REPERCUSSIONS OF APPLICATION OF TOTAL QUALITY MANAGEMENT TO HUMAN RESOURCES DEVELOPMENT IN THE ECONOMIC ENTERPRISE -DAIRY ENTERPRISE CASE STUDY-

انعكاسات تطبيق إدارة الجودة الشاملة على تنمية الموارد البشرية في المؤسسة الاقتصادية-دراسة حالة مؤسسة الألبان-

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Received: 20th/10/2023; **Accepted: 23rd/11/2023**

Abstract:

This study dealt with the topic of total quality management, which is one of the most important trends in modern management and has been fully popular in the development of human resources performance by establishing a deep quality culture in its holistic sense, and because it is a way of growth and management development. Considering that the human element is the most important and valuable resource in institutions, its management and improvement function is one of the most important and difficult tasks, which highlighted the need to adopt a comprehensive quality management approach to develop, and improve human resources and their performance.

This study has shown that There is a strong correlation between the application of total quality management and human resources development. The relationship between comprehensive quality management and human resource development is a relation partnership based on integration and exchange, Human resources management must adapt some of its activities to new systems, Comprehensive quality management must understand The role of human resources management in the implementation and successful application of the comprehensive quality management programme.

Keywords: Quality; Total Quality Management System; Human Resources Administration; Human Resource Development; Human Resources.

Jel Classification Codes : M59 .

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Abstract in Arabic:

تناولت هذه الدراسة موضوع إدارة الجودة الشاملة، والذي يعد من أهم الاتجاهات في الإدارة الحديثة التي لاقت رواجا كبيرا وبشكل كامل في تطوير أداء الموارد البشرية من خلال ترسيخ ثقافة جودة عميقة بمعناها الشمولي، ولأنها طريقة للنمو والتطور الإداري. وباعتبار أن العنصر البشري هو أهم وأثمن مورد في المؤسسات، وتعد وظيفة إدارته وتحسينه من أهم المهام وأكثرها صعوبة، الأمر الذي أبرز ضرورة تبني نهج إدارة الجودة الشاملة من أجل تنمية وتطوير والموارد البشرية وتحسين أدائها.

وقد أوضحت هذه الدراسة أن هناك ارتباط قوي بين تطبيق إدارة الجودة الشاملة وتنمية الموارد البشرية بالمؤسسة المدروسة. فالعلاقة بين إدارة الجودة الشاملة وتنمية الموارد البشرية هي علاقة شراكة قائمة على التكامل والتبادل، فكما يجب على إدارة الموارد البشرية تكييف بعض أنشطتها مع الأنظمة الجديدة، يجب على إدارة الجودة الشاملة فهم دور إدارة الموارد البشرية في تنفيذ ونجاح تطبيق برنامج إدارة الجودة الشاملة

Keywords (in Arabic): إدارة الموارد الموارد البشرية; نظام إدارة الجودة الشاملة; الجودة; تنمية الموارد البشرية. البشرية;

Jel Classification Codes : M59.

Introduction

The As the management of all institutions aims to fulfill its responsibilities with maximum efficiency and in a way that meets and satisfies the needs and requirements of the customer, any deficiency in performance is caused by the inefficiency of employees, misuse of authority, resorting to nepotism, or favoring self-interest over the public interest, which erodes society's trust in administrative organizations. Given the prevalence of traditional management models in administrative organizations in general and the service sector in particular, there have been many criticisms of the occasional weak performance, reduced productivity, and accomplishments.

Therefore, institutions are required to reconsider the concept of Total Quality Management (TQM) as one of the modern management concepts that has gained significant popularity in recent times. TQM aims to continuously improve performance by responding to customer requirements while appointing competent managers and frameworks with a culture compatible with this new direction. On the other hand, it emphasizes the importance of the human factor, which is essential in contributing to the national economy when utilized correctly.

Considering all these factors, the researcher has decided to assess the credibility of implementing and adopting Total Quality Management (TQM) systems in economic institutions. This assessment focuses on the most sensitive aspect, which is human resource development in various processes. Thus, the main research problem can be formulated as follows: To what extent can human resource development contribute to the success of the studied institution through the adoption of Total Quality Management?

To address the main research problem, several sub-questions can be formulated as follows:

-To what extent are the employees of the studied institution aware of the importance of implementing Total Quality Management at a significance level of 5%?

-Does the studied institution work on the development of its human resources to a great extent under the adoption of Total Quality Management at a significance level of 5%?

-Is there a relationship between the implementation of Total Quality Management and the development of human resources in the studied institution at a significance level of 5%?

Research Hypotheses:

To answer the main research problem and the sub-questions, the following hypotheses have been proposed:

-There is awareness among the employees of the studied institution at various levels of the importance of implementing Total Quality Management at a significance level of 5%.

-The studied institution works to a great extent on the development of its human resources under the adoption of Total Quality Management at a significance level of 5%.

-There is a relationship between the implementation of Total Quality Management and the development of human resources in the studied institution at a significance level of 5%.

First Axis: Theoretical Literature of the Study:

Firstly, we need to understand the following terms before delving into the concept of Total Quality Management: management, quality, and comprehensiveness.

Management: Stephen Cohen and Ronald Brand defined management in 1993 as the development and maintenance of an organization's capabilities and resources to continuously improve quality, starting from top-level management to the lowest level (Muayyad & Al-Tayy, 2014, p. 318) It also means organizing, directing, and monitoring all quality-related activities, including supporting quality activities and providing necessary resources.

Quality: Quality, as we see it in our era, was already emphasized in our religion fourteen centuries ago (Hashem, 2008, p. 23). When we return to the source of our civilization and pride, the Quran, we find that quality has been emphasized in many verses:

- Indeed, We do not waste the reward of one who does good work (Surah Al-Kahf, Verse 30).
- And He produced you in the best of forms (Surah At-Taghabun, Verse 3).
- The work of Allah, who perfected all things (Surah An-Naml, Verse 88).

Thus, we see that Islam not only called for work but also called for excellence and proficiency (Hashem, 2008, p. 24). Islam did not only call for work but also called for excellence and proficiency (Hashem, 2008, p. 24).

Various definitions of quality have been proposed by leading quality experts. For example:

- Crosby defined quality in 1979 as conformance to requirements, freedom from defects, and suitability for use, meaning that the quality of a product or service meets the requirements, is free from defects, and is fit for use (Bussenault & Prètet, 1998, p. 7).

- Juran in 1981 defined quality in his book Quality Control Handbook as fitness for use, meaning that the product or service should be suitable for use (Juran, Gestion de la Qualitè, 1983, p. 15).
- Taguchi defined quality in 1984 as the amount of loss that the product or service may cause to society after delivery, including failure to meet customer expectations, failure to meet performance characteristics, and side effects on society such as pollution and noise (El-Azawi, 2002, p. 19).
- Deming in 1986 defined quality as meeting the needs and expectations of the customer, present and future, meaning that everything the customer needs or expects from the product or service is available and at a low cost (Ogundi, 2009, p. 16).

Comprehensive: By this, we mean the pursuit of quality in all aspects of work, starting from identifying the beneficiary's needs to evaluating satisfaction with the provided product (Fadl & Tayy, 2014, p. 319).

Total Quality Management (TQM) is a modern term that first appeared in the mid-1980s. Like many other terms, its definitions have varied as scholars and researchers have presented them based on their diverse perspectives and approaches to this modern direction in management. Among these definitions:

- According to Juran, Total Quality Management (TQM) is not a program, but a managerial system that effectively uses and applies tools developed for the organization, bringing about changes in employee attitudes and daily operational levels. For the successful implementation of this system, all departments must have a long-term commitment to quality (Ben Said, 1998, p. 74).
- Deming defined TQM in 1986 as a management philosophy based on satisfying the beneficiary and meeting their current and future needs (Atarawneh, 2002, p. 36).
- Crosby defined Total Quality Management (TQM) as the organized methodology to ensure planned activities, serving as the best way to prevent problems by encouraging good behaviors and optimal use of control methods (Abu Nabaa, 1998, p. 70).

From the above, the researcher defines Total Quality Management as a management system based on several foundations and requirements, including awareness of the philosophy and concept of total quality, leadership's conviction and commitment to its application through participation and strategic planning, focusing on internal and external customers, continuous improvement of performance and services, setting measurement standards, task analysis, error prevention before it occurs, motivating employees, and providing appropriate training.

Secondly: The Conceptual Dimension of Human Resource Development:

The human being is the foundation of the production process, which is why various types of organizations seek to focus primarily on their human resources. They concentrate primarily on the development of these resources because they are the real nerve that helps the organization excel and evolve. Before delving into the concept of human resource development, let's introduce some related concepts.

1. Definition of Human Resources: Human resources, as a term, replaced the previously prevalent terms individuals or workforces. It became a transformative point around 1970 when the American Society for Personnel Management, as the largest specialized management organization, changed the term to human resources to align better with the increasing strategic roles of human resources within organizations. Consequently, human resources managers became full partners in the strategic planning process (Gharbi, Gira, & Slatnia, Human Resource Development, 2007, p. 14). The researcher defines human resources as the excellence link in the resource chain, whether at the state level as a larger organization or at the enterprise level as a smaller organization. The importance of this can also be elucidated through the following considerations:

- If the state and, in particular, the enterprise possess human resources with experience, skills, and efficiency in innovation and performance, they will have economic influence and independence.

- Human resources today are a global competitive tool, as evident from the widespread use of the term human resource competitive advantage.
- Possessing creative, innovative human resources facilitates technology utilization, reducing its usage cost.
- Human resources provide and increase added value to the maximum extent if developed to adapt to ongoing changes, especially technological ones.
- Attracting innovative and creative human resources and competencies has become a focal point of global competition.

2. Concept of Human Resource Management: The term human resource management emerged in the last decade of the twentieth century and the first decade of the twenty-first century. Most of its focus was on acquiring individual and collective skills and enabling them to efficiently and effectively contribute to building and achieving organizational goals. It has become an integral part of organizations after having been limited to a small group of specialists working in a specialized organizational department called Personnel Management. The phrase strategic human resource management emerged, emphasizing the strategic orientation of human resource management (Al Sayyid, 2010, p. 21). Different researchers have provided various definitions of human resource management based on their own perspectives and research topics.

In this context, we provide the following definitions for Human Resource Management:

- In 1954, the British Institute of Personnel Management defined Human Resource Management as that part of the managerial function concerned with human relations within the organization (Saeed, 1994, p. 27).
- G. Smith and J. Grant define Human Resource Management as the responsibility of all managers in the organization, in addition to a description of what human resource specialists do in personnel management (Abdul Baqi, 2005, p. 20).
- Gary Dessler defines Human Resource Management as a set of practices and policies required to execute various activities related to

the human aspects that management needs to perform its functions effectively (Dessler, 2003, p. 34).

- Sikula sees Human Resource Management as the utilization of the workforce within or by the organization, including planning, workforce, selection, recruitment, performance appraisal, training and development, compensation and salaries, industrial relations, and providing social and health services to employees, as well as individual research (Abdul Baqi, 2005, p. 16).
- E. Flippo, a prominent author in the field of Human Resource Management, defines it as the planning, organizing, directing, and controlling of the procurement, development, compensation, integration, maintenance, and separation of human resources to the end that individual, organizational, and societal objectives are accomplished (Abdul Baqi, Modern Trends in Human Resource Management, 2002, p. 18).

In this context, the researcher concludes that Human Resource Management, in its narrow sense, focuses on meeting the organization's workforce needs, preserving it, encouraging its readiness to work, and developing its capabilities to achieve a motivated, satisfied, and productive workforce. In its broader sense, it deals with the optimal use of human resources at all levels of the organization.

3. Definition of Human Development: The roots of human development first appeared in the United States, where the United Nations Human Development Report in 1990 defined human development as expanding people's choices to lead lives they value through increased opportunities for education, health care, income, and employment (Haroush, Human Resource Management, 2011, p. 256).

The researcher believes that human development is a set of interrelated, cumulative, purposefully planned, and information-based processes. It focuses on the individual as both the target and the means of development.

The human being is the maker and driver of development, with the goal of introducing the human element into the world of tomorrow, armed with technology compatible with their progress. This occurs within the context of globalization and the changing political, economic, social, cultural, and environmental factors, aiming to integrate the human element into the future world, capable of dealing with challenges and adapting to change.

4. Concept of Human Resource Development: Human Resource Development has become one of the most critical issues organizations are concerned with today, despite its historical practices. The interest in it began as a scientific field around 1958 by several economic and managerial thinkers (Yerqi, p. 89).

Definitions of Human Resource Development have varied among scholars and researchers due to their diverse cultural, civilizational, intellectual backgrounds. Here are some of the definitions:

- Human Resource Development is defined as the preparation of individuals in a way that aligns with the needs of society, based on the belief that increasing knowledge and the abilities of individuals leads to more effective utilization of natural resources, as well as increasing their capacities and efforts (Al-Louzi, Administrative Development: Concepts, Foundations, Applications, 2002, p. 25).
- It is also defined as the increase in knowledge, abilities, and skills of the workforce capable of working in all fields, selected and chosen based on various tests (Ben Zahyi and Al-Shayeb, Training as one of the essential elements of human competency development, 2005, p. 35).
- Human Resource Development is the comprehensive development of the environment that enhances the well-being of the community in terms of health, education, social, and psychological aspects. The goal is to achieve the full growth of the student by unleashing their potential and utilizing it to become a productive member and contribute to the development plans of the country, capable of facing the challenges and dealing with the realities of the era (Al-Ajmi, 2008, p. 218).

- It is defined on the enterprise level as a process that enhances and strengthens the effectiveness of current and future individuals, working to change both individual behavior and attitudes at work to achieve the desired goals of development, which requires modifying both perception and skills according to the career path (Hal & Goodale, 1986, p. 302).

From the above definitions, it can be concluded that Human Resource Development is the term we use to describe an integrated, comprehensive, conscious, and innovative approach to changing knowledge and behaviors related to work, through a set of learning strategies and techniques that help human resources, groups, and organizations achieve their full potential. This allows them to unleash the power of thinking and innovation in human resources, develop teamwork, and charge the team spirit.

Thirdly, Human Resource Development within the framework of Total Quality Management (TQM):

The principles laid out by quality pioneers did not overlook aspects related to Human Resource Development. Deming's fourteen principles of quality, for instance, encompassed six principles related to human resources. International quality awards also emphasized the significance of human resource issues. For instance, the Malcolm Baldrige Award allocated 150 points out of 1000 to Human Resource Management, while the European Quality Award allocated 90 points for human resource performance and 90 points for employee satisfaction out of a total of 1000 points (Moore & Moore, Quality Circles: Changing Individuals' Perceptions at Work, 1991, p. 194).

1. The Importance of Human Resources in Total Quality Management:

Human resources are among the most crucial requirements for implementing Total Quality Management (TQM). Therefore, they must be carefully managed from various angles. This includes developing selection systems, job placement, performance evaluation, and continuous training programs at all levels. Additionally, preparing and aligning human resources within the organization to understand, accept, and adopt Total Quality Management concepts and practices are essential.

Total Quality Management (TQM) depends on creative and exceptional individuals in ideas and actions. It requires nurturing and directing their potential to encourage them to exert more effort for building a good reputation and influence within organizations (Zarqoon & Mnasriyah, 2013, p. 308).

Organizational leaders striving for quality achievement must give significant attention to their human resources, particularly by:

- Focusing on the intellectual capabilities of the human resource as an organizational member, improving and enhancing their capabilities, allowing them to participate in problem-solving, undertake responsibilities, and assume accountability.
- Concentrating on the content of work and investigating what stimulates the intellectual capabilities of human resources, establishing an appropriate system of both moral and financial incentives.
- Recognizing the importance and value of human resources in shaping the present and future of organizations.
- Emphasizing the improvement and development of selection, recruitment, employment, training, and motivation systems.

Total Quality Management (TQM) aims to create value for customers by meeting their needs. It recognizes that human resources are responsible for creating this value and that developing them impacts the organization's competitive advantage through competency development and employee motivation. As a result, the researcher believes that the importance of human resources in Total Quality Management is manifested in decision-making, fostering positive interactions with customers, and implementing work design improvements. Often, good ideas for improving a product or service come

from employees. Consequently, there is a growing trend among organizational leaders to delegate more responsibility to employees regarding quality, setting goals for each person to work toward achieving high-quality standards that align with customer requirements.

2. Objectives of Human Resource Development in Total Quality Management:

Organizations pursuing Human Resource Development in the context of Total Quality Management (TQM) have multiple objectives, which are typically divided into several stages, including:

- Conceptual Training Stage: Aimed at highlighting the importance of quality for human resources and illustrating its potential impact on the overall performance of the organization.
- Training in Quality Tools Stage: Focused on the most important quality tools and training human resources on how to use them effectively.
- Specialized Training Stage: Relates to training human resources in specific quality-related topics relevant to their job performance.
- Leadership Training Stage: Concentrates on human resources in senior management and managers who will take the initiative to implement Total Quality Management systems.

In general, development and training processes within Total Quality Management systems typically take the form of sessions lasting from half a day to five days. These sessions can be conducted internally by experts within the organization or externally. It's essential that they involve all individuals and employees at all levels (Williams, 1999, p. 45).

3. Key Performance Indicators for Measuring Human Resource Development in Total Quality Management:

The most important indicators for measuring human resource development in the context of Total Quality Management include the following (Al-Saraireh & Al-Assaf, Total Quality Management in Higher Education Institutions: Between Theory and Practice, 2008, p. 36):

A. Encouraging all employees and empowering them to contribute to various aspects of organizational work.
B. Enhancing the knowledge and skills of employees, increasing their adaptability and responsiveness to change, and aligning their abilities with organizational goals.
C. Ensuring the flow and dissemination of information that supports job designs and customer-centered work.
D. Involving employees in decision-making to foster flexibility, innovation, and quick responsiveness.
E. Creating a motivating environment characterized by mutual trust, commitment, and effective communication among different functions.
F. Aligning employee incentives with their achievements toward the organization's core objectives.
G. Involving employees in designing training programs and updating their needs.
H. Focusing on ensuring that employees have access to essential work-related data and problem-solving techniques.
I. Encouraging communication among employees and between employees and relevant external parties.
J. Creating an organizational climate conducive to boosting motivation and striving for higher performance levels.

4. Fundamental Alignments Between Total Quality Management and Human Resource Development:

The researcher identifies several key alignments between Total Quality Management (TQM) and Human Resource Development (HRD), as follows (Luwarti, Fundamentals of Human Resource Development, 2015, p. 89):

A. Definition Perspective: TQM and HRD both focus on customer satisfaction by meeting their needs, making the customer the central point of their activities.
B. Core Function Perspective: TQM aims to increase the competitive capacity of an organization by ensuring customer acceptance of its products and services. HRD's core function is to enhance the competitive capacity of an organization by producing highly skilled, knowledgeable, and motivated trainees who can deliver superior performance and provide the best services to customers. Thus, both share a common objective of enhancing an organization's competitive edge through what it offers.
C. Process Concept Perspective: Both TQM and HRD apply the concept of processes, where targeted outcomes result from a sequence of actions involving various resources (inputs). This process-oriented approach is applicable in both TQM and HRD, incorporating principles like internal process balance, self-balancing among inputs, and interrelation among processes.
D. Starting Point Perspective: TQM and HRD share the same starting point in terms of focusing on the customer. Both begin by identifying and satisfying customer needs. Therefore, the primary orientation in both TQM and HRD is customer-centric.
E. Supplier-Customer Relationship Perspective: TQM emphasizes investing in supplier-customer relationships at all levels and across all areas within and outside the organization. HRD also capitalizes on and activates the supplier-customer relationship.

Second Axis: Field Study:

First: Study Population and Sample:

From a study population of 543 workers, the researcher randomly and objectively selected a study sample without any bias or personal preferences. A total of 160 questionnaires were distributed, representing 29.47% of the

study population. Of these, 154 questionnaires were returned, resulting in a retrieval rate of 28.36%. Subsequently, 15 questionnaires were excluded from statistical analysis due to their non-completeness, the respondents' inability to answer, or a lack of seriousness in their responses.

Therefore, the total number of valid questionnaires suitable for the study and subject to statistical analysis was 139, representing 86.88% of the distributed questionnaires, or 25.60% of the total study population of 543 individuals. This percentage is statistically analyzable and is considered representative of the entire population, allowing for the generalization of the study's results.

Secondly, Data Collection Sources and Study Tools Used in the Analysis:

In our study, we utilized various sources available for data and information collection. The primary data collection tool employed was the questionnaire, which was distributed in Arabic and consisted of four sections with a total of 140 questions. The sections were allocated as follows:

The first section contained six questions designed to describe the studied institution's workers.

The remaining three sections included variables specific to studying the problem and sub-questions based on the established hypotheses, totaling 134 questions, which will be explained below:

- The second section aimed to assess the extent to which the institution's workers at different levels perceive the importance of implementing Total Quality Management (TQM) systems. This section included 52 questions categorized into five dimensions.
- The third section examined the opinions and stances of the institution's workers regarding whether the institution places significant emphasis on human resource development. This section featured 76 questions distributed across six dimensions.
- The fourth section assessed the opinions and stances of the institution's workers concerning the actual implementation of Total Quality Management in human resource development. This section included six questions within a single dimension.

After gathering data and information through the research questionnaire, the collected data were processed and converted into quantitative values. The researcher employed the Statistical Package for the Social Sciences (SPSS) and various descriptive and inferential statistical methods, including frequency and percentage distributions, Cronbach's alpha coefficient, mean values, standard deviations, one-sample t-test, analysis of variance (ANOVA), correlation coefficient (r), determination coefficient (R^2), regression analysis, and multiple linear regression.

The questionnaire items were coded based on the Likert five-point scale. The decision threshold was determined, with a hypothetical mean value of 2.6 as the maximum agreement score, as illustrated in Table 1.

Table No. 1: Length of cells according to the five-point Likert scale:

level	response	Arithmetic mean
High	I completely agree	From 01 to less than 1,8
	I agree to some extent	From 1,8 to less than 2,6
Medium	I'm not sure	From 2,6 to less than 3,4
Low	I'm not agreed	From 3,4 to less than 4,2
	I'm completely not agreed	From 4,2 to less than 105

Source: Prepared by the researcher based on the previous information

Thirdly, Reliability Assessment of the Questionnaire:

To evaluate the overall reliability of the questionnaire, along with the consistency of its statements, we used Cronbach's Alpha coefficient. The reliability coefficient was computed for all questionnaire items and for each dimension. The reliability coefficients for each dimension of the questionnaire ranged from 0.965 to 0.989, while the overall reliability coefficient reached a value of 0.996. These high reliability ratios, exceeding 0.7, indicate that the questionnaire's statements exhibit internal consistency and reliability. This makes them suitable for study, analysis, and result extraction. The following Table 2 illustrates this:

Table No. 2: Results of the Cronbach's alpha test to measure the reliability of the questionnaire:

Cronbach's alpha	**The axis**
0,948	Total quality management principles in the organization
0,981	Advantages achieved by applying total quality management in the organization
0,985	Difficulties of applying total quality management in the organization
0,978	The most important requirements for applying total quality management in the organization
0,979	The point of view of employees in the organization towards applying total quality management in customer service
0,989	Planning the development of human resources methods in the organization
0,984	Selection and appointment of human resources in the organization
0,985	Training and training programs followed in the

	organization
0,987	The evaluation process followed in the organization
0,986	Incentives and promotions in the organization
0,983	career path development in the organization
0,965	The role of comprehensive quality programs in developing the organization's human resources
0,996	**Total coefficient**

.Source: Prepared by the researcher based on SPSS outputs

Fourthly, Testing the Study Hypotheses:

1. Testing the First Hypothesis:

The first hypothesis was tested using a one-sample T-test, as illustrated in Table 3.

Table No. 3: One sample T-test for the first main hypothesis
:

T Value	Significance level	Axis	N° Axis
-9,562	0,000	Total quality management principles in the organization	1
-4,083	0,000	Advantages achieved by applying total quality management in the organization	2
9,254	0,000	Difficulties of applying total quality management in the organization	3

-4,728	0,000	The most important requirements for applying total quality management in the organization	4
-1,682	0,095	The point of view of employees in the organization towards applying total quality management in customer service	5
-1,540	0,126	**Total axis**	

.Source: Prepared by the researcher based on SPSS outputs

Fourthly, Testing the Study Hypotheses:

1. Testing the First Hypothesis:

H0: (Null Hypothesis) There is no perception among the studied organization's employees regarding the importance of implementing Total Quality Management (TQM) systems at a significance level of 5%.

H1: (Alternative Hypothesis) There is a perception among the studied organization's employees regarding the importance of implementing Total Quality Management (TQM) systems at a significance level of 5%.

Based on the results obtained from Table 3, the calculated t-value was (1.540-), which is lower compared to the critical t-value estimated at 1.96. The statistical significance level for the total of the axes was calculated to be 0.126, which is greater than the significance level of 0.05. Therefore, we reject the alternative hypothesis (H1) and accept the null hypothesis (H0), indicating that there is no perception among the studied organization's employees regarding the importance of implementing Total Quality Management (TQM) systems at a significance level of 5%. This suggests the existence of various obstacles hindering the proper adoption of the Total Quality Management philosophy, such as not giving sufficient importance to the customer, a lack of training and continuous education programs within the organization under study, and a lack of feedback, according to the surveyed group's opinion.

2. Testing the Second Hypothesis:

The second hypothesis was tested using a one-sample T-test, as shown in Table 4.

Table No. 4: One sample T-test for the second main hypothesis
:

T value	**مستوى الدلالة**	**Axis**	**N° Axis**
3,035	0.003	Ways to attract human resources in the organization	6
4,766	0,000	Selection and appointment of human resources in the organization	7
2,270	0,002	Training and training programs followed in the organization	8
4,138	0,000	The evaluation process followed in the organization	9
2,839	0,005	Incentives and promotions in the organization	10
3,287	0,001	career path development in the organization	11
3,380	**0,001**	**Total axis**	

.Source: Prepared by the researcher based on SPSS outputs

H0: (Null Hypothesis) The studied organization does not significantly engage in human resource development under the adoption of Total Quality Management at a significance level of 5%.

H1: (Alternative Hypothesis) The studied organization significantly engages in human resource development under the adoption of Total Quality Management at a significance level of 5%.

Based on the results obtained from Table 4, the calculated t-value was (3.380), which is higher compared to the critical t-value estimated at 1.96. The statistical significance level for the total of the axes was calculated to be 0.001, which is lower than the significance level of 0.05. Therefore, we accept the alternative hypothesis (H1) and reject the null hypothesis (H0), indicating that the studied organization significantly engages in human resource development under the adoption of Total Quality Management at a significance level of 5%. This suggests the priority of human resources in the new economy, and it underscores that human resource development is essentially a long-term investment that should be surrounded by all necessary guarantees and conditions to yield the expected returns, according to the surveyed group's opinion.

3. Testing the Third Hypothesis:

The third main hypothesis was tested using simple linear regression analysis to explore the relationship between the adoption of Total Quality Management and human resource development. Tables 5, 6, 7, and 8 illustrate this.

Table 5: Variance analysis results ANOVA
:

possibility	F Value	Mean squares	Degree of freedom	Sum of squares	Stage
0,000	9076,63	126,93	1	126,96	Regression
		0,14	137	1,92	The rest
			138		Total

Source: Prepared by the researcher based on SPSS outputs

Based on the results of the analysis of variance (ANOVA) obtained from Table 5 to test the significance of the relationship between the implementation of Total Quality Management and human resource development, the statistical significance level was estimated at 0.000. This value is lower than

the significance level of 0.05, indicating that the variables, Total Quality Management implementation, and human resource development, are statistically acceptable.

Table No. 6: Determination coefficient results R^2:

Modele	**R**	**R^2**	**R^2 ajusté**	**Erreur standard de l'estimation**
1	0,993	0,985	0,985	0,11825
Variation de R^2	**Variation de F**	**ddl 1**	**ddl 2**	**Sg.variation de F**
0,985	9076,630	1	137	0,000

Source: Prepared by the researcher based on SPSS outputs

Through the results of the multiple regression analysis obtained from Table 6, it becomes evident that the coefficient of determination, R^2, is equal to 0.985. This implies that the independent variables explain the model by 98.5%.

Table No. 7: Correlation coefficient results r:

		Human Resource Development	Implementing total quality management
Corrélation de Pearson	Human Resource Development	1,000	0,993
	Implementing total quality management	0,993	1,000
Sig. (unilatèral)	Human Resource Development		0,000

	Implementing total quality management	0,000	

Source: Prepared by the researcher based on SPSS outputs

From the correlation coefficient results obtained in Table 7, it is evident that there is a strong correlation between the implementation of Total Quality Management and Human Resource Development. The correlation coefficient (r) is estimated to be 0.993, and the significance level is calculated to be 0.000, which is less than the significance level of 0.05. This indicates that there is a statistically significant positive relationship between the implementation of Total Quality Management and Human Resource Development.

Table No. 8: Simple regression coefficient analysis results

possibility	Calculated T Value	Coefficients standardisée	Coefficients non standardisée		
Sig	Value	Bêta	الخطأ المعياري	B	
0,000	-12,532	/	0,30	**-0,377**	Human Resource Development
0,000	95,271	0,993	0,11	**1,087**	Implementing total quality management

Source: Prepared by the researcher based on SPSS outputs

The conclusion:

Through our study of this topic, it has become evident that Total Quality Management, as a contemporary organizational philosophy, plays a critical strategic role in human resource development. This is aimed at improving the quality of services and the organization's position in the market. This requires changes in human resource management practices to

adapt to and align with Total Quality Management programs. It also entails creating a culture of Total Quality Management as a fundamental principle for achieving excellence and leadership.

Among the key findings of the study, the following can be summarized:

-The organization today aims to satisfy society more than before, and customer focus has significantly increased through the recommendations that the organization adheres to in its reports.
-The concept of Total Quality Management remains unclear to many employees within the organization. The sole objective of quality programs in the organization is limited to obtaining international quality certification (ISO), which the organization achieved in the past.
-There is a lack of sufficient incentives to encourage employees to be creative and innovative, and administrative regulations are not efficient in aligning with the implementation of Total Quality Management.
-Employees are not involved in decision-making, and there is neglect in forming work teams or quality circles to foster teamwork.
-There is a lack of specialists in Total Quality Management programs within the organization, with few training courses available for Total Quality Management.
-Human resource development in the organization is not well-defined, and employee participation in formulating human resource development programs is not at the desired level.
-The impact of human resource development on improving the economic performance of the organization is minimal, as it represents only a weak factor among other factors contributing to improving economic performance.
-Discussions with officials in this organization have shown their interest in human resource development. However, as the organization belongs to the public sector, it does not have the strategic decision-making powers, such as establishing a training center specifically for the organization.
-The absence of a complete and accurate job description for some positions within the organization has negatively affected the analysis and identification

of training needs for individuals. This process is often confined to the Human Resource Development Committee, which is insufficient in terms of understanding employees' desire for training and ignoring their preferences.
-Decision-making is carried out by individuals with authority and responsibility, and they often reject listening to and accepting employees' opinions, thus missing the benefits provided by the feedback system.
-The absence of initiative freedom and a lack of creativity, as supervisors are required to refer to superiors on a continuous basis or most of the time.

Recommendations and suggestions:

Based on the researcher's findings, several recommendations and suggestions are proposed, with the hope that they will contribute to improving human resource performance based on the implementation of Total Quality Management systems. These can be summarized as follows:

-Work on raising awareness of the principles and concept of Total Quality Management to achieve a clear understanding of this concept through meetings and discussions related to Total Quality Management.
-Provide full support from top management to implement Total Quality Management while monitoring and encouraging its implementation.
-Recognize that the success of quality management in the organization is achieved through the quality of processes, for which everyone is responsible.
-Adopt the principle of reverse feedback from customers and conduct surveys on customer opinions. This method relies on the continuous flow of information from customers, starting with identifying their needs and ending with their satisfaction levels and opinions about products.
-Increase communication channels to provide employees with opportunities to voice their concerns and ensure that top management takes the reports they receive into account.
-Select and appoint leaders who believe in the importance of time, quality, excellence, innovation, teamwork, competition, and have a deep belief in the unlimited capabilities of human resources. Also, value science, knowledge, and modern management sciences for an innovative and effective executive leadership.
-Attract and hire experienced and qualified individuals in Total Quality Management from outside the organization to monitor the implementation of

Total Quality Management and establish links between different departments and offices in the organization to ensure that.

-Schedule training courses in the field of Total Quality Management and improve the employees' skills at various managerial levels involved in Total Quality Management.

-Provide the necessary human, material, and moral support for implementing Total Quality Management. However, avoid rushing to achieve results in its implementation.

-Strive for open communication and develop opportunities for dialogue between human resources and work groups and leadership in the organization. This should enrich access to knowledge and experiences stored in the organization's human resources.

-Consider human resource development as a continuous process and ongoing investment that requires monitoring, improvement, and renewal in line with the organization's requirements.

-Create an appropriate environment for the success of human resource development and ensure the necessary resources for it. Monitor and take the necessary measures to implement human resource development programs by different departments and divisions of the organization.

-Offer an award (even if it is an honorary plaque) to the best employee or department committed to implementing Total Quality Management according to criteria set by top management in coordination with the Quality Department.

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