

## The Contribution of Information Technology to Human Resource Development in Sports Institutions

(A Field Study within the Directorate of Youth and Sports - M'Sila)

مساهمة تكنولوجيا المعلومات في تنمية الموارد البشرية في المؤسسات الرياضية

(دراسة ميدانية بمديرية الشباب والرياضة – المسيلة)

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### Abstract:

This study aims to determine the extent to which information technology, with its multifaceted components, contributes to human resource development in Algerian sports institutions. The success of these institutions in achieving their goals stems from the human resources department's interest in developing human capital as the crucial factor in carrying out various tasks. This can only be achieved through the development and training of human resources using information technology. In this study, the descriptive approach was used on a sample of 20 employees in M'Sila's Directorate of Youth and Sports. The questionnaire was used as a tool for collecting data. The most important results of the study indicated that information technology contributes significantly to the development of human resources in sports institutions. Based on the projected outcomes, a crucial recommendation is posited: the eradication of digital illiteracy among personnel through the implementation of continuous training programs focused on information technology proficiency.

**Keywords:** Information technology; Human resources; Human resource development; Sporting institutions.

**الملخص :** تهدف هذه الدراسة إلى معرفة مدى مساهمة تكنولوجيا المعلومات بعناصرها المختلفة في تنمية الموارد البشرية في المؤسسات الرياضية بالجزائر، فنجاح هذه الأخيرة في تحقيق أهدافها ينطلق من خلال اهتمام إدارة الموارد البشرية بتنمية المورد البشري لأنه العامل الحاسم في القيام بمختلف المهام، ولا يكون ذلك إلا بتنمية المورد البشري وتأهيله عبر استخدام تكنولوجيا المعلومات، وفي دراستنا هذه تم استخدام المنهج الوصفي على عينة مقدره ب 20 موظفا في مديرية الشباب والرياضة بالمسيلة وتم الاستعانة بالاستبيان كأداة لجمع المعلومات، وقد أشارت أهم نتائج الدراسة إلى أن تكنولوجيا المعلومات تساهم بشكل كبير في تنمية الموارد البشرية بالمؤسسات الرياضية، ومن أهم المقترحات ضرورة القضاء على الأمية الرقمية بالتدريب المستمر للموظفين على استخدام المعلوماتية.

**الكلمات المفتاحية:** تكنولوجيا المعلومات؛ الموارد البشرية؛ تنمية المورد البشري؛ المؤسسة الرياضية

## 1. INTRODUCTION AND RESEARCH PROBLEM:

Sports institutions face a challenge: linking staff to goals in a tech-driven world. Modern technology is crucial, impacting everything from internal operations to external communication.

Most modern management science experts agree that HR development in sports is essential for today's tech-driven world. Experts believe strong HR can create a competitive edge by equipping staff to handle change. However, it's important to remember: employees aren't just machines using technology. Their critical thinking and decision-making skills are irreplaceable in maximizing technology's impact for the organization. Within this transformative context,

The use of Information Technology, which is the only way for sports institutions to maintain their survival and achieve their goals through their effective contribution to the development of human resources capabilities and development in line with the postmodern era, which takes information as a

strength, especially if there are qualified human competencies to use it (wisem belkerdid, 2019, p 11)

the study seeks to answer the following central question:

**Research Problem:** Does information technology contribute to the development of human resources in M'Sila's Directorate of Youth and Sports? The following sub-questions fall under this problem:

- Is there a statistically significant relationship between information technology capabilities and human resource development in M'Sila's Directorate of Youth and Sports?
- Do the use of hardware and software; as well as communication networks, contribute to human resource development in M'Sila's Directorate of Youth and Sports?

**Study Hypotheses:** To answer the questions raised addressing the subject, the following hypotheses were relied on:

**General Hypothesis:** Information technology contributes to the development of human resources in M'Sila's Directorate of Youth and Sports.

**Sub-hypotheses:**

- There is a statistically significant relationship between information technology capabilities and human resource development in M'Sila's Directorate of Youth and Sports.
- The use of hardware and software contributes to human resource development in M'Sila's Directorate of Youth and Sports.
- The use of communication networks contributes to human resource development in M'Sila's Directorate of Youth and Sports.

## **2. General Objective of the Study:**

The importance of this study stems from the great importance of information technology in sports institutions, specifically M'Sila's Directorate of Youth and Sports, where information technology, with its various elements, aims

to develop human resources by developing their capabilities, unleashing their energies and knowledge. It imposes on the individual in the sports institution continuous change and continuous creativity to keep pace with the changes that require high-level skills; capable of competing and adapting to meet the challenges and requirements of the era and competition with other institutions, on the one hand, and to keep pace with the future needs facing sports institutions, on the other hand.

Therefore, this study seeks to support strengths, strengthen weaknesses, and identify the role played by information technology in the development of human resources in sports institutions, specifically in M'Sila's Directorate of Youth and Sports.

### **Study Objectives:**

Human resources contribute with their capabilities to the achievement of the sports institution's basic goals. On this basis, the study investigates the interplay between information technology capabilities and human resource development within M'Sila's Directorate of Youth and Sports. Specifically, the study aims to:

- **Examine the Correlation Between IT Capabilities and HR Development:** This objective delves into the potential existence of a relationship between the technological capacities of the Directorate of Youth and Sports and the development of its human resources.
- **Assess the Impact of Modern Hardware and Software on HR Development:** This objective focuses on the specific role of modern hardware and software in fostering human resource development within M'Sila's Directorate of Youth and Sports. It seeks to determine whether the utilization of such technologies contributes to enhancing employee skills and knowledge.
- **Evaluate the Contribution of Software Applications to HR Development:** This objective narrows the scope to analyze the influence of software applications,

independent of hardware, on human resource development. It aims to understand whether specific software programs play a role in improving employee capabilities within M'Sila's Directorate of Youth and Sports.

### **3. Operational Definition of Concepts in the Research:**

- **Information Technology:**

**Concept of Information Technology:** The term information technology refers to: "Modern technology that uses microprocessor-based machines: microcomputers, machines, and wired and wireless communication equipment to collect, process, store, generate, disseminate, rearrange, and exploit information." (Kouache & Chicha, 2021, p 1457)

**Components and Elements of Information Technology:** Information technology consists of a set of elements that develop as a result of the continuous demand for it, and these components are represented by the following:

- **Hardware components:** They are electronic devices that have the ability to process data by receiving, storing, retrieving and processing it automatically (Yahyaoui Bouhadid, 2017, p 324)
- **Software:** These are computer programs that control the work of hardware components and perform different application tasks. Software is designed to direct computers in reading inputs, storing data, retrieving it, updating it, and converting it into understandable and useful forms. (Arabsh, 2021, p 38)
- **Communication networks:** A group of systems that work to link computers together and allow them to share and exchange information within internal and external networks, (Abu Al-Hussein, 2012, p 9)
- **Database :** The repository for the collection of structured and interconnected data, information and files that describe the current and previous operations of the organization, which can be consulted and modified periodically to enable

managers to make the right decisions at the right time (Asmaa saoudi, 2021, p 121)

- **Human Skills:** They are the individuals who manage and operate information technology, including administrators, specialists, and end users of the system (Muslim Hassan, 2015, p 133)

**Characteristics of Information Technology:** Information technology has many characteristics that make it have high capabilities and increasing effects in various organizations. The most important of these characteristics are:

- **Asynchronicity and decentralization:** It refers to receiving information at any time that suits the user, which allows the independence of information technology.

**Forming communication networks:** Different devices are unified to form communication networks, which increases the flow of information between users and allows it to be exchanged. (Hrizi Farouk, 2020, p 8)

- **Convertibility:** The ability to transfer information from one medium to another, such as converting audible information to printed information (Hachani ahmed, 2019, p 7)
- **Reducing time and space:** This means obtaining information in a very short time and processing and transferring it, while providing storage means that can accommodate a large amount of information.
- **Artificial intelligence:** information technology contributes to the development of knowledge and improve the capabilities of users, which is reflected positively on the level of productivity (Kerouche aisa, 2017, p 121)

**Widespread:** information technology eliminates geographical boundaries because it is spread all over the world (Kabiri fatiha, 2018, p 144)

**Importance of Information Technology in the sports institution:** information technology is of great importance for sports institutions because it enables the latter to:

- Translation of all works into electronic activities
- Ensure fast and effective communication
- All material possibilities and human resources are the main axis for doing all the work
- The available information is the cornerstone for making the right decision (Abderahim nasir ahmed omar, 2016, p 121)

#### **Human Resources:**

**Definition of Human Resource:** Human resource is that person who has mental and physical qualifications that meet the readiness for effective performance in order to achieve the goals of the institution. (Brahmia, 2017, p 4)

- **Concept of Human Resource Development:** It is a process aimed at developing the various skills and abilities of employees in order to raise their production efficiency (Mohamed lamin aloun, aisawi sihem, houhou fatoum, 2017, p 7)

- **The Underlying Reasons for Human Resource Development:** The most prominent reasons underlying the need for human resource development in organizations are as follows:

- Utilizing the role of the individual to exploit knowledge and convert it into something productive.
- Keeping pace with the transformation that has taken place in the transition of jobs from the industrial sector to the service sector.
- Guiding new individuals in their various jobs and instructing them on the manner and quality of performance expected of them.
- Improving skills, increasing individual capabilities, and raising their performance level to match the performance standards set for them.
- Preparing individuals to assume future jobs and face all the technological, information and marketing changes that affect their productivity and performance.

- Preparing individuals to face the challenges; imposed by external environments on institutions in several areas, including the globalization of labor and the spread of competitive spaces between goods and services. (Tatay, 2019, p 4)

**Sports Institutions:** They are a relatively social system and a rational coordinating framework between the activities of a group of individuals who are linked by overlapping relationships in order to achieve common goals and organize their relationships within a specific structure of authority and responsibility and the type of activity to manage sports affairs. (Zaoui, 2022, p 5)

• **Previous and Similar Studies:**

This study relied on a number of previous studies related to the research topic as follows:

- **Study 1:** Boualam Lahi and Othman Mohadd 2019; A research paper published in the Journal of Research in Financial and Accounting Sciences in December 2019, Volume 4, Issue 2, under the title "The Effect of Using Information Technology on the Effectiveness of Tax Management" A Case Study of a Group of Institutions".

The problem of the study was as follows: How does the use of information technology affect the effectiveness of tax management? The study aimed to highlight the role of information technology as a basic component of the information system in the institution; To achieve this, four hypotheses were formulated and the questionnaire was used as the main tool for collecting data and information from the study sample, which amounted to 31 economic institutions. The study reached the following findings:

- There is a relationship between the use of information technology and the effectiveness of tax management.
- There is a statistically significant effect of prior knowledge of information technology tools on the effectiveness of tax management.



- There is a statistically significant effect of the information technology tools used in the institution on the effectiveness of tax management.

- **Study 2:** An intervention in an international conference on December 16-17, 2018, entitled "The Contribution of Using Information and Communication Technology to the Development of Human Resource Management Functions in the Institution" A field study in the Condor Electronics institution in Bordj Bou Arreridj Province; This study aimed to reveal the contribution of using information and communication technology to the development and improvement of human resource management functions within the institution; To achieve this, the questionnaire was used as the main tool for collecting data and information from the study sample, which amounted to 63 individuals in the Condor Electronics institution. The study yielded the following key findings:

- The computer is one of the most important components of information and communication technology.
- E-recruitment is one of the latest developments in communication technology.
- The human resources information system plays a fundamental role in decision-making in the institution.

- **Study 3:** Dr. Ben Abdelrahman Sidi Ali; Dr. Sassi Abdel Aziz; A research paper entitled "The Contribution of Information Technology to the Development of Sports Management". The problem was as follows: The impact of information and communication technology on updating sports management; Where the topic dealt with the concept of information and communication technology, as well as the use of information and communication technology in the field of sports management; Sports training and education, in addition to the obstacles to applying information and communication technology in the field of physical education and sports; It concluded with a set of recommendations:

- Establish a large sports database that depends in its work on information technology using the available programs and is placed within a broad base, the purpose of which is to benefit from the speed of retrieving and using the information contained in it in managing sports competitions.
- Strengthen communication between administrators, technicians, and sports organizations with the availability of confidentiality, security, and accuracy of personal information. The computer contributes to the evaluation of curricula and teaching methods for physical education and sports.
- Bridging the digital divide requires radical changes in the technological infrastructure, including the elimination of e-illiteracy and increasing investment in modern communications media.

#### **4. Methodological Procedures Followed in the Study:**

**1. Methodological Approaches Followed:** The exploratory study is considered the first step in any field study with the aim of familiarizing oneself with the research topic so that we can know the different aspects that need to be studied. The exploratory study that we conducted aimed to familiarize ourselves with the various aspects of the research problem. Therefore, we conducted an exploratory study by distributing a preliminary questionnaire to a group of employees at the level of the Youth and Sports Directorate in M'Sila Governorate, estimated at 50 employees, in order to identify the gaps in the questionnaire before the final distribution.

**2. Methodology Used in the Study:** Given the research focus on the use of information technology and its impact on human resource development within sports institutions, a descriptive methodology has been adopted. This approach aligns optimally with the nature of the inquiry, which centers on describing existing phenomena. The descriptive methodology allows for the systematic collection and analysis of data to comprehend the current state of information

technology utilization and its contributions to human resource development practices in sports institutions.

**3. Study Community and Sample:** (Grawitz) defines the community as a finite or infinite set of elements that are predefined and on which observations are based. Within the topic being addressed, our research community is embodied in all employees at the level of the Youth and Sports Directorate in M'Sila Governorate, where we used a simple random sample of 20 employees.

**4. Data and Information Collection Tools:** We relied on the closed questionnaire that specifies the possible responses to each question in the completion of this research. The respondents were asked to determine the extent of their agreement with these statements, where the questionnaire includes five degrees:

**Table 1: Questionnaire Degrees**

Degrees	Disagree	Strongly Disagree	Neutral	Agree	Strongly Agree
Answers	1	2	3	4	5

**5. Scientific Conditions of the Tool:** There are standard conditions that must be considered when conducting tests according to the correct scientific bases, which are represented in:

**Validity Index:** The validity score is the most important factor for scales and tests, and it is basically related to the test results. We have seen that apparent validity is the best way to extract the validity score of the scale, as this type of validity is based on observing the measure and its contents. Using the method of surveying the opinions of experts, after preparing the questionnaire form attached to the hypotheses and the problem, we presented it to professors with proven experience in the field of scientific research to survey their opinions on what the questionnaire contains in terms of:

- The clarity of the paragraphs and their suitability for each axis.
- Are there any paragraphs that need to be rephrased?

- Are there any paragraphs that need to be transferred to another axis?

**Reliability Coefficient:** Reliability is of great importance in the process of standardizing and building tests, and it means that the test should be of a high degree of accuracy and mastery. The reliability score is high the closer it is to the correct value to one. Therefore, we used the (Cronbach's alpha) method to ensure reliability, and the result obtained was (0.05), which is close to the value one, which confirms the stability of the results that can be obtained when applied.

**6. Field Application Procedures:** After the final formulation of the questionnaire forms, we began to distribute them, as we distributed the forms starting from November 14, 2023; And they were retrieved on December 3, 2023, then we started the process of emptying and subjecting the data obtained to statistical processing.

**7. Statistical Methods:** Statistical data were processed using the Statistical Package for Social Sciences (Spss V25) program by addressing repetitions and percentages, the Cronbach's alpha reliability coefficient, the arithmetic mean, and finally the standard deviation.

#### 4.2 Presentation and Analysis of Results:

**Q 1: Are you interested in learning modern technology tools in the management you work in?**

**Objective of the question:** The researchers' desire to learn modern technology tools in the management they work in.

**Table 2:** the frequencies, percentages, and Chi-square values for Q1.

Degree of freedom	Calculated Chi-square	Tabulated Chi-square	Significance level	Decision
4	17	9.4877	0.002	Statistically significant at = 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the percentage of respondents who believe that they have a desire to learn modern technology tools in the management they work in, which is confirmed by the percentage of 60% who answered "strongly agree", as well as the percentage of 35% who answered "agree", while we find 5% answered "strongly disagree".

**Q 2: Do you have an awareness of the need to use information technology?**

**Objective of the question:** To determine whether the sample members support administrative change procedures in their department.

**Table 3:** the frequencies, percentages, and Chi-square values for Q2.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
4	17	5.9915	0.002	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the sample members support administrative change procedures in their department, which is confirmed by the percentage of 55% who answered "agree", as well as the percentage of 20% who answered "strongly agree", while we find 15% neutral, while 5% answered "disagree" and "strongly disagree"

**Q 3: Do you attend training courses in information technology outside work hours?**

**Objective of the question:** To determine whether the sample members are aware of the need to transition to information technology.

**Table 4:** the frequencies, percentages, and Chi-square values for Q3.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
2	7.6	5.9915	0.022	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the sample members are aware of the need to transition to information technology, which is confirmed by the percentage of 60% who answered "strongly agree", as well as the percentage of 30% who answered "agree", while we recorded the percentage of opponents by 10% who answered "strongly disagree".

**Q 4: Does information technology provide individuals with the opportunity to be creative in their work?**

**Objective of the question:** To determine the contribution of information technology in bringing management closer to customers.

**Table 5:** the frequencies, percentages, and Chi-square values for Q4.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
2	10.9	5.9915	0.004	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the percentage of respondents who believe that information technology contributes to bringing management closer to customers, which is confirmed by the percentage of 65% who answered "agree", as well as the percentage of 30% who answered "strongly agree", while we recorded the percentage of neutral by 5% who answered "neutral".

**Q 5: Does information technology contribute to the self-reliance of individuals?**

**Objective of the question:** To determine whether information technology for employees provides the opportunity for creativity during their work.

**Table 6:** the frequencies, percentages, and Chi-square values for Q5.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
1	1.8	3.8415	0.18	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the percentage of respondents who believe that information technology for employees provides the opportunity for creativity during their work, which is confirmed by the percentage of 65% who answered "strongly agree", as well as the percentage of 35% who answered "agree".

**Q 6: Does information technology contribute to increasing the skills of workers to perform their jobs?**

**Objective of the question:** To determine whether the use of equipment and tools develops their abilities.

**Table 7:** the frequencies, percentages, and Chi-square values for Q6.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
4	14	9.4877	0.007	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the percentage of respondents who believe that the use of equipment and tools develops their abilities, which is confirmed by the percentage of 45% who answered "agree", as

well as the percentage of 35% who answered "strongly agree", while we recorded a percentage of 10% for those who were neutral, as well as we recorded 5% for those who disagree and strongly disagree.

**Q 7: Does information technology contribute to reducing your mistakes while performing tasks?**

**Objective of the question:** Whether information technology contributes to the self-reliance of workers.

**Table 8:** the frequencies, percentages, and Chi-square values for Q7.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
4	7	9.4877	0.136	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the percentage of respondents who believe that information technology contributes to the self-reliance of workers, which is confirmed by the percentage of 40% who answered "agree", as well as the percentage of 5% who answered "strongly agree", while we recorded a percentage of 25% for those who were neutral, as for the percentage of disagree and strongly disagree, they came equal at 15%.

**Q 8: Do modern devices make workers control their work better than traditional methods?**

**Objective of the question:** To determine whether information technology contributes to increasing the skills of workers to perform their jobs.

**Table 9:** the frequencies, percentages, and Chi-square values for Q8.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
4	9	9.4877	0.061	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25



Based on the data obtained in the table above, it appears that the percentage of respondents who believe that information technology contributes to increasing the skills of workers to perform their jobs, which is confirmed by the percentage of 40% who answered "agree", as well as the percentage of 25% who answered "strongly agree", while we recorded a percentage of 25% for those who were neutral, as for the percentage of disagree and strongly disagree, they came equal at 5%.

**Q 9: Do you receive training on the use of software in the management you work in?**

**Objective of the question:** To determine whether information technology contributes to reducing the chances of worker errors.

**Table10:** the frequencies, percentages, and Chi-square values for Q9.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
2	0.7	5.9915	0.705	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the percentage of respondents who believe that information technology contributes to reducing the chances of worker errors, which is confirmed by the percentage of 40% who answered "agree", as well as the percentage of 35% who answered "strongly agree", while we recorded a percentage of 25% for those who were neutral.

**Q 10: Does using software increase your productivity?**

**Objective of the question:** To determine whether the use of information technology elements contributes to providing a distinguished customer service.

**Table 11:** the frequencies, percentages, and Chi-square values for Q10.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
3	13.2	7.8147	0.004	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the percentage of respondents who believe that the use of information technology elements contributes to providing a distinguished customer service, which is confirmed by the percentage of 50% who answered "agree", as well as the percentage of 40% who answered "strongly agree", while we recorded a percentage of 5% for those who answered "neutral" and "disagree".

**Q 11: Does relying on databases make it easier for you to do your tasks?**

**Objective of the question:** To determine whether the respondents are trained on modern technology in the management they work in.

**Table 12:** the frequencies, percentages, and Chi-square values for Q11.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
3	8	7.8147	0.046	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the percentage of respondents who agree that they are trained on modern technology in the management they work in, which is confirmed by the percentage of 45% who answered "agree", as well as the percentage of 35% who answered "agree", while we find a percentage of 15% who answered "neutral" while we find a percentage of 5% who disagree and strongly disagree.

**Q 12: Do workers have sufficient skills to complete the required tasks based on hardware and software?**

**Objective of the question:** To determine whether the possession of scientific knowledge makes the individuals of the sample control modern communication technology.

**Table 13:** the frequencies, percentages, and Chi-square values for Q12.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
2	10.9	5.9915	0.004	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25  
Based on the data obtained in the table above, it appears that the sample members agree that they possess the scientific knowledge that makes them control modern communication technology, which is confirmed by the percentage of 65% who answered "agree", as well as the percentage of 30% who answered "strongly agree", while we find a percentage of 5% who strongly disagree.

**Q 13: Do the software you use help you analyze problems accurately?**

**Objective of the question:** To determine the desire of the sample members to compensate their old professional skills with modern technological experience.

**Table 14:** the frequencies, percentages, and Chi-square values for Q13.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
3	6.8	7.8147	0.079	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25  
Based on the data obtained in the table above, it appears that the sample members do not have a desire to compensate their old professional skills with modern technological experience, which is confirmed by the percentage of 45%

who answered "strongly disagree", as well as the percentage of 30% who answered "disagree", while we find a percentage of 20% who answered "neutral" while we find a percentage of 5% who agree with that.

**Q 14: Do databases contribute to the effective exchange of information between different interests and departments?**

**Objective of the question:** To determine whether information technology for workers makes them control their work better than traditional management.

**Table 15:** the frequencies, percentages, and Chi-square values for Q14.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
3	13.2	7.8147	0.004	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the percentage of respondents who believe that information technology for workers makes them control their work better than traditional management, which is confirmed by the percentage of 50% who answered "agree", as well as the percentage of 40% who answered "strongly agree", while we recorded a percentage of 5% for those who strongly disagree with that, as well as the percentage of neutral respondents came at the same percentage.

**Q 15: Are you satisfied with the level of technical and network infrastructure in the M'Sila Youth and Sports Directorate?**

**Objective of the question:** To determine the contribution of software use to increase their effectiveness.

**Table 16:** the frequencies, percentages, and Chi-square values for question 15.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
2	5.2	5.9915	0.074	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the percentage of respondents who believe that the use of software contributes to increasing their effectiveness, which is confirmed by the percentage of 50% who answered "strongly agree", as well as the percentage of 40% who answered "agree", while we recorded a percentage of 10% for those who were neutral.

**Q 16: Does the M'Sila Youth and Sports Directorate use communication networks to link all departments and interests?**

**Objective of the question:** To determine whether the sample members are satisfied with the level of technical and network infrastructure in their administration.

**Table 17:** the frequencies, percentages, and Chi-square values for question 16.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
4	16.5	9.4877	0.002	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the sample members are satisfied with the level of technical and network infrastructure in their administration, which is confirmed by the percentage of 55% who answered "agree", as well as the percentage of 20% who answered "strongly agree", while we find a percentage of 10% who answered "disagree" and "strongly disagree" at the same percentage, while we find a percentage of 5% who are neutral on that.

**Q 17: Are you willing to give up old communication methods in favor of others that are in line with modern communication networks?**

**Objective of the question:** Whether the sample members are willing to give up their old ways of working.

**Table 18:** the frequencies, percentages, and Chi-square values for question 17.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
3	12.8	7.8147	0.005	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the sample members are willing to give up their old ways of working, which is confirmed by the percentage of 45% who answered "strongly agree" and "agree", while we find a percentage of 5% who answered "neutral" and "strongly disagree".

**Q 18: Do communication networks bring different interests closer together?**

**Objective of the question:** To determine whether the sample members find it difficult to understand the working mechanisms of the information technology system.

**Table 19:** the frequencies, percentages, and Chi-square values for question 18.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
4	14	9.4877	0.007	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the sample members do not find it difficult to understand the working mechanisms of the information technology system, which is confirmed by the percentage of 54% who answered "agree", as well as the percentage of 35% who answered "strongly

agree", while we find a percentage of 10% who are neutral and only 5% who answered "disagree" and "strongly disagree".

**Q 19: Does the use of communication networks contribute to reducing effort and saving time?**

**Objective of the question:** To determine whether the sample members use communication networks to help reduce effort and save time.

**Table 20:** the frequencies, percentages, and Chi-square values for question 19.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
0	6.4	5.9915	0.041	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the sample members use communication networks to help reduce effort and save time, which is confirmed by the percentage of 60% who answered "agree", as well as the percentage of 20% who answered "strongly agree" and "neutral", while we did not record any percentage for "disagree" and "strongly disagree".

**Q 20: Do communication networks bring you closer to your customers?**

**Objective of the question:** To determine whether information technology contributes to achieving employee satisfaction.

**Table 21:** the frequencies, percentages, and Chi-square values for question 20.

Frequency	Percentage %	Degrees of freedom	Calculated Chi-square	Tabulated Chi-square
3	5.2	7.8147	0.158	Statistically significant at 0.05

**Source:** Prepared by the student based on the outputs of SPSS program. V25

Based on the data obtained in the table above, it appears that the percentage of respondents who believe that information technology contributes to achieving

employee satisfaction, which is confirmed by the percentage of 40% who answered "agree", as well as the percentage of 5.2% who answered "strongly agree", while a percentage of 30% for those who were neutral was recorded.

#### **4.3 Conclusion:**

This study finds IT revolutionizes HR in sports. New tools and tech boost HR effectiveness, leading directly to better performance for the entire organization. In light of the field study, we conducted in the Youth and Sports Directorate of M'Sila Province and based on the analysis of the results obtained, the three hypotheses were proven:

- There is a statistically significant relationship between information technology capabilities and human resource development in sports institutions.
- The use of hardware and software; as well as communication networks, contribute to the development of human resources in sports institutions.

#### **Recommendations:**

- The need to spread IT culture among employees in sports institutions.
- The computer and various software contribute to saving time and reducing effort.
- Communication networks contribute to bringing different interests closer together, as well as bringing the sports institution closer to its customers.
- Continuous training for employees and raising their technical levels in the field of information.

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