

## The role of human competency development in achieving competitive advantage: A case study of the SAIDAL complex

Zahia Gharbi <sup>1</sup> and Abderraouf Hadjadj <sup>2</sup>

<sup>1</sup> Doctoral Student, Laboratory of Institutional and Economic Performance in the Context of Globalization, Kasdi Merbah University- Ouargla, (Algeria). Email: [zahiagarpi@gmail.com](mailto:zahiagarpi@gmail.com)

<sup>2</sup> Professor, Laboratory of Institutional and Economic Performance in the Context of Globalization, Kasdi Merbah University- Ouargla, (Algeria). Email: [abderraouf.hadjadj2@gmail.com](mailto:abderraouf.hadjadj2@gmail.com)

**Abstract---**The study aims to shed light on the concept of human competency development in pharmaceutical manufacturing institutions, and to assess the extent of its application within the SAIDAL (Algerian Company of Pharmaceutical Industries). It also seeks to measure its impact on achieving competitive advantage at SAIDAL. To reach the study's objective, we adopted a descriptive-analytical approach and relied on a questionnaire as an auxiliary tool. The study population consisted of a group of employees from SAIDAL (Dar El Beïda Unit), with a sample of 54 workers. A total of 83 questionnaires were distributed, 56 were returned, and 2 were excluded for being invalid. The results were statistically analyzed using the SPSS software for social sciences. We arrived at several conclusions, including the presence of a good and acceptable understanding of the concept of human competency development among SAIDAL employees, attributed to the company's attention to human competencies and the commitment of its employees to good behavior, in addition to the presence of individuals with high skills and knowledge. There was also a clear understanding of the concept of competitive advantage. We found a strong positive relationship between the study variables, with the "skill" dimension being the most influential in achieving competitive advantage. This indicates that the company possesses highly skilled individuals, along with the knowledge and behaviors they exhibit.

**Keywords---**social responsibility, competitive advantage, sustainable, economic dimension, social dimension, ethical dimension, human dimension.

---

### How to Cite:

Gharbi, Z., & Hadjadj, A. (2025). The role of human competency development in achieving competitive advantage: A case study of the SAIDAL complex. *The International Tax Journal*, 52(3), 748–765. Retrieved from <https://internationaltaxjournal.online/index.php/itj/article/view/99>

The International tax journal ISSN: 0097-7314 E-ISSN: 3066-2370 © 2025

ITJ is open access and licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

Submitted: 27 Jan 2025 | Revised: 13 March 2025 | Accepted: 25 May 2025

### **Introduction:**

In our current era—characterized by rapid technological advancement and increasing globalization—human competencies have become the cornerstone for achieving success and excellence in any institution. In the face of intense competition, where all traditional differences in material and technological resources are diminishing, the human element—equipped with ever-evolving knowledge, advanced skills, and distinct behaviors—has emerged as the true driver of competitive advantage. Mere recruitment is no longer sufficient; institutions are now required to adopt comprehensive and ongoing strategies for the development and enhancement of these competencies. This is not just to keep up with change, but to lead it and shape the future. Investing in human competencies is no longer a tactical option—it has become an urgent strategic necessity.

Institutions that recognize the value of their human capital and invest in it effectively are those capable of fostering innovation, improving the quality of products and services, increasing productivity, and strengthening the loyalty of both customers and employees. In this paper, we aim to explore how the process of human competency development—seen as the cornerstone in building and maintaining competitive advantage—takes shape, and how institutions can transform their human resources into priceless strategic assets in the contemporary business environment.

Based on this, we raise the following central research question:

To what extent can human competency development be considered a key driver of competitive advantage at the SAIDAL Company?

From this main question, we derive the following sub-questions:

- What is the level of interest in developing human competencies within the institution?
- What is the level of competitive advantage achieved by the SAIDAL Company?
- Does the variation in respondents' attitudes regarding the level of competitive advantage achieved by the institution stem from differences in demographic variables (gender, age, educational level, seniority, job position)?
- Is there an impact of the dimensions of human competency development on competitive advantage?
- What is the relationship between human competency development and competitive advantage?

To answer these sub-questions, we formulated the following hypotheses:

- There is strong interest in developing human competencies within the institution.
- There is a variation in respondents' attitudes regarding the level of competitive advantage achieved by the institution, due to differences in demographic variables (gender, age, educational level, seniority, job position).
- The dimensions of human competency development have a statistically significant effect on achieving competitive advantage.
- There is a statistically significant relationship between human competency development and competitive advantage.

### **Research Objectives**

This study aims to:

- Identify the current state of human competency development in Algerian institutions.
- Highlight the importance of human competencies and the need to develop them in order to achieve the predefined objectives in Algerian institutions.
- Emphasize the role of human competency development in achieving competitive advantage in the SAIDAL Company.

## **2. The Conceptual Framework of Human Competencies and Competitive Advantage**

### **2.1. The Concept and Importance of Human Competencies**

#### **2.1.1. Definition of Human Competencies:**

- The concept of competence refers to the scientific skills that result in value creation. It is a combination of knowledge, skills, experience, and behaviors practiced within a specific framework. <sup>i</sup>
- Ulich defined a set of competencies for human resources, based on the notion that competence involves knowledge, skills, abilities, and personal traits that directly influence an individual's performance at work. <sup>ii</sup>
- Luc Boyer defined it as the ability to carry out specific tasks, which is measurable and observable through activity. More broadly, competence is a readiness to mobilize, combine, and apply resources to work. Competence only manifests through action. <sup>iii</sup>
- According to Vincent Plauchet, it is "the ability to perform the required work with minimal resources; efficient activity is the least costly." Thus, competence is embodied in achieving the required outcome while minimizing costs. <sup>iv</sup>
- Competence is influenced by various indicators and qualifications that govern and contribute to its development. Therefore, Caird links competence to psychological variables, skill, knowledge, and performance. When these factors come together, they result in successful behavior. <sup>v</sup> Competence is "a set of knowledge, skills, and experiences implemented to provide an appropriate response to achieve a measurable goal. Competencies include technical knowledge, behavioral knowledge, and subject matter expertise used to perform a specific activity". <sup>vi</sup>

#### **2.1.2. The Concept of Human Competency Development:**

The concept of competency development refers to the mix of methods, tools, and activities that contribute to enhancing the performance level of existing competencies within institutions. <sup>vii</sup> Others define it as a set of educational activities that increase both current and future productivity by enhancing individuals' capacities to complete assigned tasks. It is also described as "a process of activating, refining, maintaining, and developing human talents and capabilities across scientific, technical, and behavioral dimensions. It enables individuals to perform their work and understand their environment and techniques". <sup>viii</sup>

#### **2.1.3. The Importance of Competencies: <sup>ix</sup>**

Human competency development is considered an urgent necessity to address observed deficiencies—whether in knowledge or performance levels of human resources. Others view it as a strategic option to face future institutional challenges. Its importance is highlighted in the following points:

- It helps institutions enhance individual effectiveness and productivity.
- It serves as a tool to increase the sense of belonging and loyalty, thereby reducing absenteeism and workplace conflicts.
- It fosters psychological security and confidence among individuals by making them aware of their valuable skills and knowledge.
- It bridges performance gaps in both the present and future.
- It acts as a tool to strengthen competitive advantage.

#### **2.1.4. Types of Competencies:**

There are many types of competencies, varying according to authors and researchers. However, most agree on the following classifications:

##### **A. Individual Competencies:**

According to Athey and Orth (1999), individual competence is a set of observable performance dimensions that include knowledge, skills, behaviors, and organizational abilities. These are interconnected to achieve high performance and provide a sustainable competitive advantage.<sup>x</sup> It represents a combination of both latent and evident resources possessed by the individual—skills,

knowledge, capabilities, behaviors, and social values—that are applied in professional situations to achieve expected results.

### **B. Collective Competence:**

According to Le Boterf (2000), collective competence arises from collaboration and the synergy between individual competencies. It includes knowledge, the ability to prepare and deliver jointly, communication skills, cooperation, and learning from experience <sup>xi</sup> (Ibrahim Yahiaoui and Nawal Ben Ahmed, p.12). It defines the institution's strength or weakness in terms of competitiveness, evaluated through societal judgment by selecting the most competent resource. It includes:

1. **Specific or qualitative competence:** Linked to a defined field of knowledge or skills and specific tasks within institutional departments.
2. **Extended or transversal competence:** Applied in new contexts. The broader and more diverse the situations where the same competence is applied, the more extended it becomes.

### **C. Organizational (Strategic) Competence:**

According to Prahalad and Hamel (1994), core (strategic/central) competence is a combination of skills and technologies that contribute significantly to the value added to the final product. Strategic competence represents the organization's capabilities multiplied by its resources. <sup>xii</sup> Strategic competencies span various hierarchical levels and functions (planning, execution, management, control), including:

- Technical competence
- Human relations competence
- Administrative and technical competence
- Planning and management competence
- Execution competence
- Evaluation/control competence <sup>xiii</sup>

**D. Future-Oriented Competence:** A distinction is made between acquired competencies and required competencies. This distinction arises from the rapid evolution of professions due to technological innovation, changing consumer preferences, and competitive pressures, which affect both product life cycles and the relevance of competencies. <sup>xiv</sup>

## **2.1.5. Dimensions of Competencies: <sup>xv</sup>**

### **A. Knowledge:**

A structured and integrated body of information within a reference framework that guides institutional activities. It includes essential professional knowledge, like accounting or secretarial techniques, and can be transferred between individuals.

### **B. Skills (Know-how):**

The ability to act concretely based on predefined objectives. It consists of applied concepts, activities, procedures, and specific operational information. Skill requirements vary across administrative levels depending on task nature.

### **C. Behavior (social competence):**

This involves the set of attitudes and personal traits linked to job performance, such as organization, precision, initiative, etc. Behavior can be positive (aligned with organizational goals), negative (opposing), or neutral.

## **2.2. Competitive Advantage**

### **2.2.1. Definition of Competitiveness:**

Ahmed Bounfour defined competitiveness as “the institution's ability to achieve a relatively larger market share than its competitors.” This definition emphasizes market share as an indicator of competitiveness. Another view sees competitiveness as the institution's ability to penetrate and establish

presence in new markets. Similarly, Farid Najjar defined it as “the ability to withstand competitors in order to achieve profitability, growth, stability, expansion, innovation, and renewal”.<sup>xvi</sup> In sum, competitiveness is the capacity to withstand competition, measured by how well an institution can respond to market challenges—be it through better offerings, lower prices, or operational efficiency.

### 2.2.2. Definition of Competitive Advantage:

There are various definitions of competitive advantage depending on scholars and thinkers. It has been defined as “an organization's ability to design and implement strategies that place it in a better position relative to others in the same field.” Competitive advantage stems from optimal use of technical, financial, organizational, informational, and human resources, among others. It depends on two main dimensions: perceived customer value and the organization's ability to achieve distinctiveness.<sup>xvii</sup> According to Nabil Morsi Khalil (2003), it is “an advantage or edge achieved by an organization when adopting a specific competitive strategy”.<sup>xviii</sup> Thus, competitive advantage is the institution's ability to meet customer needs in a way that ensures superiority, increases market share, and maximizes profit.

### 2.2.3. Types of Competitive Advantage: <sup>xix</sup>

Porter identified two main types:

- **Cost Leadership Advantage:** The organization's ability to produce and market goods at the lowest cost compared to competitors, thereby gaining higher returns. This includes not only production cost reduction but also marketing cost efficiency.
- **Differentiation Advantage:** The organization's ability to distinguish itself by offering unique and valuable products or services—whether through quality, technological innovation, after-sales services, distribution channels, promotional strategies, or pricing—to establish a strong market reputation.

### Dimensions of Competitive Advantage:

- **Cost:** <sup>xx</sup> The oldest form of competitiveness. It refers to producing and distributing goods at minimal costs compared to competitors.
- **Quality:** <sup>xxi</sup> Consumers now prioritize quality over price. Institutions must therefore deliver high-quality goods and services through technology, process improvement, and employee training. Continuous improvement is key to building a sustainable advantage.
- **Knowledge:** <sup>xxii</sup> In today's era of knowledge explosion, knowledge becomes the most crucial asset for generating competitive advantage. Successful organizations are those that anticipate and create new knowledge and apply it through innovative technologies, products, and services.
- **Market Share:** <sup>xxiii</sup> Reflects the effectiveness of marketing activities and is measured by the company's sales compared to the total industry sales. Institutions with higher market shares often lead in pricing, innovation, and technological adoption.
- **Time:** <sup>xxiv</sup> A critical competitive factor. Efficient time management reduces costs, improves quality and productivity, and enhances profitability and market position. It also shortens product development cycles and boosts performance.
- **Flexibility:** <sup>xxv</sup> As per Heizer (1999), flexibility is the organization's ability to adapt to market changes, design innovations, and demand variability. It is the organization's capacity to adjust its production system to environmental changes and market needs.

### 2.2.4. Importance of Competitive Advantage: <sup>xxvi</sup>

Organizations continuously strive to position themselves competitively within their sectors. The importance of competitive advantage includes:

- Creating customer value, ensuring loyalty, and enhancing the institution's reputation.
- Achieving strategic distinction from competitors in goods and services provided.

## Field Study of the SAIDAL Pharmaceutical Company in Algeria

### Introduction

After addressing the theoretical aspects of both human competencies development and competitive advantage, as well as reviewing the most significant previous studies in the field, we aim—through this section—to apply the theoretical framework to a sample of employees and department heads at SAIDAL, a pharmaceutical manufacturing company in Algeria. We seek to highlight the actual implementation of human competencies development and its impact on achieving competitive advantage.

SAIDAL was selected as a case study for two main reasons:

First, the scarcity of studies in the pharmaceutical industry; Second, SAIDAL's status as one of the leading companies operating in the sector. Additionally, its excellent reputation and significant position among Algeria's strategic institutions, along with its success in securing a strong place both locally and internationally, justify this choice.

Thus, we saw fit to shed light on this institution and assess the effectiveness of its system based on data and observation. Accordingly, we will address the following:

### 2.3.1. Methodology and Tools Used in the Study

#### 2.3.1.1. Research Methodology

This section defines the methodological framework of the field study in order to organize and structure the information and ultimately reach accurate results. It also presents the methods and tools used in the study.

#### 1. Research Method:

We relied on the **descriptive-analytical method**, which aligns well with the economic nature of the topic. A research method is generally defined as a systematic path leading to the discovery of facts in sciences, governed by a set of general rules that guide reasoning and define its processes to reach known results. It can also be described as the approach used by the researcher to examine a particular phenomenon or subject in order to identify its causes and provide solutions.

To achieve the intended objectives, we employed the following:

- **Questionnaire:** This was our main data collection tool. It is defined as a set of interrelated questions designed to achieve a specific research objective. The questionnaire was formulated based on theoretical knowledge and refined with the help of a panel of academic experts.
- **Spreadsheet Software (Excel):** Used to convert study data into organized tables for easier analysis and interpretation.
- **Statistical Package (SPSS):** This tool helped us, based on questionnaire data, to understand the strength or weakness of the relationship between the study variables.

### 2.3.2. Study Population, Sample, and Variables

Before addressing the study population, we will present a brief overview of SAIDAL, the institution where the study was conducted.

#### 1. Overview of the Institution:

SAIDAL is a public Algerian pharmaceutical company and one of the largest in Africa and the largest in Algeria. It was established in 1982, incorporating the “Antibiotics Complex”, and was transformed into an industrial group in 1997. The company is 80% state-owned, while the remaining 20% is held by foreign stakeholders.

Accordingly, we chose to focus on this institution and assess the effectiveness of its system through data and observations. In this context, we address the following:

*First: Study Population and Sample*

The study population consists of a group of SAIDAL employees. The study sample includes a subset of employees, department heads, and assistant managers. A total of 83 questionnaires were distributed. Of these, 56 were recovered, while **25** were lost, and **2** were excluded for not being valid for analysis. The following table illustrates this:

**Table (2-1):** Distributed and Retrieved Questionnaires

Description	Number	Percentage
Distributed questionnaires	83	100%
Lost questionnaires	25	30.12%
Retrieved questionnaires	56	67.47%
Excluded questionnaires	2	2.41%
Valid questionnaires for analysis	54	100%

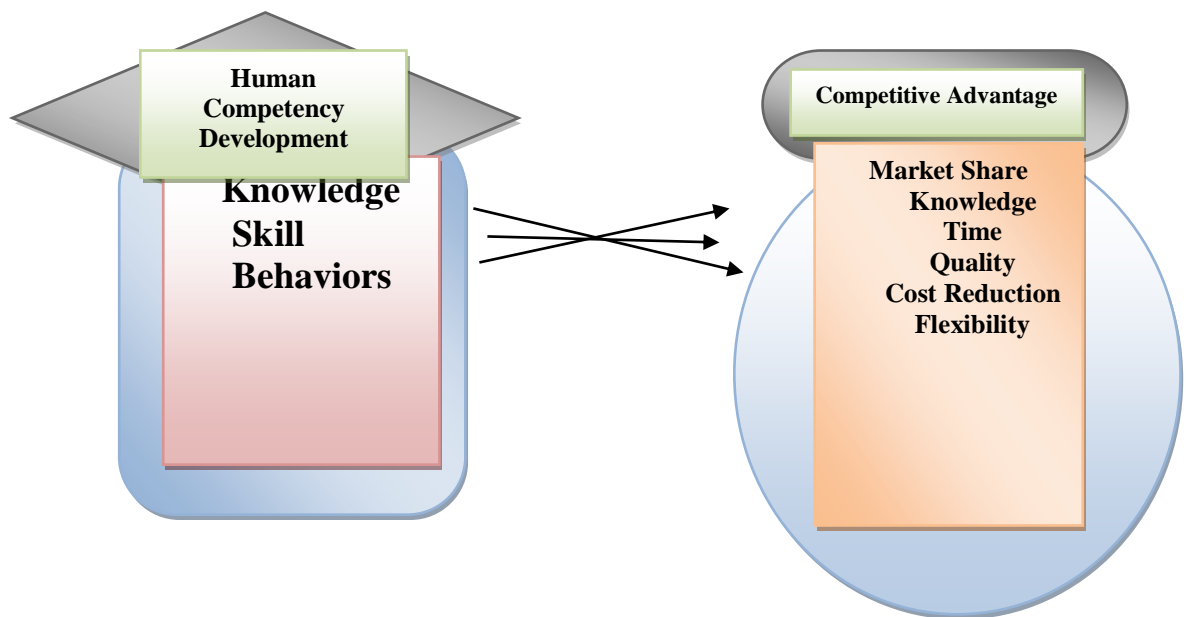
*Prepared by the researcher based on SPSS results.*

#### *Second: Study Variables*

The main study variables were as follows:

- **Independent Variable:** Human Competencies Development, which was divided into **three dimensions**, as illustrated in the following figure.
- **Dependent Variable:** Competitive Advantage, which was divided into **six sources**, as shown in the next figure.

**Figure (2-1):** Study Variables



*Source: Prepared by the researcher.*

#### **2.3.3. Data Sources**

The main data sources used in this study were:

- **Primary Sources:** To address the field aspect of the study, we collected primary data using a specifically designed questionnaire, distributed to the institution's employees.
- **Secondary Sources:** For the theoretical framework, we relied on secondary sources, such as previous studies and academic research relevant to the topic.

#### 4. Tools of the Study

The process of conducting research and studies requires the availability of a set of appropriate research tools and means used to collect the information that enables the researcher to access the necessary data and thus understand the reality or field of study. Given the multiplicity and diversity of data collection tools, the nature and specificity of the topic under study dictate the selection of suitable data collection tools and statistical methods for analyzing such data.

##### 4.1. Data Collection Tools

In this research, the questionnaire was heavily relied upon as a means of collecting data, in addition to scientific observation aimed at gathering the necessary information to achieve the study's objectives. A questionnaire was constructed consisting of three main sections:

- **Validity by Experts:** To assess the clarity of the questionnaire questions, they were presented to the supervising professor for feedback, as well as to specialized professors in the fields of Human Resource Management, Business Administration, and experts in statistical methods and data processing. Their suggestions and corrections were taken into consideration, and some phrases were deleted or modified accordingly. The final phrasing was designed to be more appropriate, clearer, and simpler.
- **Validity and Reliability of the Questionnaire:** The questionnaire was used as a primary tool to investigate the extent of the company's interest in developing human competencies and its contribution to achieving a competitive advantage in the SAIDAL Company. The questionnaire consisted of three parts:

**Section One:** Related to personal data of the sample including gender, age, education level, job position, and seniority. This section contained (16) items.

**Section Two:** Related to the independent variable of the study, including (24) items divided into the following three principles:

1. Knowledge: items (1–8)
2. Skills: items (9–16)
3. Behaviors: items (17–24)

**Section Three:** Contained items related to the dependent variable — competitive advantage — and was divided into the following sources:

4. Cost reduction: items (25, 26, 27)
5. Quality: items (28, 29, 30)
6. Knowledge: items (31, 32, 33)
7. Market share: items (34, 35, 36)
8. Time: items (37, 38, 39)
9. Flexibility: items (40, 41, 42)

Each item in the questionnaire was weighted according to the three-point Likert scale to determine the general direction of the respondents' opinions, as illustrated in the following table:

**Table (2-2) : Likert Scale Agreement Levels**

Agreement Level	Value	Mean Range
Disagree	1	From 1 to 1.66
Neutral	2	From 1.67 to 2.33
Agree	3	From 2.34 to 3

**Source:** Waleed Al-Farra, "Analyzing Questionnaire Data Using SPSS", *International Islamic Youth Conference*, 2010, p. 7.

The first and second parts of the questionnaire relied on the three-point Likert scale, commonly used in similar studies. Employees were asked to indicate their agreement with each statement as follows:



- Agree = 3 points
- Neutral = 2 points
- Disagree = 1 point

According to previous studies, the Likert scale levels are categorized as follows based on mean ranges:

**Table (2-3):** Weighted Arithmetic Mean Range for Each Level (Likert Scale)

Weighted Mean Range	Corresponding Level
From 1 to 1.66	Low
From 1.67 to 2.33	Medium
From 2.34 to 3	High

*Source : Prepared by the researcher*

The arithmetic mean range was determined by calculating the range ( $3 - 1 = 2$ ) and dividing it by the number of scale points ( $2 \div 3 = 0.66$ ), then adding the value to the minimum scale score (1) to define each level's boundaries.

#### Second : Tool Validity (Questionnaire)

- **Expert Validity:** Multiple tests were conducted to confirm the validity and reliability of the questionnaire. Content validity was verified by submitting the preliminary version of the questionnaire to five subject-matter experts from the Faculty of Management Sciences at Kasdi Merbah University – Ouargla. Feedback and recommendations were used to revise the wording of some items for better suitability and alignment with the measured variables, in addition to conducting tests for both validity and reliability.
- **Reliability and Validity of the Measurement Tool (Questionnaire):**
  - **Reliability:** A tool is said to be reliable if it yields consistent results when measurement is repeated.
  - **Validity:** A tool is said to be valid if it measures what it is intended to measure.

Reliability of the Human Competence Development Scale

Based on the SPSS software outputs, the number of items in the second section and the Cronbach's Alpha coefficient are presented in the following table:

**Table (2-4):** Cronbach's Alpha Results for Section Two (Human Competence Development)

Number of Items	Cronbach's Alpha
24	89.5%

*Source: Prepared by the researchers based on SPSS data*

The table shows that the 24-item section achieved a high reliability coefficient of (89.5%), indicating a strong level of internal consistency.

Validity of the Human Competence Development Scale

To calculate the validity coefficient, the values from Table (2-4) were used:

**Table (2-5):** Validity Coefficient for Section Two (Human Competence Development)

Number of Items	Validity Coefficient
24	94.6%

*Source: Prepared by the researchers based on SPSS data*

The validity coefficient of (94.6%) indicates that the scale is highly valid and suitable for the study.

Reliability of the Competitive Advantage Scale

Based on SPSS software outputs, the number of items in the third section and the Cronbach's Alpha coefficient are presented in the following table:

**Table (2-6):** Cronbach's Alpha Results for Section Three (Competitive Advantage)

Number of Items	Cronbach's Alpha
18	87.5%

*Source: Prepared by the researchers based on SPSS data*

This high alpha value (87.5%) confirms the reliability of the scale.

Validity of the Competitive Advantage Scale

To calculate the validity coefficient, the values from Table (2-6) were used:

**Table (2-7):** Validity Coefficient for Section Three (Competitive Advantage)

Number of Items	Validity Coefficient
18	98.7%

*Source: Prepared by the researchers based on SPSS data*

With a validity coefficient of (98.7%), the scale proves to be highly valid and suitable for the research.

### 4.3. Statistical Processing

To achieve the study objectives and analyze the collected data, the SPSS statistical package was used, which is the appropriate software for such analysis. Data were inputted, coded, and analyzed using the following statistical methods:

- Cronbach's Alpha test to measure reliability and internal consistency of questionnaire items.
- Arithmetic Mean to assess the degree of responses to each item.
- Standard Deviation to evaluate the dispersion of responses around the mean.
- Pearson Correlation Coefficient to determine the relationship between human competence development and competitive advantage, and the relation between each of their dimensions.
- T-test to examine differences between two independent samples.
- One-Way ANOVA test to identify differences in responses due to demographic variables.
- Microsoft Excel was also used for chart creation.

### 3. Sub-questions and Alternative Hypotheses for the Company

The following research questions are addressed:

1. To what extent are the principles of human competence development clear and applied in SAIDAL?
2. To what extent is the concept of competitive advantage understood by SAIDAL's employees, and how well is it promoted and supported?
3. What is the correlation between human competence development (independent variable) and the achievement of competitive advantage (dependent variable) at SAIDAL?
4. Is there a statistically significant impact at a 0.05 significance level of human competence development dimensions on achieving competitive advantage at SAIDAL?
5. Are there statistically significant differences in employee responses due to demographic variables?

The hypotheses corresponding to the above questions are:

1. The principles of human competence development are clearly understood and well-applied at SAIDAL.
2. The sources of competitive advantage are clearly recognized and well-supported at SAIDAL.
3. There is a very strong correlation between human competence development and achieving competitive advantage at SAIDAL.
4. There is a statistically significant effect at the 0.05 level of human competence development on achieving competitive advantage.
5. There are statistically significant differences in employee responses due to demographic differences.

### 3. Discussion and Analysis of Results

#### 3.1. Discussion of Results

##### First Hypothesis:

There is clarity regarding the principles of human competence development and their effective application at SAIDAL.

**Table (2-8):** Arithmetic Means and Standard Deviations of SAIDAL Employees' Responses on the Concept of Human Competence Development

No.	Statements	Arithmetic Mean	Standard Deviation	Rank	Response Direction
01	Knowledge	2.463	0.389	2	High
02	Skills	2.423	0.408	3	High
03	Behaviors	2.479	0.423	1	High
	<b>Human Competence Development</b>	<b>2.455</b>	<b>0.361</b>	/	High

*Source: Prepared by the researcher based on SPSS data*

The table above shows that the overall mean for the items related to the variable "human competence development" reached (2.455) with a standard deviation of (0.361). The dimension "behaviors" ranked first with a mean of (2.479) and a standard deviation of (0.423), followed by the "knowledge" dimension in second place with a mean of (2.463) and a standard deviation of (0.389). Lastly, the "skills" dimension came in third with a mean of (2.423) and a standard deviation of (0.408).

The table also indicates that the arithmetic means for all items related to the independent variable are at a high level, which reflects a good and acceptable understanding of the concept of human competence development among SAIDAL employees. This supports the validity of the first hypothesis.

##### Second Hypothesis:

There is clarity regarding the sources of competitive advantage at SAIDAL, along with sufficient attention to their development and reinforcement.

**Table (2-9):** Arithmetic Means and Standard Deviations of SAIDAL Employees' Responses on the Concept of Competitive Advantage

No.	Statements	Arithmetic Mean	Standard Deviation	Rank	Response Direction
01	Cost	2.333	0.657	5	Medium
02	Quality	2.339	0.499	4	High
03	Knowledge	2.654	0.342	1	High
04	Market Share	2.456	0.527	3	High
05	Flexibility	2.259	0.585	6	High
06	Time	2.524	0.512	2	High
	<b>Competitive Advantage</b>	<b>2.428</b>	<b>0.376</b>	/	High

*Source: Prepared by the researcher based on SPSS data*

As shown in the table above, the overall mean for the items related to the variable "competitive advantage" was (2.428) with a standard deviation of (0.376). The "knowledge" dimension ranked first with a mean of (2.654) and a standard deviation of (0.342), followed by "time" in second place with a mean of (2.524) and a standard deviation of (0.512). "Market share" ranked third with a mean of (2.456) and a standard deviation of (0.527), followed by "quality" in fourth place with a mean of (2.339) and a standard deviation of (0.499). The "cost" dimension came fifth with a mean of (2.333) and a standard

deviation of (0.657), while the "flexibility" dimension ranked last with a mean of (2.259) and a standard deviation of (0.585).

The arithmetic means of the independent variable's dimensions were generally high, except for one dimension which was of medium level. Nevertheless, the results are positive, indicating a good and acceptable understanding of the concept of competitive advantage among SAIDAL employees. This confirms the validity of the second hypothesis.

### Third Hypothesis:

There is a very strong correlation between human competence development as an independent variable and the achievement of competitive advantage at SAIDAL as a dependent variable.

**Table (2-10):** Correlation Matrix

		<b>Dependent Variable: Competitive Advantage</b>
<b>Knowledge</b>	Pearson Correlation	0.6330
	Sig. (2-tailed):	0.0000
	N:	54
<b>Skills</b>	Pearson Correlation	0.7170
	Sig. (2-tailed):	0.0000
	N:	54
<b>Behaviors</b>	Pearson Correlation:	0.7150
	Sig. (2-tailed):	0.0000
	N:	54
<b>Independent Variable: Human Competence Development</b>	Pearson Correlation	0.7760
	Sig. (2-tailed):	0.0000
	N	54

*Source: Prepared by the researcher based on SPSS data*

The table shows that all correlation relationships between the independent variable (human competence development) and the dependent variable (competitive advantage) are statistically significant and positive—both at the overall level and for each individual component. The overall correlation value between human competence development and competitive advantage reached 77.6%, which is both positive and strong, confirming the effective influence of human competence development on competitive advantage.

The strongest correlation for the dependent variable (competitive advantage) was found with the skills dimension at 71.7%, followed by behaviors at 71.5%, and finally knowledge at 63.3%. This indicates that human competence development plays a significant role in achieving competitive advantage for the economic enterprise SAIDAL, thereby confirming the validity of the third hypothesis.

### Fourth Hypothesis:

There is a statistically significant effect at the 0.05 significance level of the dimensions of human competence development on achieving competitive advantage at SAIDAL.

**Table (2-11):** Values of the Simple Linear Regression Equation for Competitive Advantage

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.443	0.226	/	1.960	0.055
	<b>Independent Variable: Human Competence Development</b>	0.809	0.091	0.776	8.879	0.000

*Dependent Variable: Competitive Advantage*

*Source: Prepared by the researcher based on SPSS data*

The above table shows that the B value is 0.809, which means that for each one-unit increase in human competence development, the competitive advantage increases by 0.809 units. Moreover, the Beta value is estimated at 0.776, indicating a strong influence of human competence development on competitive advantage.

Given that the Sig. value is 0.000, which is less than 0.05, it implies that the influence of human competence development on competitive advantage is statistically significant. The results from the "Coefficients" table clearly demonstrate that human competence development has a strong and positive effect on competitive advantage, thus confirming the validity of the fourth hypothesis.

**Table (2-12):** Values of the Multiple Linear Regression Equation for the Dependent Variable: Competitive Advantage

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	0.824	0.219	/	3.756	0.000
	Skills	0.662	0.089	0.717	7.417	0.000
2	Constant	0.673	0.218	/	3.088	0.003
	Skills	0.370	0.146	0.401	2.533	0.014
	Behaviors	0.346	0.141	0.390	2.463	0.017
3	Constant	0.440	0.234	/	1.878	0.066
	Skills	0.201	0.160	0.217	1.256	0.215
	Behaviors	0.346	0.135	0.389	2.555	0.014
	Knowledge	0.262	0.117	0.271	2.237	0.030
4	Constant	0.454	0.235	/	1.927	0.060
	Behaviors	0.467	0.095	0.526	4.906	0.000
	Knowledge = 0.331	0.104	0.343		3.198	0.002

*Dependent Variable: Competitive Advantage*

*Source: Prepared by the researcher based on SPSS data*

From the table above, we observe the B<sub>1</sub> value of 0.467, indicating that for every one-unit increase in the behavior dimension, the competitive advantage increases by 0.467 units. The corresponding Beta value of 0.526 (or 52.6%) signifies a strong influence of behaviors on competitive advantage.

Furthermore, the B<sub>2</sub> value for the knowledge dimension is 0.331, which implies that a one-unit increase in knowledge leads to a 0.331-unit increase in competitive advantage. The Beta value of 0.343 (or 34.3%) also indicates a notable influence.

We note that the Sig. value of 0.000 is less than 0.05, which confirms that the influence of human competence development dimensions on competitive advantage is statistically significant. The results of

the "coefficients" table show that the dimensions of human competence development have a strong and positive effect on competitive advantage at SAIDAL.

Based on Tables (2-8) and (2-9), it can be concluded that competitive advantage is influenced by the dimensions of human competence development—most notably by adherence to good behaviors and the knowledge possessed by the organization. This confirms the validity of the fourth hypothesis.

### Hypothesis 5

There are statistically significant differences at the 0.05 significance level in the workers' responses due to differences in demographic variables.

**Table (2-13): Test of Differences in Demographic Variables**

Variable	Sig	F
Gender	0.354	0.089
Age	0.619	0.599
Educational Level	0.086	2.575
Work Seniority	0.928	0.075
Job Position	0.905	0.015

**Source:** Prepared by the researcher based on SPSS statistical program data

From the above table, it is clear that the significance values (Sig) for all demographic variables are greater than the significance level (0.05). Specifically, gender has a significance of 0.354, age 0.619, educational level 0.086, work seniority 0.928, and job position 0.905. This means there are no statistically significant differences between workers based on these variables.

Accordingly, the null hypothesis (H0) is rejected and the alternative hypothesis (H1) is accepted, which negates Hypothesis 5.

### Response to the Research Problem

**Table (2-14): Linear Correlation Between Independent Variables and Dependent Variable Using the Least Squares Method**

Model	R	R Square	Adjusted R Square
1	0.776	0.603	0.595

**Source:** Prepared by the researcher based on SPSS statistical program data

From the above table, there is a strong effect of human competence development on competitive advantage, with a linear correlation coefficient (R) of 0.776, indicating a positive linear correlation of 77.6%. This means a strong positive relationship exists between human competence development (independent variable) and competitive advantage (dependent variable).

The adjusted R square is 60.3%, indicating that 60.3% of the variation in competitive advantage is explained by human competence development, while the remaining 39.7% is due to other variables such as organizational culture, competitive strategies, and others.

### 4. Summary

- The analysis shows that the institution pays good attention to applying the principles of human competence development and competitive advantage, implementing principles like cost reduction, time efficiency, and flexibility, as evidenced by obtaining the ISO 9001 certification.
- All correlation relationships are statistically significant and positively significant between the independent variable (human competence development) and the dependent variable (competitive advantage), both at the overall level and for each individual dimension.
- There is a very strong correlation between human competence development (independent variable)

and achieving competitive advantage for SAIDAL Company (dependent variable).

### 5. Field Study Results

- The study reveals that SAIDAL Company places strong emphasis on human competence and continuously strives to develop it by applying its three dimensions: knowledge, behaviors, and skills, supported by their ISO certification.
- Workers have a good and acceptable understanding of the concept of human competence development, reflecting the company's commitment to laws and its continuous attraction and development of human competencies.
- Workers also have a good understanding of competitive advantage, due to the company's serious efforts in applying local and international total quality standards; its products are distinguished by high quality and difficult to imitate.
- There is a strong correlation between human competence development and competitive advantage, with the skills dimension having the strongest impact among the competence dimensions.
- There is a statistically significant impact of human competence development dimensions on competitive advantage at the 0.05 significance level.
- No statistically significant differences were found in demographic variables (gender, age, education level, seniority, job position), indicating the institution's commitment to equality and equal opportunities for training and development.
- Competitive advantage is strongly affected by the commitment to human competence development and periodic training, which is a key factor in the company's success.
- The largest portion of competitive advantage achievement is attributed to human competence development, with the remaining portion related to other factors such as organizational culture and corporate strategy.

### 6. Conclusion

This study highlighted the concept of human competence development, reviewed theoretical literature about this independent variable, and assessed its application and impact on competitive advantage at SAIDAL Pharmaceutical Company. The research showed that SAIDAL pays considerable attention to applying the concept of human competence development across its dimensions (knowledge, behaviors, skills).

The findings confirm a strong positive correlation between human competence development and competitive advantage, with the skills dimension having the greatest effect. In a rapidly changing world, institutions that invest in human competence are more likely to achieve sustainable success and contribute to building a better society.

Therefore, organizations aiming to achieve competitive advantage must focus on developing and maintaining their human competencies, which enhances product quality, customer loyalty, and reputation, thus ensuring business continuity.

### 7. Recommendations

- Leaders should create and maintain an internal environment that encourages full participation in achieving organizational goals.
- The company should maintain its policies regarding continuous training and qualification of employees.
- It is advisable to adopt brainstorming techniques due to their positive effects on human competence development.
- The company should consider expanding its activities to leverage its huge potential.
- Although the company focuses on the dimensions of human competence development, the

knowledge dimension receives relatively less attention; this should be increased given the nature of the work and the need for highly skilled human resources.

## 8. References

- Ahmed, I. S. H. (2017). The impact of total quality management practices on achieving competitive advantage: A field study in Jordanian pharmaceutical companies according to company size (Master's thesis, Department of Business Administration, Faculty of Business, Middle East University).
  - Atlawy, M. (2022). The role of competencies in achieving the goals of Algerian universities according to the requirements of the knowledge economy (Doctoral dissertation, University of Algiers 3).
  - Ben Saleh, K., & Talhi, F. Z. (2019). The impact of adopting information and communication technology on the development of human competencies in Algerian banks: A field study of public banks in Guelma. *Al-Bashaer Economic Journal*, 5(2).
  - Belaid, B. (2013). The role of change management in improving the competitive advantage of the operational directorate of Algeria Telecom in M'sila (Master's thesis, University of M'sila).
  - Bouzid, W. (2012). An approach to internal resources and competencies as an entrance to competitive advantage in Algerian economic institutions: An applied study on some economic institutions in Setif Province (Master's thesis, University of Setif 1, Faculty of Economic and Commercial Sciences and Management Sciences).
  - Farouk, A. (2015). The role of total quality management in achieving sustainable competitive advantage: A case study of some Algerian economic institutions (Master's thesis, Doctoral School of Economic Sciences and Management Sciences).
  - Ghabbati, S., & Boudbeiza, R. (n.d.). Developing competencies as a strategy to improve human resource performance: A case study of Misbarat Omar Ben Omar institution in Guelma (Master's thesis, University of May 8, 1945, Guelma, Algeria).
  - Jamal, S. (2019). The role of competencies in developing educational curricula for literary text analysis: A critical analytical study. *Al-Abyaa Journal*, 19(22).
  - Meskouni, M. (2012-2013). Management of competencies and distinguished competitive performance of small and medium enterprises in Algeria (Doctoral dissertation, Kasdi Merbah University, Ouargla).
  - Morsi, N. K. (2003). Competitive advantage in the business field. Alexandria Center for Books, Egypt.
  - Rached, B. M. A. (2017). The impact of the availability of human resource competencies on the perception of organizational justice dimensions: A field study on Saudi business organizations. *Scientific Journal of the Faculty of Commerce, Al-Azhar University*, 17.
  - Saleh, S. (2021). Competitiveness and competitive advantage in business organizations. *Journal of Development Research and Studies*, 8(1).
  - Thabeti, H., & Ben Addou, J. (2009). Development of competencies and human resource development: The main pillars of success for third-millennium institutions. University Culture Foundation.
  - Yahyawi, I., & Ben Ahmed, N. (2016). The importance and role of human competencies within organizations. *Journal of Development and Human Resource Management*, 5(2).
  - Zaar, R., & Bourahli, A. T. (2019). The role of human competency management in improving the performance of higher education institutions: A study of opinions from administrative leadership at the University of Larbi Tebessi. *Al-Bashaer Economic Journal*, 5(2).
1. Mohamed Atlaoui, *The Role of Competencies in Achieving the Goals of the Algerian University According to the Requirements of the Knowledge Economy*, PhD dissertation in Service Economics, University of Algiers 3, 2022, p. 5.
  2. Rashed bin Muslat Al-Sharif, "The Impact of the Availability of Human Resources Competencies



- on the Perception of Organizational Justice Dimensions – A Field Study on Saudi Commercial Business Organizations,” *The Scientific Journal of the Faculty of Commerce, Al-Azhar University*, Issue 17, January 2017, p. 88.
3. Ahmed Masnouaa, “Developing Human Competencies as an Approach to Enhance the Competitive Advantage of the Insurance Product,” *Seventh International Conference on the Insurance Industry: Scientific Reality and Development Prospects – Country Experiences*.
  4. Mouna Mesghouni, *Competency Management and Competitive Performance of Small and Medium Enterprises in Algeria*, PhD dissertation in Management Sciences, Kasdi Merbah University – Ouargla, 2012–2013, p. 105.
  5. Djamel Saihi, “The Role of Competencies in Developing Curricula for Literary Text Analysis – A Critical Analytical Study,” *Al-Ihya Journal*, Vol. 19, No. 22, September 2019, p. 760.
  6. Karima Ben Saleh & Fatima Zahra Talhi, “The Impact of ICT Adoption on Developing Human Competencies in Algerian Banks – A Field Study in Public Banks in the City of Guelma,” *El-Bashaer Economic Journal*, Vol. 5, No. 2, August 2019, p. 266.
  7. Faiza Bouras, “Developing Human Competencies as an Approach to Enhance Career Path Planning Strategy at the Saidal Complex,” *Human Sciences Journal – Mohamed Khider University of Biskra*, Issue 41, 2015, p. 448.
  8. Rabab Zaraa & Ahmed Tawfiq Bourahli, “The Role of Human Competency Management in Improving the Performance of Higher Education Institutions – A Study of the Views of a Sample of Administrative Leaders at Larbi Tebessi University,” *El-Bashaer Economic Journal*, Vol. 5, No. 2, August 2019, p. 386.
  9. Sarah Khebaty & Rayan Boudbiza, *Developing Competencies as a Strategy to Improve Human Resources Performance – Case Study of Omar Ben Omar Canning Company, Guelma*, Master’s thesis in Economics and Business Management, University of May 8, 1945 – Guelma, Algeria, pp. 31–32.
  10. Ibrahim Bouyahoui & Nawal Ben Ahmed, “The Importance and Role of Human Competencies within Organizations,” *Journal of Development and Human Resources Management*, Vol. 2, Issue 5, June 2016, Blida, Algeria, p. 14.
  11. Ibid., p. 12.
  12. Ibid., p. 12.
  13. Masnouaa, op. cit.
  14. El-Habib Thabti & Djilali Benadou, *Competency Development and Human Resource Development – Key Pillars of Success for Third Millennium Institutions*, University Culture Foundation, 1st Edition, Vol. 1, January 2009, Algeria, p. 87.
  15. Bouyahoui & Ben Ahmed, op. cit., p. 12.
  16. Wassila Bouazid, *The Internal Resources and Competencies Approach as a Gateway to Competitive Advantage in Algerian Economic Enterprises – Applied Study on Some Enterprises in Sétif Province*, Master’s thesis in Strategic Management, University of Sétif 1, Faculty of Economic, Commercial and Management Sciences, 2012, p. 8.
  17. Elias Salem, “Competitiveness and Competitive Advantage in Business Organizations,” *Journal of Development Research and Studies*, Vol. 8, Issue 1, June 2021, p. 139.
  18. Nabil Morsi Khalil, *Competitive Advantage in Business*, Alexandria Book Center, Egypt, 2003, pp. 37–38.
  19. Elias Salem, op. cit., pp. 241–242.
  20. Alaa Farhan Taleb & Zainab Makki Mahmoud Al-Banna, *Blue Ocean Strategy and Sustainable Competitive Advantage*, Hamed Publishing and Distribution, 1st Edition, 2012–1433H, Jordan, p. 265.
  21. Belhassen Belanda, *The Role of Change Management in Enhancing Competitive Advantage of the Operational Directorate of Algeria Telecom in M’sila*, Master’s thesis in Management Sciences – Organizational Management, University of M’sila, 2013.
  22. M.M. Thabet Hassan, *Competitive Strategies as a Means to Achieve Sustainable Competitive Advantage – A Field Study on a Sample of Algerian Economic Enterprises*, Faculty of Financial and Administrative Sciences, Cihan University.
  23. Taleb & Al-Banna, op. cit., p. 262.

24. Ahmed Ibrahim Said Hassan, *The Impact of Total Quality Management Practices on Achieving Competitive Advantage: A Field Study in Jordanian Pharmaceutical Companies Based on Company Size*, Master's thesis, Department of Business Administration, Faculty of Business, Middle East University, 2017, p. 27.
25. *Blue Ocean Strategy* [unspecified source – clarify if needed].
26. Farouk Azoun, "The Role of Total Quality Management in Achieving Sustainable Competitive Advantage – A Case Study in Some Algerian Economic Enterprises," Master's thesis within the Doctoral School of Economic and Management Sciences, 2015, p. 72.

---

<sup>i</sup> Mohamed Atlaoui, *The Role of Competencies in Achieving the Goals of the Algerian University According to the Requirements of the Knowledge Economy*, PhD dissertation in Service Economics, University of Algiers 3, 2022, p. 5.

<sup>ii</sup> Rashed bin Muslat Al-Sharif, "The Impact of the Availability of Human Resources Competencies on the Perception of Organizational Justice Dimensions – A Field Study on Saudi Commercial Business Organizations," *The Scientific Journal of the Faculty of Commerce, Al-Azhar University*, Issue 17, January 2017, p. 88.

<sup>iii</sup> Ahmed Masnouaa, "Developing Human Competencies as an Approach to Enhance the Competitive Advantage of the Insurance Product," *Seventh International Conference on the Insurance Industry: Scientific Reality and Development Prospects – Country Experiences*.

<sup>iv</sup> Mouna Mesghouni, *Competency Management and Competitive Performance of Small and Medium Enterprises in Algeria*, PhD dissertation in Management Sciences, Kasdi Merbah University – Ouargla, 2012–2013, p. 105.

<sup>v</sup> Djamel Saihi, "The Role of Competencies in Developing Curricula for Literary Text Analysis – A Critical Analytical Study," *Al-Ihya Journal*, Vol. 19, No. 22, September 2019, p. 760.

<sup>vi</sup> Karima Ben Saleh & Fatima Zahra Talhi, "The Impact of ICT Adoption on Developing Human Competencies in Algerian Banks – A Field Study in Public Banks in the City of Guelma," *El-Bashaer Economic Journal*, Vol. 5, No. 2, August 2019, p. 266.

<sup>vii</sup> Faiza Bouras, "Developing Human Competencies as an Approach to Enhance Career Path Planning Strategy at the Saïdal Complex," *Human Sciences Journal – Mohamed Khider University of Biskra*, Issue 41, 2015, p. 448.

<sup>viii</sup> Rabab Zarea & Ahmed Tawfiq Bourahli, "The Role of Human Competency Management in Improving the Performance of Higher Education Institutions – A Study of the Views of a Sample of Administrative Leaders at Larbi Tebessi University," *El-Bashaer Economic Journal*, Vol. 5, No. 2, August 2019, p. 386.

<sup>ix</sup> Sarah Khebbati & Rayan Boudbiza, *Developing Competencies as a Strategy to Improve Human Resources Performance – Case Study of Omar Ben Omar Canning Company, Guelma*, Master's thesis in Economics and Business Management, University of May 8, 1945 – Guelma, Algeria, pp. 31–32.

<sup>x</sup> Ibrahim Bouyahoui & Nawal Ben Ahmed, "The Importance and Role of Human Competencies within Organizations," *Journal of Development and Human Resources Management*, Vol. 2, Issue 5, June 2016, Blida, Algeria, p. 14.

<sup>xi</sup> *Ibid.*, p. 12.

<sup>xii</sup> *Ibid.*

<sup>xiii</sup> Masnouaa, op. cit.

<sup>xiv</sup> El-Habib Thabti & Djilali Benadou, *Competency Development and Human Resource Development – Key Pillars of Success for Third Millennium Institutions*, University Culture Foundation, 1st Edition, Vol. 1, January 2009, Algeria, p. 87.

<sup>xv</sup> Bouyahoui & Ben Ahmed, op. cit., p. 12.

<sup>xvi</sup> Wassila Bouazid, *The Internal Resources and Competencies Approach as a Gateway to Competitive Advantage in Algerian Economic Enterprises – Applied Study on Some Enterprises in Sétif Province*, Master's thesis in Strategic Management, University of Sétif 1, Faculty of Economic, Commercial and Management Sciences, 2012, p. 8.

<sup>xvii</sup> Elias Salem, "Competitiveness and Competitive Advantage in Business Organizations," *Journal of Development Research and Studies*, Vol. 8, Issue 1, June 2021, p. 139.

<sup>xviii</sup> Nabil Morsi Khalil, *Competitive Advantage in Business*, Alexandria Book Center, Egypt, 2003, pp. 37–38.

<sup>xix</sup> Elias Salem, op. cit., pp. 241–242.

<sup>xx</sup> Alaa Farhan Taleb & Zainab Makki Mahmoud Al-Banna, *Blue Ocean Strategy and Sustainable Competitive Advantage*, Hamed Publishing and Distribution, 1st Edition, 2012–1433H, Jordan, p. 265.

<sup>xxi</sup> Belhassen Belanda, *The Role of Change Management in Enhancing Competitive Advantage of the Operational Directorate of Algeria Telecom in M'sila*, Master's thesis in Management Sciences – Organizational Management, University of M'sila, 2013.

<sup>xxii</sup> M.M. Thabet Hassan, *Competitive Strategies as a Means to Achieve Sustainable Competitive Advantage – A Field Study on a Sample of Algerian Economic Enterprises*, Faculty of Financial and Administrative Sciences, Cihan University.

<sup>xxiii</sup> Taleb & Al-Banna, op. cit., p. 262.

<sup>xxiv</sup> Ahmed Ibrahim Said Hassan, *The Impact of Total Quality Management Practices on Achieving Competitive Advantage: A Field Study in Jordanian Pharmaceutical Companies Based on Company Size*, Master's thesis, Department of Business Administration, Faculty of Business, Middle East University, 2017, p. 27.

<sup>xxv</sup> *Blue Ocean Strategy*, see Heizer, J., & Render, B. (1999). *Operations Management* (6th ed.). Prentice Hall.

<sup>xxvi</sup> Farouk Azoun, "The Role of Total Quality Management in Achieving Sustainable Competitive Advantage – A Case Study in Some Algerian Economic Enterprises," Master's thesis within the Doctoral School of Economic and Management Sciences, 2015, p. 72.