

# The Role of Human Resources Management in Achieving Competitive Advantage Using the Requirements of Total Quality Management (An Applied Study at the Electrical Industries Company)

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The current research aims to study the knowledge bases of both human resource management and competitive advantage, in addition to explaining the role that human resources management can play in achieving competitive advantage in light of the requirements of total quality management in a manner that is appropriate to different environmental changes and developments. To achieve this goal, a major hypothesis has been put forward that human resources management can help organizations achieve competitive advantage in light of the requirements of total quality management. Three sub-hypotheses emerge from this hypothesis: (1) Human resources management helps in reducing costs, (2) Human Resources Management helps in improving quality (3) Human Resources Management helps reduce design, manufacturing and assembly time. In order to test the research hypothesis, a questionnaire was designed and distributed to a group of workers in the Electrical Industries Company, including administrators, accountants, engineers, and technicians for the fiscal year ending on 31/12/2019. Among all the conclusions, the most important was that there is a prominent role for human resources management in achieving a competitive advantage by relying on total quality management with regard to improving cost, quality, and time indicators.

**Key words:** *Human resources, management, electrical industries, advantage.* 



#### Introduction

Human Resources Management is considered one of the most important functions of management. Focusing on the human element, it deals with what is considered the most valuable resource and the most influential in productivity. Keeping pace with current and future challenges, human resources can contribute strongly to achieving goals and profit for the organization, and human resources management means the optimal use of the available and expected human component over the efficiency, capabilities and expertise of this element and its enthusiasm To raise the efficiency of the organization and its success in achieving the achievement of its goals, management scholars have been interested in setting principles and foundations that help to make the most of every individual in the organization through human resources management, and on these foundations start from planning, selection, training, incentives, evaluation and everything related to the element of human research. The current research aims to clarify the role that human resources management can play in achieving competitive advantage in light of the requirements of total quality management in a manner that is appropriate with various environmental developments. Therefore, the knowledge bases of its variables have been addressed in addition to the role of human esources in achieving competitive advantage by using the appropriate statistical methods.

#### The Study Problem

In light of the rapid and successive developments that accompanied the modern business environment, organizations have faced many challenges, the most important of which is the increased intensity of competition among them. Organizations have consequentially focused on building unique competitive advantages by focusing on the management of human resources and their utility in achieving competitive advantage, while also taking into account quality. The research problem can be formulated through the following question: Can human resources management contribute to achieving competitive advantage in light of the requirements of total quality management?

#### Study Objectives

The research aims to study the knowledge bases of both human resource management and competitive advantage, in addition to explaining the role that human resources management can play in achieving competitive advantage in light of the requirements of total quality management in a manner that is appropriate with different environmental changes and developments.



#### The Importance of the Research

The importance of research comes from the importance of its variables represented in the management of human resources and competitive advantage, as human resource management is one of the important functions that concern the efficient use of the human element Competitive advantage is the field in which the organization has a higher ability than its competitors in exploiting opportunities and facing threats.

#### The Hypothesis of the Study

The research is based on the basic hypothesis that Human resource management can help organizations achieve competitive advantage in light of the requirements of total quality management. The following sub-assumptions emerge from this hypothesis: (1) Human resources management helps reduce costs other than that necessity associated with activities that do not add value to both the organization and the customer. (2) The Human Resources Department assists in improving the quality of products and processes in a manner that makes the product conform to the specifications and standards set. (3) The Human Resources Department helps reduce the design, manufacture and assembly time, which helps reduce the delivery time of the product to the customer.

#### The Study Sample

The research sample is represented by a group of workers in the Electrical Industries Company, including administrators, accountants, engineers and technicians, where 54 questionnaires were distributed and 50 forms were retrieved, which are valid for analysis, with the aim of showing the role of human resources management in achieving a competitive advantage using the requirements of quality management.

# Theoretical Framework of the Study The Concept and Importance of Human Resources

Human Resources Management is seen as a series of decisions about the functional relationships affecting the effectiveness of the organization and the effectiveness of employees, and thus it is the process for attracting, developing and maintaining individuals within the framework of achieving the goals of the organization, i.e. the involvement of human resources management in the overall strategic planning of the organization as the human element is originally an investment that must be managed and developed if the organization is to achieve "increased productivity and performance over the long term" (McManus & Millard, 2002: 4-5).



Therefore programs must be designed, and policies prepared in line with the economic and emotional needs of employees. Creating a career climate in the field of work in a way that helps employees reach their maximum potential, and that takes advantage of their skills and capabilities, is necessary for an organization in order to achieve their objectives. Likewise, designing and preparing the goals, policies and activities of human resources management in the organization is critical, specifically when formulated in a manner that achieves harmony, coordination, and consistency with the rest of the goals and activities of other administrative sectors in the organization (Montoya, et.al., 2014: 13).

There are those who look at the concept of human resources management as a concept that is based on the consideration that the individual is an important investment asset of the establishment, and that human resources management is an important partner in comprehensive strategic planning. The message of human resource management can be to emphasize the maximum use of energies by implementing constructive strategies in the field of selection, appointment, development, as well as in the preservation of human resources and employee relations. In light of this message, long-term strategies for human resource management can be elaborated to achieve the intended goals of the organization as a whole (Guiney, et.al., 2016: 172-173).

Accordingly, human resources management is the use of the workforce in the organization. This encompasses the recruitment processes, the evaluation of performance, development, compensation and salaries, and the provision of social and health services to workers and individual researchers, that is, those in the organization that specializes in supplying the necessary human resources. This includes planning, searching for and operating manpower needs (Bong, et.al., 2005: 30).

Human resources management includes basic operations that must be performed and rules that must be followed. The main task of the manager of individuals is to assist the managers in the facility and provide them with the opinion and advice they need to manage their subordinates more effectively, which is the responsibility of all managers in the facility and the arrangement of what human resources specialize in People Management (Al-Mewari, 2015: 133-134).

It is clear from the previous definitions that human resource management is one of the most important jobs in modern organizations that specialize in using the human element efficiently in all kinds of establishments. This is the process for attracting, developing and maintaining individuals within the framework of achieving the goals of the organization and achieving the goals of workers, i.e. involving human resources management in the overall strategic planning of the organization.



The decision to adopt a human resources program is subject to controversy because its economic returns are not clear in terms of numbers and accounts, which causes the organization to direct its expenditures to programs with tangible returns such as buying machines or maintaining them instead of directing them to training and developing human resources. Thus, the concept of human resources management is a modern concept for dealing with the human element, especially in profit-making organizations. It means that behind every successful organization are successful programs for human resources (Bong, et.al., 2005: 30). As for the goals of human resources management, they often involve two main goals, namely efficiency and justice, and these goals can be clarified through the following:

- 1. Efficiency: It is the relationship between the inputs of production processes and outputs. The production inputs are raw materials, machinery, technology and human resources, and outputs are products or services. Efficiency is achieved whenever the value of the outputs is greater than the value of the inputs, and it reflects the efficiency of the organization's performance from two angles which are the organization's performance and employee performance (Autocues, 2015: 48).
- 2. Justice: These are procedures and decisions for dealing with human resources, and they can be measured from two angles, namely the organization and workers. The organization's policies relate to the non-discrimination policy and the stimulus policy and the policies related to achieving customer satisfaction. Employee measurements relate to the percentage of grievances and complaints and the degree of complaint seriousness and the impact of complaints on the morale of individuals (Paradises, 2016: 2).

The human resources department aims to provide a homogeneous workforce in terms of culture and training level and behavioural background, as well as provide a productive workforce in terms of achieving production or service in accordance with the criteria set in time, in addition to achieving an effective workforce in terms of completing work in the best ways and at the lowest costs. Additionally, it also provides a stable workforce by improving the rate of employee turnover. The lower the turnover rate and employee absence, the greater the organization's strength and effectiveness. It also facilities the development of individuals through training and, through the organization's keenness to satisfy employees, especially the most qualified of them, organizational loyality. From the above it is clear that the importance of human resources management comes from the following points: (Cahunta, 2012: 435-436)

- 1. The ability of the human resources department to attract the best human elements to fill vacancies, which in turn will reflect on productivity and profitability.
- 2. The ability of the organization to provide a good organizational climate for work in terms of motivation and push workers to give and produce effectively and efficiently in a manner that achieves the desired goals.



- 3. The immediate treatment of potential problems in the area of recruitment, performance evaluation, training and promotions will save potential costs arising from fast turnover, increased absenteeism rates or lower productivity.
- 4. Providing high costs in legal cases that the employee can turn to in cases of dismissal, not to grant a bonus or an override in promotions.

#### The Concept and Determinants of Competitive Advantage

- 1. Business organizations can achieve a competitive advantage by making better use of the available technical, material, financial and organizational capabilities and resources, in addition to the capabilities, competencies, knowledge and other possibilities that the organization enjoys, which enables it to design and implement its competitive strategies. There are several definitions that dealt with the concept of competitive advantage. As you understand, competitive advantage is the ability of the organization to formulate and apply strategies that improve its position in relation to other organizations working in the same activity. This definition indicates that competitive advantage is limited to the ability of applying strategies that enable a better competitive position compared to other competitors (Burdines, et.al.2008: 12.)
- 2. Accordingly, it can be said that competitive advantage is the field in which the organization has a higher ability than its competitors to exploit external opportunities or limit the impact of threats. Competitive advantage stems from the organization's ability to exploit its material, human or intellectual resources. It may relate to quality or the ability to reduce costs. Achieving competitive advantage is related to two main dimensions, as follows: (Hazier & Render, 1996: 77)
- **3.** The perceived value of the customer to the customer, that is, the way in which organizations exploit the various capabilities in improving the value that the customer realizes for the goods and services provided by those organizations.
- **4.** Excellence: Competitive advantage can also be achieved by offering a commodity that competitors cannot mimic or copy. There are several ways to access excellence, the most important of which is human resources.

There are three main types of competitive advantages, namely the cost advantage of the lowest, the advantage of distinguishing the product, and the advantage of shortening time (Cahunta, 2012: 435). These types can be illustrated by the following:

1. The advantage of the lowest cost: By that we mean the organization's ability to design, manufacture and market products at the lowest possible cost compared to its competitors, which enables them to achieve great profits. The low cost creates opportunities for sale at competitive prices that can attract customers (Wasta, et.al., 2013: 52).



- 2. Product Excellence Advantage (Quality): It is that the organization can provide unique and unique products or services that receive customer satisfaction, so it has become necessary for the organization to understand and analyse sources of excellence through value chain activities, exploiting competencies and skills, and pursuing effective expansion methods and policies, which promote increases in market share (Chan & Wu, 2012: 477.)
- A The advantage of shortening time: It is achieving a competitive advantage on the basis of reducing the time component for the benefit of the customer through several elements, the most important of which are the following: (Barney, 2009: 102)
- B Reducing the time to introduce new products to the market.
- C Reducing the processing cycle times of products. Reducing storage costs and production costs.
- D Reducing delivery time for the customer permanently.
- E- Reducing turnaround times for production processes, that is, there is flexibility in manufacturing.

It is worth noting that the competitive advantage arises as a result of external and internal factors, the external factors are the change in customer needs or technological, economic and legal changes, which may create a competitive advantage for some organizations due to the speed of their reaction to the changes. Internal factors are represented by the organization's ability to own and build resources or develop skills and abilities that are not available to other competitors, including innovation and creativity, which play a major role in creating a competitive advantage. (Burdines, et.al. 2008: 140

The competitive advantage of the organization is determined by two important dimensions, namely the size of the competitive advantage and the scope of competition (Wasta, et.al., 2013: 52). These two dimensions can be clarified by the following:

- 1. First: The size of the competitive advantage: The competitive advantage passes through a set of stages that start with the application stage and end with the tradition phase, and these stages can be explained as follows: (Bailout, 2006: 159)
- 2. The application stage: It is the longest stage for the organization creating the competitive advantage, because it needs a lot of thinking and preparation, and the competitive advantage is increasingly known with the passage of time.
- **3.** Adoption stage: The advantage here is relatively stable in terms of prevalence, given that competitors have begun to focus on them, and the savings at this stage are the most possible.
- **4.** The imitation stage: The size of the competitive advantage gradually decreases to stagnation, because competitors have imitated the advantage of the organization, and thus its primacy over them decreases and there is a decrease in the savings.



- **5.** The stage of necessity: Here comes the need to rapidly improve and develop the current feature or create a new feature on completely different grounds than the foundations of the current feature.
- **6.** Second: The scope of competition: The scope of competition expresses the extent of the activities and operations of the organization in order to achieve competitive advantages. The scope of competition is formed of four dimensions, which are as follows: (Chan & Wu, 2012: 478)
- 1. Market segment: reflects the diversity of the organization's outputs, as well as the diversity of customers who are served, and here the choice is made between focusing on a specific sector of the market or serving the entire market.
- 2. The degree of forward integration refers to the degree to which the organization performs its activities, whether internal or external, as high front integration compared to the competitor may achieve the advantages of lower cost or discrimination.
- **3.** Geographical dimension: represents the number of geographical regions in which the organization competes. This range allows the achievement of competitive advantages by providing activities and jobs across these regions.
- **4.** Activity Sector: Reflects the extent of correlation between the industries in which the organization operates. Having links between activities across several industries would create opportunities to achieve various competitive advantages.
- 5. Accordingly, the economic unit seeks to search for a competitive advantage that suits its capabilities and its field of activity, and then tries to set dynamic controls and standards to measure the degree of validity of the approved feature, and then to identify the framework and the limits that set it in order to achieve the desired goals and results.

# The Importance of Human Resources Management in Achieving Competitive Advantage in Light of the Requirements of Total Quality Management

- 1. The importance of a re-consideration of human resource management is evident in the fact that it has become a pillar of development for business organizations, growth and success, so the more knowledge workers have, the greater their creativity. This constitutes a competitive advantage since it is clear that the intangible component of the value of advanced technology outperforms the real values of its sensory assets (Barney, 2009). Reliance on human resources management to build and achieve the competitive advantage of the organization and preserve it in light of the requirements of total quality management requires dealing with three basic data sets, which is implementing the organization's strategy, dealing with change positively, and building enthusiasm. The strategy of the organization, and the data can be clarified through the following: (Wasta, et.al., 2013: 52)
- 2. Implementation of the organization's strategy: The strategy is related to setting the organization's mission and primary goals within the framework of environmental conditions and the capabilities of that organization as the strategy deals with the future.



- **3.** Dealing with change positively: The highly dynamic environment necessitates the need for the organization to strengthen its ability to manage change positively, and this can be achieved by determining the relative importance of its innovations or by calculating the value of the organization's intellectual assets.
- **4.** Building the strategic autism of the organization: Strategic autism means the degree of customer participation in the group's core values and assumptions in a way that helps achieve the set goals.
- 5. When the organization strengthens its competitive advantage by relying on human resources management, the quality component must be observed, as quality is necessary and important in the modern manufacturing environment, as it is a strong competitive weapon that economic units use to appeal to customers, win, and distinguish itself from competitors, as the activities of these units have become directed towards the customer to meet his needs and expectations. The importance of human resources management in achieving competitive advantage in light of the requirements of total quality management can be explained as follows: (Hazier & Render, 1996: 79-80)
- **6.** Costs and market share: The high quality of products can lead to an increase in market share and cost savings, which affects the overall profitability of the organization.
- 7. The reputation of the economic unit: High quality helps it to improve the reputation and thus enables it to draw effective policies accordingly through the production of new products or the expansion of existing products.
- **8.** Compensatory claims: The economic unit can get rid of legal issues and countervailing claims when it produces high-quality products that meet the needs and expectations of customers.
- 9. International results: Quality has become a global affair in light of the many technological developments that have occurred in recent years. If the economic unit wants to compete globally, it must produce high-quality products at an acceptable price, because competition is based on quality and price.

# The Applied Side of Research Research Society and Sample

The research community consists of a group of workers in the Electrical Industries Company, including administrators, accountants, engineers, and technicians. The sample of the research has been selected. A sample of those workers were chosen, as fifty-four questionnaires were distributed and fifty forms were retrieved, which are valid for analysis. The researcher relied on personal interviews with individuals for the research sample. The questionnaire was designed in a way that is consistent with the research objectives and hypotheses. The questionnaire included an introduction that showed the nature of the research and the general (demographic) questions of the research sample, in addition to questions about testing its hypotheses. The answers of the questionnaire can be converted into quantitative values on a



five-degree scale as follows: completely agree (5) degrees, agree (4) degrees, neutral (3) degrees, do not agree (2) degrees, do not completely agree (1) degrees.

A set of statistical methods was used, including the arithmetic mean, attributed to the maximum value of the five-degree Likert scale. If the arithmetic mean exceeds three degrees of the area of the scale, the study is acceptable, that is, if it has a percentage greater than 60%, in addition to the use of percentages and standard deviation, In addition to the T-test, which aims to demonstrate that the relationships between the variables of the study are real and not due to chance, through inference about the arithmetic mean of the statistical community.

## Results of Distributing the Questionnaire and Analysing the Demographic Characteristics of the Individuals in the Research Sample

54 questionnaires were distributed among the individuals of the research sample, and 50 questionnaires were retrieved for analysis. The percentage of these forms reached 92.6%. The non-retrieved forms reached 4 forms by 7.4%.

After analysing the demographic characteristics, it was found that 46% of the respondents are aged 41-50 years. The male percentage of the individuals in the research sample reached 72%, and the female percentage reached 28%. 70% possessed a bachelor's degree is and 6% possessed a master's degree, which means that they are qualified to understand the idea of the topic. Finally, in terms of the years of experience for the individuals in the research sample, the largest percentage for a group was 21-30 years at 40%.

#### Research Hypothesis Test

We review, during this paragraph, the research hypotheses test using both the arithmetic mean, percentage, and standard deviation, in addition to using (One Sample T-test) in order to prove or negate these hypotheses and to ensure that there is a relationship between research variables.

#### First Hypothesis Test

The first hypothesis states the following: Human Resources Management helps reduce unnecessary costs associated with activities that do not add value to both the organization and the customer. Table 1 shows the arithmetic mean, percentage, and standard deviation of the first hypothesis variables.



**Table 1:** Arithmetic mean, percentage, and standard deviation of the first hypothesis variables

VARIABLES	Arithmetic	Standard	Percentage
	Mean	Deviation	
Human Resources Management helps in			
synchronizing the design and development			
process so that this can help reduce the total	4.522	0.653	<b>%90.44</b>
costs of the product due to the reduction of			
time and costs related to it.			
Human Resources Management contributes to			
reducing costs as a result of deleting or	4.198	0.596	%83.96
merging similar or homogeneous activities	4.190	0.390	7003.90
and procedures.			
Human resource management enables cost			
estimation during the early stages of design	3.877	0.535	<b>%77.54</b>
and helps reduce unjustified costs.			
Human Resources Department contributes to			
continuous improvement processes and	3.702	0.506	%74.04
carrying out these operations simultaneously	3.702	0.300	/0/4.04
will reduce costs.			
Human Resources Management helps remove			
components and functions that do not add			
value during the design phase with a focus on	3.861	0.532	<b>%77.22</b>
value-adding functions in order to enhance			
them.			
Overall average	4.032	0.564	%80.64

**Source:** prepared by the researcher.

It is clear from Table (1) that the individuals of the research sample believe that human resources management helps reduce unnecessary costs associated with activities that do not add value, as the general mean for all paragraphs was 4.032, and the percentage of 80.64% reached a standard deviation of 0.564, which indicates acceptance of this hypothesis. Paragraph (1) got the highest arithmetic mean of 4,522 and the percentage 90.44% with a standard deviation of 0.653. Paragraph (4) got the lowest arithmetic mean of 3.702 and percentage of 74.04% with a standard deviation of 0.506. To verify that the arithmetic mean shown by respondents from the sample members for the paragraphs of this hypothesis is significantly greater than the mean of the measuring instrument, and that these differences are not due to chance, T-test was used. Table (2) shows the results of the T-test for the first hypothesis variables.



**Table 2:** One Sample T-test results for the first hypothesis variables

Variables	Tabular T	Computed T	Degree of Freedom	Significance Level
X11	2.704	9.201	49	0.05
X12	2.704	8.343	49	0.05
X13	2.704	7.695	49	0.05
X14	2.704	4.822	49	0.05
X15	2.704	7.497	49	0.05
Overall average	2.704	7.512	49	0.05

**Source:** Prepared by the researcher

Through Table (2), it is noted that the calculated value of T for all paragraphs is greater than the tabular value, which ranged between 4,822 and 9.201, as the tabular value of T was 2.704 with a freedom degree of 49 and a significance level of 0.05. The general average for all hypothesis variables first involved the calculated value of T, which was greater than its tabular value with a freedom level of 49 and a significance level of 0.05. This indicates acceptance of this hypothesis.

#### Second Hypothesis Test

The second hypothesis states the following: Human resources management helps in improving the quality of products and processes in a way that makes the product conform to the specifications and criteria set. Table (3) shows the arithmetic mean, percentage, and standard deviation of the variables of the second hypothesis.



**Table 3:** Arithmetic mean, percentage, and standard deviation of the second hypothesis variables

Variables	Arithmetic Mean	Percentage	Standard Deviation
The Human Resources Department focuses on the			
customer during the first stage of product design in		%73.64	
a manner that provides a broad basis for the design	3.682	7075.01	0.503
team in order to improve the quality of both the			
product and the process.			
Through human resource management, emphasis			
will be placed on quality activities that add value,		%90.36	
which are prevention activities, and work to		7070.30	
enhance them in a way that makes the product			
conform to specifications and standards.			
Human Resources Management helps to reinforce			
synchronization in the design and development			
process in a way that helps reduce the total costs of	4.518	%96.04	0.661
the product as a result of reducing the time and			
costs related to it.			
Human Resources Management helps in improving			
the quality of design in a way that can produce		%85.18	0.734
products that meet the needs and desires of		/003.10	0.734
customers and match their expectations.			
The Human Resources Department helps reduce the			
number of redesigns, which indicates the quality of			
designs submitted by the design team in a manner	4.802	%83.98	0.604
that is consistent with the requirements of			
customers.			
Overall average	4.259	%85.84	0.591

**Source:** prepared by the researcher

It is clear from Table (3) that the individuals of the research sample believe that human resources management helps in improving the quality of products and processes, which makes the product conform to the specifications and standards established so that it can help in providing products and services that can meet the needs and desires of customers. The general arithmetic mean of all paragraphs was 4.292, which is a percentage 85.84% with a standard deviation of 0.619. This indicates acceptance of this hypothesis. Paragraph (3) got the highest arithmetic mean of 4.802 and a percentage of 96.04% with a standard deviation of 0.734. Paragraph (1) obtained the lowest mean of 3.682 and a percentage of 73.64% with a standard



deviation of 0.503. A T-test per sample was next used, and Table 4 shows the results of this test regading the variables of the second hypothesis.

**Table 4:** One Sample T-test results for the second hypothesis

Variables	Significance Level	Degree of Freedom	T Tabular	Computed T
X21	0.05	49	2.704	7.595
X22	0.05	49	2.704	8.213
X23	0.05	49	2.704	9.413
X24	0.05	49	2.704	4.726
X25	0.05	49	2.704	4.333
Overall average	0.05	49	2.704	6.856

**Source:** prepared by the researcher.

Through Table (4), it is noted that the calculated T value for all paragraphs is greater than the tabular value, which ranged between 4.333 and 9.413. The tabular value of T was 2.704 with a freedom degree of 49 and a significance level of 0.05. The general average for all hypothesis variables first invovled the calculated value of T, which was greater than its tabular value with a freedom degree of 49 and a significance level of 0.05. This indicates acceptance of this hypothesis, as it can be said that human resource management helps to improve the quality of products and processes.

#### The Third Hypothesis Test

The third hypothesis states the following: The human resources department helps reduce the design, manufacture and assembly time and helps in reducing the delivery time of the product to the customer. Table (5) shows the arithmetic mean, percentage, and standard deviation of the variables of the third hypothesis.



**Table 5:** Arithmetic mean, percentage, and standard deviation of the third hypothesis variables

X7::-1.1	Standard	D	Arithmetic
Variables	Deviation	Percentage	Mean
The human resource management enables the design			
team to implement the various stages of product			
design simultaneously in a manner that helps in	0.569	%81.64	4.082
achieving significant savings in the overall design			
time.			
The Human Resources Department assists in carrying			
out the manufacturing and assembly process	0.518	%76.96	3.798
simultaneously in a manner that helps to reduce the	0.516	70/0.90	3.190
time of both the manufacturing and the assembly to a			
minimum.			
Human Resources Management helps speed up the			
idea's arrival in the market in a way that achieves	0.577	%82.34	4.117
customer satisfaction, as this access is faster than	0.577	7082.34	4.11/
competitors.			
The Human Resources Department helps reduce the			
time of delivery of products to customers as a result			
of cuts in the time of design, manufacture and	0.556	%80.44	4.022
assembly in a manner that achieves customer			
satisfaction.			
Human resource management enables individuals to			
perform the design, manufacture and assembly	0.565	%81.22	4.061
processes simultaneously in a manner that helps	0.303	/001.22	7.001
reduce the total time of the product life cycle.			_
Overall average	0.557	%80.32	4.016

**Source:** prepared by the researcher

It is clear from Table (5) that the individuals of the research sample believe that the Human Resources Department helps reduce the design, manufacturing and assembly time, and that this helps in reducing the delivery time of the product to the customer, as the general mean for all paragraphs was 4.016 with a percentage 80.32% and a standard deviation of 0.557. This indicates acceptance of this hypothesis. Paragraph (3) got the highest arithmetic mean of 4.117 and a percentage 82.34% with a standard deviation 0.577. Paragraph (2) got the lowest arithmetic mean of 3.798 and a percentage of 76.96% with a standard deviation 0.518. A T-test was used, and Table (6) shows the results of T-test for the three hypothesis variables.



**Table 6:** One Sample T-test results for the third hypothesis

Variables	Significance Level	Degree of Freedom	T Tabular	Computed T
X31	0.05	49	2.704	9.443
X32	0.05	49	2.704	5.812
X33	0.05	49	2.704	9.748
X34	0.05	49	2.704	7.947
X35	0.05	49	2.704	9.269
Overall average	0.05	49	2.704	8.444

**Source:** prepared by the researcher

Through Table (6), it is noted that the calculated value of T for all paragraphs is greater than the tabular value, which ranged between 5.812 and 9.748, as the tabular value of T was 2.704 with a freedom degree of 49 and a significance level of 0.05. The general average for all hypothesis variables involved the calculated value of T, which was greater than its tabular value with a freedom level of 49 and a significance level of 0.05. This indicates acceptance of this hypothesis.

#### Main Hypothesis Test

The main hypothesis states the following: Human resources management can help organizations achieve competitive advantage in light of the requirements of total quality management. Table (7) shows the arithmetic mean, percentage, and standard deviation for the variables of this hypothesis.

Table 7: The mean, percentage, and standard deviation of the main hypothesis variables

Variables	Standard	Percentage	Arithmetic
v arrables	Deviation	reicemage	Mean
Human Resources Management helps reduce	0.564	%80.64	4.032
unnecessary costs associated with activities that do	0.304	7000.04	4.032
not add value.			
The Human Resources Department assists in			
improving the quality of products and processes in	0.619	85.84%	4.292
way that makes the product conform to the		03.0470	4.292
specifications.			
The Human Resources Department helps reduce the			
design and manufacturing time and reduce the	0.557	%80.32	4.016
delivery time of the product to the customer.			
Overall average	0.580	%82.26	4.113

**Source:** prepared by the researcher



It is clear from the above table that the individuals of the research sample believe that human resources management can help organizations achieve competitive advantage in light of the requirements of total quality management, as the general mean for all paragraphs was 4.113, which is a percentage of 82.26% with a standard deviation of 0.580, This indicates acceptance of this hypothesis. One Sample T-test can be used. Table (8) shows the results of One Sample T-test for the fourth hypothesis

**Table 8:** One Sample T-test results for the main hypothesis variables

Variables	Significance Level	Degree of Freedom	T Tabular	Computed T
X1	0.05	49	2.704	7.512
X2	0.05	49	2.704	6.856
Х3	0.05	49	2.704	8.444
Overall average	0.05	49	2.704	7.604

**Source:** prepared by the researcher

Through the above table, it is noted that the calculated value of T for all paragraphs is greater than the tabular value, which indicates acceptance of this hypothesis, as it can be said that human resources management can help organizations achieve competitive advantage in light of the requirements of total quality management.

#### Conclusions and Recommendations

#### **Conclusions**

During this research, the following set of conclusions were reached:

- 1. Human resources management represents one of the most important jobs in modern organizations that specialize in using the human element efficiently in all kinds of establishments, and it is thus the process for attracting, developing and maintaining individuals within the framework of achieving the goals of the organization and achieving the goals of workers.
- 2. The importance of human resources management comes from its ability to attract the best human elements to fill important and vacant jobs, and the organization's ability to provide a good organizational climate for work.
- 3. Competitive advantage is the field in which the organization has a higher ability than its competitors in exploiting external opportunities or reducing the impact of threats, and the competitive advantage stems from the organization's ability to exploit its material, human or intellectual resources. It may relate to quality or the ability to reduce cost.



- 4. When the organization strengthens its competitive advantage by relying on human resources management, the quality component that is necessary in the modern manufacturing environment must be observed.
- 5. From the field study, it became clear that there is a prominent role for human resources management in achieving the competitive advantage by relying on total quality management with regard to improving cost, quality and time indicators.

#### Recommendations

Based on the conclusions reached, the research recommends the following:

- 1. The need for senior management in the organization to adopt a sound strategy in evaluating the performance of human resources in the framework of the overall strategy of the organization to be the reference on which human resource experts depend on companies affiliated with the organization and provide a sound basis for applying this strategy.
- 2. Emphasizing the conduct of an in-depth analysis regarding the use of the evaluation of human resource performance in supporting the management of the company's relationships with both employees and customers alike to achieve the desired goals.
- 3. Working to raise and deepen awareness among managers and individuals alike of the importance of human resources management because of its effective impact on accomplishing the strategic tasks of human resources in the organization.
- 4. The organization must take advantage of external opportunities or limit the impact of threats, and the competitive advantage stems from the organization's ability to make better use of its material, human or intellectual resources.
- 5. The necessity of using human resources management with its capabilities and skills to achieve and maintain competitive advantage by taking into account the application of the necessary requirements for comprehensive quality management.



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