development, and evaluation of its performance efficiently and effectively. (Mahmoud Ali & Muthanna Muhammad , 2013, p. 230)

The main objective of the human resources information system is to achieve the requirements of human resources management and other departments and agencies within and outside the organization of appropriate information in terms of accuracy, timeliness and timeliness to enable them to take the right decisions.

Human resource information systems achieve many goals, including: (Prakash, Naveen, Prakash, & Deepika, 2020)

- Preparation of competitive plans and strategies for the enterprise;
- Forecasting and analyzing human resource needs;
- career path planning and promotion paths;
- Preparing reports on human resource management;
- Supporting the daily activities of the human resources department, such as recording working hours and absence.

Among its goals we also mention:

- Achieving integration and coordination between the various human resource management activities, and it also helps to achieve integration between the human resource function and various other functions.
- Reducing the handling of manual records and paper transactions.

#### **4- Process of evaluating the performance of human resources :**

The process of evaluating the performance of human resources is considered one of the most important functions of human resources management, as it is considered one of the important processes at all levels of the organization. This process results in many decisions in the field of people's affairs, which means measuring the efficiency of workers, their competence, their achievements and their behavior in their current work to identify the extent of their ability Carrying out their current responsibilities and their willingness to imitate us casting the highest future (Yousef & and others, 2006, p. 22). It

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provides performance appraisal rich, clear, objective and correct information about the performance of human resources, which are used to achieve the objectives expected from behind the performance appraisal: (Robert D & Dorothy E, 2014)

Directing and guiding the workers through the feedback.

- Incentive bonus disbursement.
- Upgrade and transfer.
- Termination of service or reduction in duties, activity, or responsibilities.
- Discovering the potential capabilities and energies of workers.
- Planning career progression path.
- Planning human resources to develop them.
- Defining and preparing training programs to develop employees' competence.
- To develop internal communications and cooperation among the members of the organization.
- Counseling and performance measurement is an indicator of the testing, selection and appointment processes in the organization.

It should also be noted that many economists and researchers who have been exposed to the objectives, importance, uses and benefits of the results of performance appraisal differed in naming and classification, but they are all focused on serving and in the interest of developing and promoting performance in organizations.

The methods of evaluating the performance of human resources are divided into two parts: the performance evaluation section by traditional or subjective methods due to its reliance on personal judgment, and the department of performance evaluation by modern or objective methods in which the matter has been corrected to avoid the errors of traditional methods.

**4-1 Performance evaluation by traditional “subjective” methods:**

This method includes the judgment of the immediate superior of an individual on his performance in the evaluation process. It focuses on quantitative aspects and uses purely financial criteria and indicators as well as attention to individual performance. It includes:

- **Ranking method:** The superior arranges the subordinates in descending order according to the general level of performance and contributions of individuals, from best to worst.
- **Double comparison method:** In this way, the two workers are evaluated by comparing each one of them with the others in an even comparison, and the number of times the individual is chosen is the number on the basis of which the rank he represents among the members of the subject of evaluation is determined.



- **Compulsory distribution method:** according to this method, the president is asked to place the group of employees to be evaluated in different groups in terms of the degree or level of the evaluation.
- **Graduation method:** According to this method, classifications are made for working individuals, as each classification represents a certain degree of performance. There may be three classifications, as follows: satisfactory performance, unsatisfactory performance, and outstanding performance.

Despite the simplicity of this traditional method, and its adoption by most organizations, it suffers from some problems, such as influencing the behavior and personality of the evaluator, and the lack of impartiality in addition to the fact that his tools are no longer able to give a clear and integrated picture regarding performance. "This necessitated the adoption of modern methods based on The opinion of everyone in a manner consistent with the surrounding environment, and ensures the objectivity of decisions, with the aim of increasing the effectiveness of human resources.

**4-2 Evaluating performance by modern "objective" methods** It includes:

- **Management by objectives method:** "Management by objectives is called by several terms such as: management by results, results management, work planning, performance management and audit programs.
- **Critical events method:** which means monitoring important accidents, whether good or bad, and the critical event means that part of the individual's behavior that is a specific sign of his success or failure, or an indicator of his good or short performance.
- **The compulsory choice method:** This method is based on the collection of a large number of expressions describing the performance of the individual, and these phrases are distributed on learned aspects and desirable aspects.

### **5- Study structure and the tools used:**

We primarily relied on the questionnaire to collect primary data as a main research tool, and then relied on observation in order to support the results of the questionnaire analysis, and the content of the questions asked in the questionnaire aimed at knowing the role of an information system in evaluating the performance of human resources, and the questionnaire was designed as follows:

- A. **The first part:** relates to the primary information of the sample members, which are gender, age, educational qualification, years of experience.
- B. **The second part:** It relates to the subject of the study and was divided according to the variables of the study into three axes:
  - **The first axis:** It includes 6 phrases, all related to the human information systems in the National Fund for Social Security and the Tindouf Agency (as an independent variable), which includes

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all of the equipment and methods used, work requests, insurance and application programs for wages and salaries using the automated system, as the main dimensions of this Independent variable.

- **The second axis:** It includes 6 phrases all related to performance evaluation (as a dependent variable), which includes both performance evaluation for achieving goals and performance evaluation for the purpose of distributing reward and incentives, as key dimensions for this dependent variable.
- **The third axis:** It includes 6 phrases, all of which relate to the contribution of an information system to the process of evaluating the performance of human resources, which complement the relationship between the two variables.

We also relied on the five-gradient Likart scale in the design of the questionnaire, as this scale is considered one of the most common scales because it is easy to prepare and apply, and it gives the individuals under study the freedom to define their opinions, which emphasizes the distinction between the strength of the individual's compatibility with the choice or phrase and determining levels From a strong positive-direct relationship to a strong negative-inverse relationship, and the degrees of the five-point Likart scale can be explained through the following table:

**Table 1. Ladder Likart scale**

Response	Not Strongly Agree	Not Agree	Neutral	Agree	Strongly Agree
Degree of response	1	2	3	4	5

**Source :** Prepared by the researcher

We worked on unpacking and analyzing the questionnaire through the Statistical Package for Social Social Sciences, which is known as SPSS (version64), which is one of the most important ready-made statistical programs in the world, and using statistical tests in order to reach or deny statistical significance by discovering its truth. It appears when conducting the comparison process between the results obtained with the help of Excel 2010 in terms of figures, and thus achieving the goal of the study, which is to reach adequate conclusions about the subject of the study and these statistical treatments are as follows:

- Calculate the frequencies and percentages to describe the study sample.
- Calculating the arithmetic mean from the measures of central tendency to determine the level of response of the sample members to the study variables and their analysis, and the standard deviation from the measures of dispersion is used to diagnose the extent or degree of dispersion of the actual response values from their arithmetic mean, noting that it is also useful in arranging the statements according to the arithmetic mean in favor of the least dispersion when Equals the arithmetic mean.

- Cronbach Alpha to measure the reliability of the questionnaire. The value of the Cronbach alpha parameter was estimated at (0.638) (63.8%), which is a high percentage that exceeds the minimum (60%), which explains the high credibility of the results obtained.
- Pearson correlation coefficient in order to identify the degree of correlation between the independent and dependent variables and between the degree of each of the expressions of each axis and the total score of all the expressions of this axis to which they belong, and to compare the calculated level of significance with the approved level of significant significance = 0.05 =  $\alpha$ .

And to find out the extent of compatibility of the theoretical side with the practical reality, we took a random sample from the population under study to express their opinion on the subject. Therefore, this study was conducted on a sample of 50 workers, i.e. 58.13% (out of 86 workers).

So that 50 printed, non-electronic, questionnaires were distributed to the targeted study sample, and the study sample size is shown in Table 02-03, where 48 questionnaires were retrieved at a rate of 96%, and after reviewing the questionnaires and checking the answers, 45 valid questionnaires were accepted for the analysis process and excluded the questionnaire. One is because it did not meet the required conditions, and therefore the percentage of employees' response (analyzable forms) was estimated at 90%, which is a very acceptable percentage for statistical analysis.

**6. RESULTS :**

**6.1 Statistical description of the study sample:**

**A. Analysis of the phrases of the first axis.**

The results of the terms of the first axis can be summarized in the following tables:

**Table 2.** The arithmetic mean and standard deviation of the expressions of the first axis: *human resources information system*.

N°	The statement	SMA	standard deviation	Relative importance	The orientation of the sample
1.	The institution provides the equipment, methods used, and cadres to connect all parties related to work and the worker.	1,24	0.189	<b>6</b>	<b>Agree</b>
2.	The organization receives work requests and is keen to process them using information systems and applications.	1,51	0.665	<b>5</b>	<b>Agree</b>
3.	Securing the organization on the technical structure to design the career path for employees after they are appointed in a data system.	1,53	0.527	<b>4</b>	<b>Agree</b>
4.	The organization has databases for personnel processing, job description forms and cards, and performance appraisal.	1,55	0.662	<b>3</b>	<b>Agree</b>

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5.	The organization uses wages and salaries application programs using an automated system.	1,64	0.598	2	Agree
6.	The organization trains supervisors and managers to use an information system.	2,37	1.331	1	Neutral
The arithmetic mean and standard deviation (general)		1.64	0.363	Agree	

**Source:** Depending on the output of SPSS version 22.

**Table 2** refers to the human resources information system in the Social Security Corporation for the Insurance of Wage Workers in the State of Tindouf according to the answers of the members of the study sample, where the arithmetic averages of the terms of this axis ranged from [1.24, 2.37] with standard deviations ranging between [0.189] , 1.331], statement 6 was ranked first among the statements that stated “the institution trains supervisors and managers to use an information system” with an arithmetic mean of (2.37) and a standard deviation equal to (1.331), that is, with a “neutral” acceptance level, which indicates that the institution does not It trains supervisors and managers to use an information system.

This indicates that the institution, while statement 1 received the last rank of relative importance, with an arithmetic mean of (1.24) and a standard deviation equal to (0.189), that is, the level of acceptance of "agree", which stipulated << The institution provides the equipment, methods used, and cadres to connect all parties Which has to do with work and the worker >>, which indicates that the institution provides the necessary resources sufficient to establish an effective information system, with the presence of specialized individuals qualified for this work.

In general, the HRIS axis ranked third compared to the other axes of the questionnaire, and according to the Likart scale of the general arithmetic mean, the degree of approval came according to the answers of the study sample individuals with an arithmetic mean of (1.64) and a standard deviation. The amount of (0.363),), and this can be explained by the fact that the institution has the basic elements that make up the information system, including computer hardware and software, the information network and the database, in addition to the human element used for the system. The outputs of the human resources information system also contribute to the wage and salary administration function.

**B. Analysis of the phrases of the second axis..**

The results of the terms of the second axis can be précised in the following tables:

**Table 3.** The arithmetic mean and standard deviation of the expressions of the second axis: *the performance of human resource.*

N°	The statement	SMA	standard deviation	Relative importance	The orientation of the sample
1.	The direct supervisor or manager shall be responsible for clarifying the job's powers and the evaluation criteria to which he is subject in advance. - The timing of the evaluation is weekly, quarterly, annually or monthly, according to the institution's policy. - An evaluation tool by referring to performance evaluation indicators or with a personal view on the worker's performance. - The result of the evaluation formally according to the institution's model, or without your	2,11	2,146	<b>2</b>	<b>Agree</b>
2.	knowledge of it (informal evaluation). Performance is evaluated in order to achieve the institution's objectives.	1,51	0.619	<b>6</b>	<b>Agree</b>
3.	Performance is evaluated for the purpose of equitable distribution of rewards and incentives (financial, promotion, training ...).	1,73	0.836	<b>4</b>	<b>Agree</b>
4.	Performance is evaluated to improve performance and increase its effectiveness. Evaluations are reviewed based on their results without referring to the employee (high, low, average performance).	1,60	0.836	<b>5</b>	<b>Agree</b>
5.	Evaluations are reviewed based on their results without referring to the employee (high, low, average performance).	1,82	1.195	<b>3</b>	<b>Agree</b>
6.	The evaluations are reviewed based on the employee's comments that have been evaluated (objection to the result, recommendation, ...).	2.28	1.710	<b>1</b>	<b>Agree</b>
The arithmetic mean and standard deviation (general)		<b>1.84</b>	<b>0.519</b>	<b>Agree</b>	

**Source:** Depending on the output of SPSS version 22.

**Table 3.** refers to evaluating the performance of human resources according to the answers of the individuals of the study sample, where the arithmetic averages of the statements of this axis ranged between [1.51, 2.28] with standard deviations ranging between [0.619, 2,146], where

The statement was ranked first in terms of relative importance, the statement 12 which stated: "The evaluations are reviewed based on the observations of the evaluated employee (objection to the result, recommendation, ...)", with an arithmetic average of (2.28), meaning the level of acceptance of "agree", which Indicates a review of the employees' observations that have been evaluated, while the eighth statement ranked last in terms of relative importance with an arithmetic average of (1.51), that is, the level of acceptance of "agree" which stated << Performance is evaluated in order to achieve the objectives of the

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organization >>, according to the answers The sample members say that performance is evaluated in order to pursue the goals of the institution.

In general, the performance evaluation in the institution was ranked 2 compared to the other axes of the questionnaire, and it came according to the five-year Likart scale, the average of my general arithmetic, the degree of acceptance, "completely agree" and that according to the answers of the study sample individuals with an arithmetic mean of (1.84) and a standard deviation of (0.519), and through a personal interview with the head of the Human Resources Department in evaluating the performance of human resources, this can be interpreted as having a great interest in evaluating the performance of employees and that the main goal of evaluating the performance of employees is to improve the performance of the institution and its development and this is through the workers' competition for the points awarded by the president Interest to do their business efficiently and effectively.

**C. Analysis of the phrases of the second axis..**

The results of the terms of the third axis can be précised in the following tables:

**Table 4.** The arithmetic mean and standard deviation of the expressions of the third axis: *the contribution of an information system to the process of evaluating the performance of human resources.*

N°	The statement	SMA	standard deviation	Relative importance	The orientation of the sample
1.	In providing accurate, clear, comprehensive and sufficient information on the progress of work and the worker and analyzing the needs with the lowest cost, effort and time.	1,62	1,013	5	Agree
2.	In proving the level of qualification required by the position of work in the institution, including the preparation and implementation of the specified schedule budget.	1,48	0,437	6	Agree
3.	In his contribution to job analysis (meaning: employment planning   recruitment and selection, evaluation, salary determination) from the start of the business relationship to its end.	1,82	1,059	4	Agree
4.	In the availability and arrangement of similar or peer job positions according to the performance indicators used in the organization.	1,97	1,477	2	Agree
5.	Ensure that job satisfaction is measured based on the approved annual employment plan and good communication between administrative levels in order to reduce the volume of work-related problems.	1,97	1,386	3	Agree
6.	Submit reports to analyze differences, forecasts and assumptions as needed	2,20	1,845	1	Agree
The arithmetic mean and standard deviation (general)		1.85	0.66	Agree	

**Source:** Depending on the output of SPSS version 22.

**Table 4.** indicates the contribution of an information system to the process of evaluating the performance of human resources at the Social Security

Corporation to insure workers for the state of Tindouf according to the answers of the study sample individuals, where the arithmetic averages of the terms of this axis ranged between [1.48, 2.20] with standard deviations ranging between [0.437, 1,845], and the seventeenth statement was ranked first in terms of relative importance, which stated << Submit reports to analyze differences, forecasts and assumptions as needed >>, with an arithmetic average of (2.20), meaning the level of acceptance of "agree", this indicates The information provided by the system on performance evaluation helps to predict the probabilities of the crisis for the success of the individual in his current job or in jobs greater than it and to provide the inputs to the crisis to identify effective training needs by identifying the strengths and weaknesses in the performance of individuals, while the fourteenth statement was ranked last in terms of importance The ratio with an arithmetic average of (1.48), that is, the level of acceptance of "agree" which stipulated "in proving the level of qualification required by the position of work in the institution, including the preparation and implementation of the specified schedule budget." According to the responses of the study sample individuals, an information system in evaluating the performance of human resources contributes to proving the level of qualification required by the position of work in the institution.

In general, the third axis ranked first compared to the other axes of the questionnaire, and according to the five-year Likart scale, the degree of approval came as "completely agreed", according to the answers of the study sample individuals with an arithmetic mean of (1.48) and a standard deviation of (0.437). This can be explained by the fact that an information system with its applications provides accurate information about the performance standards for each job and the level of individual performance and what it possesses of high analytical capabilities. We extract the results from a huge set of information about workers and their level of performance. In order for an information system to function efficiently, workers should be provided to operate these systems. Also, the use of an information system reduces potential errors in the process of evaluating the performance of employees in the organization.

The third requirement: the correlation and influence of personal variables on the study axes

### **6.2 Analysis and results of the correlation coefficient between the personality variables and the study axes.**

The following is a presentation of the analyzes and results of the correlation coefficient between the personal variables, the first axis (human resources information systems), the second axis (performance evaluation) and the third axis (the contribution of information systems to evaluating the performance of human resources) of the National Fund for Social Insurance, Tindouf Agency.

#### **A. Analysis and results of the correlation coefficient between the personal variables and the first axis.**

**Table 5.** Results of the correlation coefficient between personal variables with the first axis.

Axis 01		years of work in the institution		Educational level		Age		Sex		
Pearson coefficient	level of significance	Pearson coefficient	level of significance	Pearson coefficient	level of significance	Pearson coefficient	level of significance	Pearson coefficient	level of significance	
-*0.315	0.035	-*0.376	0.011	0.122	0.423	-0.061	0.690	1		Sex
0.022	0.885	**0.480	0.001	0.422	0.123	1		0.690	-0.061	Age
-0.205	0.112	-0.205	0.177	1		-0.123	0.422	0.122	0.423	Education level
0.087	0.571	1		-0.205	0.177	0.001	**0.480	-*0.376	0.011	years of work in the institution
1		0.087	0.571	-0.240	0.112	0.022	0.885	-0.035	0.315	Axis 01

**Source:** Depending on the output of SPSS version 22.

We note from **Table .5** the following:

- The value of the Pearson correlation coefficient between gender and the first axis (human resources information systems) is equal to 0.315 \* - at a significance level of 0.035 greater than 0.05, which indicates that there is no statistically significant relationship between gender and human resources information systems in the National Fund for Social Insurance, Tindouf Agency.
- The value of the correlation coefficient between age and the first axis (human resources information systems) is equal to 0.022 at the significance level of 0.885 and it is greater than 0.05, which indicates that there is no statistically significant relationship between age and the human resources information systems of the National Fund for Social Insurance, Tindouf Agency.
- The value of the correlation coefficient between the level of education and the first axis (human resources information systems) is equal to 0.205 - at the level of significance 0.112 and it is greater than 0.05, which indicates that there is no statistically significant relationship between the educational level and the human resources information systems of the National Fund for Social Insurance Agency. Tindouf.



- The value of the correlation coefficient between the number of years of work in the institution and the first axis (human resources information systems) is equal to 0.087 at the level of significance 0.571 and is greater than 0.05, which indicates that there is no statistically significant relationship between the number of years of work in the institution and the human resources information systems of the National Fund Social Insurance Agency Tindouf.

**B. Analysis and results of the correlation coefficient between between the personality variables and the second axis.**

**Table 6.** Results of the correlation coefficient between personal variables with the second axis.

Axis 02		years of work in the institution		Educational level		Age		Sex		
Pearson coefficient	level of significance	Pearson coefficient	level of significance	Pearson coefficient	level of significance	Pearson coefficient	level of significance	Pearson coefficient	level of significance	
0.032	0.834	-.376	0.011	0.122	0.423	-0.061	0.690	1		Sex
-0.245	0.105	-.480	0.001	-0.123	0.422	1		-0.061	0.690	Age
0.192	0.207	-0.205	0.177	1		-0.123	0.422	0.122	0.423	Educational level
-0.030	0.843	1		-0.205	0.177	-.480	0.001	-.376	0.011	years of work in the institution
1		-0.030	0.843	0.192	0.207	-0.245	0.105	0.032	0.834	Axis 02

**Source:** Depending on the output of SPSS version 22.

We note from **Table 06** the following:

- The value of the Pearson correlation coefficient between gender and the second axis (performance evaluation) is equal to 0.032 at a significance level of 0.834 and is greater than 0.05, indicating that there is no statistically significant relationship between gender and the performance evaluation of the National Fund for Social Insurance and the Tindouf Agency.
- The value of the Pearson correlation coefficient between age and the second axis (performance evaluation) is equal to - 0.245 at a significance level of 0.105 and it is greater than 0.05, indicating that there is no statistically significant relationship between age and

performance evaluation of the National Fund for Social Insurance and the Tindouf Agency.

- The value of the Pearson correlation coefficient between the educational level and the second axis (performance evaluation) is equal to 0.192 at the significance level of 0.207 and is greater than 0.05, which indicates that there is no statistically significant relationship between the educational level and the performance evaluation of the National Fund for Social Insurance and the Tindouf Agency.
- The value of the Pearson correlation coefficient between the number of years of work in the institution and the second axis (performance evaluation) is equal to -0.030 at a significance level of 0.843 and is greater than 0.05, which indicates that there is no statistically significant relationship between the number of years of work in the institution and the performance evaluation of the National Fund for Social Insurance Agency Tindouf.

**C. Analysis and results of the correlation coefficient between between the personality variables and the third axis.**

**Table 7.** Results of the correlation coefficient between personal variables with the third axis.

Axis 03		years of work in the institution		Educational level		Age		Sex		
Pearson coefficient	level of significance	Pearson coefficient	level of significance	Pearson coefficient	level of significance	Pearson coefficient	level of significance	Pearson coefficient	level of significance	
0.015	0.921	-.376	0.11	0.122	0.423	-0.061	0.690	1		Sex
-0.202	0.183	**0.480	0.001	-0.123	0.422	1		-0.061	0.690	Age
0.268	0.076	-0.205	0.177	1		-0.123	0.422	0.122	0.423	Educational level
-0.193	0.203	1		-0.205	0.177	**0.480	0.001	-.376	0.011	years of work in the institution
1		-0.193	0.203	0.268	0.076	-0.202	0.183	-0.015	0.921	Axis 03

**Source:** Depending on the output of SPSS version 22.

We note from **Table .7** the following:

- The value of the Pearson correlation coefficient between gender and the third axis (the contribution of information systems in evaluating the performance of human resources) is equal to 0.015 - at a significance level of 0.921 and it is

greater than 0.05, which indicates the absence of a statistically significant relationship between gender and the contribution of information systems in evaluating performance Human resources at the National Fund for Social Insurance, Tindouf Agency.

- The value of the Pearson correlation coefficient between age and the third axis (the contribution of information systems in evaluating the performance of human resources) is equal to 0.202 - at a level of significance of 0.183 and it is greater than 0.05, which indicates that there is no statistically significant relationship between age and the contribution of information systems in evaluating performance Human resources at the National Fund for Social Insurance, Tindouf Agency.

- The value of the Pearson correlation coefficient between the educational level and the third axis (the contribution of information systems in evaluating the performance of human resources) is equal to 0.268 at a significance level of 0.076 and it is greater than 0.05, which indicates that there is no statistically significant relationship between the educational level and the contribution of information systems in the evaluation of Human resources performance in the National Fund for Social Insurance, Tindouf Agency.

- The value of the Pearson correlation coefficient between the number of years of work in the institution and the third axis (the contribution of information systems in evaluating the performance of human resources) is equal to 0.193 - at a significance level of 0.203 and it is greater than 0.05, indicating that there is no statistically significant relationship between the educational level and the contribution of systems Information on evaluating the performance of human resources in the National Fund for Social Insurance, Tindouf Agency.

Fourth requirement: hypothesis testing.

In this requirement, the hypotheses will be tested, in which it is clear from which the extent of acceptance or rejection of the study hypotheses, by using the Pearson correlation coefficient to find out the relationship between the independent variables and the dependent variable.

**6.3 Test of hypothesis:**

- **H0:** There is no statistically significant relationship between the unavailability of the human resources information system and the failure to evaluate the performance of human resources.
- **H1:** There is a statistically significant effect between the human resources information system and the evaluation of human resources performance.

**Table 8. total results**

Human resource information systems	Human resource information systems		evaluate the performance of human resources	
	level of significance	Pearson coefficient	level of significance	Pearson coefficient
	<u>1</u>		0.136	0.226
evaluate the performance of human resources	0.136	0.226	<u>1</u>	

**Source:** Depending on the output of SPSS version 22.

Through the table, we conclude that the correlation coefficient is equal to 0.226

with the significance level of 0.136 greater than 0.05, and therefore we accept  $H_0$  and reject  $H_1$ , this confirms that there is no statistically significant relationship between the unavailability of the human resources information system (the independent variable) and the failure to evaluate the performance of human resources (the dependent variable) For the National Social Security Fund for the State of Tindouf.

### **7-Conclusion:**

we can said Human resource information systems are one of the systems through which the organization seeks to achieve its goals of planning control and decision-making on the information and results provided by the information system with the least effort, time and cost. The organization, and the human resources information system can easily ensure procedures for handling information and facilitate communication between the system and its users, and its effectiveness and approach can be reflected in the performance of decision-making processes and on the performance evaluation processes of the human element.

#### **A. Results of the theoretical study:**

The information system helps in making decisions within the organization.

The availability of the human resources function on a database increases the effectiveness of the human resources information system, because it allows its users to use the same data and retrieve it in a timely manner.

An information system is an effective tool for evaluating the performance of human resources.

The information system, with its various types, branches and levels, operates within the organization in an integrated manner, as it is not possible to operate each system separately, in addition to the importance of the human resource controlling it.

Human resource information systems are considered a tool in collecting data and providing information with specific characteristics that support the process of making the right decisions in relation to adopting the dimensions of human resources management functions.

#### **B. Results of the applied study:**

The reality and role of information systems in evaluating human resources in the National Fund for Social Insurance and the Tindouf Agency were highlighted in this study, which enabled us to review several aspects related to the National Fund for Social Insurance such as origins, tasks and the organizational structure, and this study was carried out by distributing a questionnaire. To all workers in a random manner, and the content of the questionnaire was about three axes, namely, the axis of information systems, the axis of performance evaluation, and the axis of the contribution of information systems in evaluating the performance of human resources.

The Cronbach Alpha reliability coefficient was also used to measure the validity, overall stability and internal consistency of the questionnaire statements

directed at workers, so the value of the Cronbach alpha coefficient for all questionnaire statements was 0.638, which is a value greater than the acceptable value 0.60, i.e. 60%.

Our goal, through this tool represented in the questionnaire, was on the problem of our study, "To what extent can information systems contribute to evaluating the performance of human resources in the National Fund for Social Security for Wage Workers in the State of Tindouf", then we unpacked and processed it using the spss v20 program after presenting, analyzing and interpreting the results. The applied study found the validity and acceptance of the hypothesis, and concluded that there is no statistically significant effect at the level of  $\alpha = 0,05$  between each of the human resources information systems and the evaluation of the performance of the human resource in the institution under study, from the workers' point of view.

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