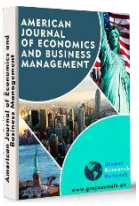


American Journal of Economics and Business Management

Vol. 8 Issue 1 | **pp**. 258-278 | **ISSN:** 2576-5973
Available online @ https://www.globalresearchnetwork.us/index.php/ajebm

Intellectual Capital and its Role in Enhancing Competitive Advantage, A Survey Study of the Opinions of a Sample of Employees of the Men's Clothing Factory in Najaf Governorate

Hawraa Sahib Abed [1], Jinan Abdulabbas Ismael [2], Ghassan Hammadi Ali [3]

[1] Business Administration Department, Faculty of Administration and Economics, University of Kufa, IRAQ
[2] Al-Furat Al-Awsat Technical University, Babylon Technical Institute
[3] Electricity Directorate

Abstract:
The research aims to identify the role of intellectual capital in enhancing competitive advantage, as the study focused on a sample of employees of the men's clothing factory in Najaf Governorate. Based on the problem that the men's clothing factory suffers from weakness or lack of interest in the subject of competitive advantage, the research problem was formulated as follows (intellectual capital and its role in enhancing the competitive advantage of the organisation under study). To achieve the research goals, the researchers organised the questionnaire. Then, they distributed it to the employees of the men's clothing factory in Najaf Governorate, where the number of distributed questionnaires reached (145), of which (138) were recovered. Statistical tests were used, such as the arithmetic mean, standard deviation, and statistical test (t-test) to analyse the results and test the hypotheses. The researchers concluded their efforts with conclusions and recommendations that could serve the clothing factory. One of the most important results reached by the researcher is the existence of a statistically significant correlation between each of the capital (human, structural, and relational) And the competitive advantage. Among the important recommendations that the researchers focused on is the necessity of dealing with intellectual capital as an important strategic resource, so it must be preserved as an effective element in the success of the organisation, as well as emphasising its role in the success of the organisation and achieving competitive advantage, especially in light of the technological and information developments that the world is witnessing at present.

Keywords: Intellectual capital, competitive advantage, men's clothing factory in Najaf Governorate / Iraq.

Citation: Abed , H. S. ., Ismael , J. A. ., & Ali , G. H. . (2025). Intellectual Capital and its Role in Enhancing Competitive Advantage, A Survey Study of the Opinions of a Sample of Employees of the Men's Clothing Factory in Najaf Governorate. American Journal of Economics and Business Management, 8(1), 258–278. Retrieved from https://globalresearchnetwork.us/index.php/ajebm/article/view/3233

Received: 29 Nov 2024
Revised: 20 Dec 2024
Accepted: 29 Dec 2024
Published: 18 Jan 2025

Introduction

Intellectual capital has become an important feature in the current era of technology and knowledge, as it has become a strategic resource, a source of information, and an important asset in the modern economy. It has surpassed the material aspect to achieve excellence, as it contributes greatly to creating positive changes in all fields and is a vital element in moving the wheel of the economy. The concept of competitive advantage has also appeared significantly in the modern era due to realising the importance of competitive advantage in the information age. Therefore, this topic is one of the important topics in management science. From this standpoint, contemporary organisations have begun to move towards attracting intellectual capital to achieve a competitive advantage, as competition is the best behaviour to achieve survival in the markets.

Therefore, the organisation must possess competitive advantages and continuously search for sources. Hence, organisations seek to strengthen their competitive position in the markets. Hence, intellectual capital is one of the most important sources of competitive advantage, especially in the ongoing changes in the global economy.

Like other Iraqi factories, the men's clothing factory in Najaf Governorate faces many challenges in achieving a competitive product advantage. One of the factors influencing this issue is the role of the intellectual capital of its employees. Employees are the backbone of the production process and are responsible for transferring knowledge and skills in the production of products. The research structure included four main paragraphs, the first of which dealt with the methodology, the second paragraph included a review of the literature related to the main research variables and their sub-dimensions, the third paragraph was devoted to the results of the research analysis, and the research concluded with the fourth paragraph, which reviewed the conclusions and recommendations presented in light of the statistical analysis.

1- The first section: Research methodology

The section deals with the problem, objectives, importance, research methodology, tools for collecting information and analysis, and statistical treatments, as follows: -

1-1- The research problem.

The developments resulting from rapid technological progress are one of the factors influencing economic growth in the world as a whole, as intellectual capital has become a major role in the strategies of the organisation, as it is a basic factor that maximises the value of the organisation, so it requires effective management of this element, as service organisations seek to achieve profits from the intellectual assets they possess, so they must manage such assets efficiently and effectively (Harbi et al., 2012: 14). Therefore, the international business environment has become very interested in aspects related to the knowledge economy, technological development and creativity to achieve competitive advantage at the local or global level, which requires increasing attention to intellectual assets, which are one of the most important modern means of the knowledge economy, as they directly affect the enhancement of competitive advantage. Therefore, intellectual capital was considered an essential element that enables the organisation to increase its efficiency and achieve competitive advantage, as its study concluded that the success of any organisation under the surrounding circumstances is characterised by change and intense competition associated with its ability to achieve differentiation and integration from others, so we find that successful organisations that make efforts to achieve competitive advantage are through transforming Intellectual capital into tools and methods that can be improved. From this standpoint, the research problem revolves around answering the following question: - (**What role does intellectual capital play in achieving competitive advantage in the organisation under study**?)

1-2- Research objectives: Objectives

The objectives are as follows: -

1- Highlighting the practical reality of the heads of departments of the organisations under study to reach treatment recommendations.

2- Identifying the reality of employees' awareness of the availability of competitive advantage and intellectual capital practices in the laboratory under study.

3- Determining the strength of the association and influence between the main variables and their dimensions.

1-3- Importance of the research: Importance

The importance is represented by the following: -

1- Providing the data and information that potential researchers need in the future.

2- Competitive advantage allows individuals to use their skills and creativity to accomplish their assigned tasks.

3- The conclusions supported the organisation under study in focusing on the "Independent Variable".

4- The scientific importance of the organisation was asked to focus on the current and future variables.

1-4- Hypothetical model

Based on previous studies related to the topic of intellectual capital and competitive advantage (Abdel Fattah and 2022), the researchers developed a hypothetical diagram

showing the nature of the relationship between the research variables, as is clear in Figure (1), which shows that the intellectual capital variable is the "Independent Variable" (intellectual capital), which was measured through three dimensions, namely (human capital, intellectual capital, and relational capital), while the competitive advantage is a dependent variable, which was measured through 5 dimensions (cost dimension, quality dimension, flexibility dimension, delivery dimension, and creativity dimension).

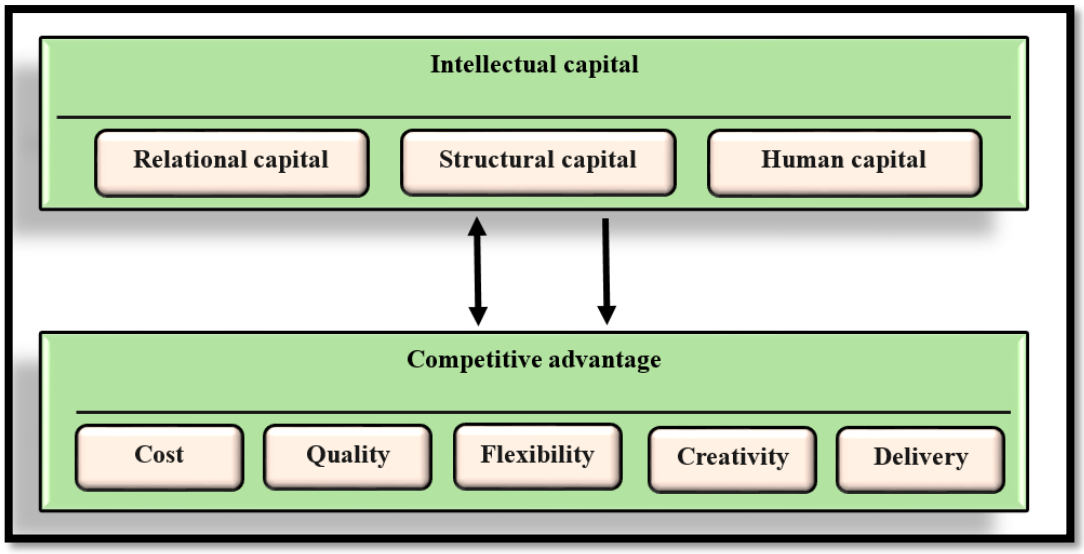


Figure (1) Hypothetical research plan

Source prepared by the researcher based on the literature above

1-5- Research hypotheses

Hypotheses The hypotheses are clear in the following form: -

In light of the research objectives and an attempt to address its problem and achieve its objectives, a set of main and sub-hypotheses were formulated that pertain to the research variables as follows:

1. The first main hypothesis: There is a significant correlation statistical (significance) between intellectual capital and achieving competitive advantage, and from this hypothesis, four sub-hypotheses emerge as follows:

- There is a substantial correlation with statistical (significance) between human capital and competitive advantage.
- There is a significant correlation with statistical (significance) between structural capital and competitive advantage.
- There is a significant correlation with statistical (significance) between relational capital and competitive advantage.

2. The second main hypothesis: There is a statistically significant moral effect of intellectual capital on competitive advantage, and from this hypothesis, four sub-hypotheses emerge as follows:

- The human capital dimension has a statistically significant moral effect in achieving competitive advantage.
- The structural capital dimension has a statistically significant moral effect in achieving competitive advantage.

- The relational capital dimension has a statistically significant moral effect in achieving competitive advantage.

1-6- Research tool and scale

The current research relied on the five-point Likert scale with a gradation (completely agree, agree, neutral, disagree, disagree). The current research tool was the questionnaire, designed in the form of a booklet and represented by the main source that the researchers relied on in answering the research questions to achieve the specific objectives. It was distributed directly by the researchers for the period from (10/1/2024 to 12/1/2024) to the research sample, where it was divided into two main parts, which are: -

- The first part includes general information about the personal variables of the research sample, which are represented by gender, age, social status, place of work, level of education, and number of years of experience in his current job.
- The second part includes the paragraphs of dimensions consisting of (39) paragraphs with restricted answers related to the study variables and divided into two axes, which are: -
- The first axis is related to intellectual capital consisting of (15) Paragraphs.
- The second axis - is related to the competitive advantage and consists of (23) paragraphs.

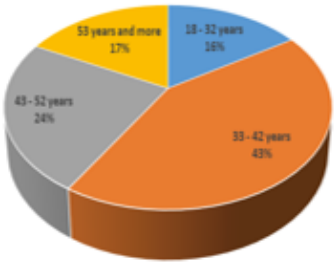
1-7- Research community and sample

The industrial sector was chosen as a research community because a factory operating effectively and continuously was sampled. Two hundred ten community members, including 145 men's apparel industry employees in Najaf Governorate, received the prepared questionnaire. The rest was excluded since it did not match the standards. The statistical table indicated that 138 surveys were valid for statistical analysis (Krejcie, 1970: 608). After testing for validity and reliability, SPSS V 26 was used to analyse their answers statistically.

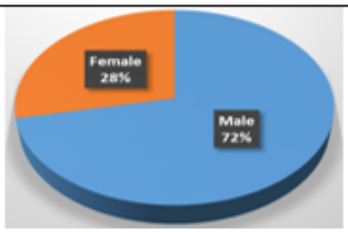
The information collected through the questionnaire prepared for this research showed details about the personal data of the research sample members in terms of (gender, age, educational attainment, and years of experience) as shown in the following tables:

Table (1) Demographic characteristics of the research sample

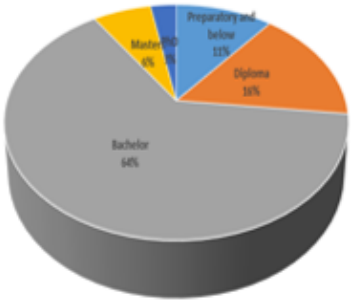
the age	Recurrence	%
18 - 32 years	22	15.94%
33 - 42 years	59	42.75%
43 - 52 years	33	23.91%
53 years and more	24	17.39%
Total	138	100%



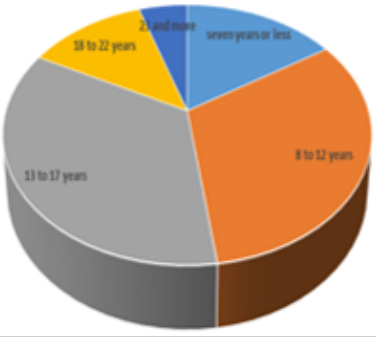
Gender	Recurrence	%
Male	99	71.74%
Female	39	28.26%
Total	138	100%



Educational Qualification	Recurrence	%
Preparatory and below	15	10.87%
Diploma	22	15.94%
Bachelor	88	63.77%
Masters	9	6.52%
PhD	4	2.90%
Total	138	100%



Number of years of experience	Recurrence	%
seven years or less	22	15.94%
8 to 12 years	44	31.88%
13 to 17 years	48	34.78%
18 to 22 years	17	12.32%
23 and more	7	5.07%
Total	138	100%



Source: Researcher-prepared from SPSS V 26 outputs.

It is clear from the table above:

1. **Age:** The highest percentage of age groups was in the age group (33 - 42 years) with a rate of (42.75%) and with (59) observations, while the age group (18 - 32 years) with a percentage of (15.94%) and (22) observations, ranked last, which means that there is an increase in the ages of those who occupy the selected sample in the studied laboratory and who have good work experience.
2. **Gender:** Above, the percentage of males was the highest (71.74%), while the rate of females among the total sample of the studied laboratory was (28.26%) with (99) observations for males and (39) observations for females, which indicates that most of the workforce in the studied laboratory are males.
3. **Academic achievement:** The percentage of bachelor's degree holders in the study laboratory sample was the highest, reaching (63.77%) with (88) observations, while other categories obtained varying degrees of observations.
4. **Years of experience:** The category with years of experience (13 to 17 years) obtained the first rank with a percentage of (34.78%) and a number of observations (48). In contrast,

the last rank was occupied by years of experience (23 and more) with a percentage of (5.07%) and a number of observations (7), which indicates the belief of the studied laboratory in the necessity of working according to acceptable experience to achieve the desired goals.

1-8- Research scale test

- **Testing the research variables in terms of moderation (normal moderation distribution)**

This test is used to determine the extent of the moderation of the data, whether it (follows the normal distribution) or not, and conducting this test is important to decide on the statistical methods that are compatible with this type of data. This is done through the Kolmogorov-Smirnov Test. The null hypothesis of this test assumes that the data are normally distributed, while the alternative hypothesis assumes that the data are not normally distributed, with a significance level of (0.05).

Table No. (2) Testing the research variables in terms of normal distribution (the studied laboratory)

Variable	"Independent Variable" Intellectual capital	Dependent Variable Competitive Advantage
Test statistic	0.187	0.119
Significance level	0.177	0.246
Degrees of freedom	137	137
Skew	-0.262	-0.324
Kurtosis	0.666	0.478

"**Source: Researcher-prepared from SPSS V 26 outputs**".

We note from the table above that the value of the significance level for each of the research variables was (0.177) for the intellectual capital variable and (0.246) for the competitive advantage variable, and both values are higher than the significance level of 5%. This indicates that the study variables are distributed normally, and the upcoming analyses can be carried out.

- **Measuring validity based on the stability coefficient**

The Cronbach's alpha coefficient was chosen to determine the stability of the questionnaire and indicate its consistency as well as the extent of its distance from giving the same results when used repeatedly and for different periods. The table below displays the results of the validity coefficient for each axis of the questionnaire for the research variables (intellectual capital, competitive advantage) according to the following formula:

A- The "Independent Variable" (intellectual capital): This variable has three dimensions (1) human capital, (2) structural capital, and (3) relational capital, with (15) paragraphs, and in general, it obtained a stability coefficient of (0.862), and thus the axes of the "Independent Variable" Good for measurement and gives the same results with the mentioned probability of 86.2%.

B- The "Dependent variable (competitive advantage)": This variable was measured in five dimensions: (1) the cost dimension, (2) the quality dimension, (3) the flexibility dimension, (4) the creativity dimension, (5) the delivery dimension and with (24) paragraphs the variable obtained a total stability coefficient of (0.863), and therefore it is reliable for measurement and gives the same results with the mentioned probability of 86.3%.

Table (3) Stability coefficient for the study variable

Dimensions of Intellectual Capital	stability coefficient
Human Capital	0.792
Structural Capital	0.911
Relational Capital	0.882
Total Axis	0.862
Cost Dimension	0.933
Quality Dimension	0.837
Flexibility Dimension	0.777
Creativity Dimension	0.951
Delivery Dimension	0.819
Total Axis	0.863

"**Source: Researcher-prepared from SPSS V 26 outputs**"

2- The theoretical framework of the research

Two variables will be addressed, namely intellectual capital and competitive advantage, as follows:-

2-1- The "Independent Variable", intellectual capital

The opinions of writers and researchers differed regarding the concept of intellectual capital, as the Organization for Economic Cooperation and Development defined it as the economic value of two categories of intangible assets of a specific organisation, namely human capital and structural capital. (OECD,1999)

BONTIS;2004) sees that it represents the set of hidden values of individuals, institutions, companies, and then regions and groups that are defined by current and expected sources for the formation of wealth, where hidden values are the roots for planting and feeding well-being in the distant future.

It is also defined as a set of intangible values that are part of the capital of a specific organisation, as it is represented by human, structural and relational components that can contribute in one way or another to the production of new and innovative ideas that help it to survive and improve the market share of that organisation and maximise its competitive ability. (Al-Saeed, 69:2008)

Al-Amiri and Al-Ghalbi (2009:652) are defined as the economic value of human resources generated through the presence of capabilities, qualifications, ideas, energy and knowledge and then the commitment of these human resources that they occupy.

Some defined it as: - A set of explicit information resources that are represented by apparent knowledge that can be obtained and expressed by writing it and then Transferring it to others, which is represented by tacit knowledge that is difficult to get because it is based on personal experiences (Al-Shajri, 2017: 63)

Through the concepts mentioned, the importance of intellectual capital lies in the fact that it represents the primary source of wealth and one of the pillars of strength for any organisation, as interest in it is considered one of the issues imposed by the nature of contemporary scientific and technical challenges that peoples and nations rely on in the current global conflict (Al-Anzi and Obaid, 2001: 33) In addition to what was mentioned, the importance of intellectual capital is represented by the following: -

- Intellectual capital represents the main weapon of the organisation in the world today because intellectual assets represent the hidden power that guarantees the organisation's survival.
- Intellectual capital is considered a competitive advantage in the organisation.
- Intellectual capital represents a buried treasure that needs someone to search for it and extract it for existence and practice. One of the methods of extracting it is the dissemination of knowledge.
- Intellectual capital is considered a source of generating wealth for the individual and the organisation as it is capable of generating imaginary wealth (Hamdan, 2001)

2-2- Objectives of capital Intellectual Capital

The objectives of intellectual capital are embodied in the following (Al-Sherbiny,2011 23)

1. **Organisational characteristics:** - These are related to the organisation's environment and are represented by the following: -

- The presence of intellectual capital at all levels
- What helps in continuous renewal is flexibility in the type of structures
- The distance, to a large extent, from administrative centralisation

2. **Professional characteristics: -** These are related to the human element and its practice within the organisation and are represented by the following: -

- Having many rare professional skills in addition to accumulated experiences so that it is difficult to replace them
- Enjoying a high degree of organisation

3. **Behavioural and personal characteristics:** - These are largely related to the human element and self-construction and are represented by the following: -

- The intellectual capital tends at the beginning of work to bear risks to a large extent and to embark on unknown activities that are characterised by uncertainty as well as work.
- Benefiting from the experiences enjoyed by others and their initiatives represented by presenting constructive proposals and ideas

A group of literature that addressed the topic of intellectual capital also identified a group of the following characteristics (Louisa 61:2016)

- ✓ Intellectual capital is intangible
- ✓ It certainly increases with use and utilisation
- ✓ Its tendency towards independence in work
- ✓ Its tendency towards flexibility and non-rigidity
- ✓ It provides constructive ideas
- ✓ It continuously seeks to develop and renew

2-3- Dimensions of intellectual capital

The dimensions of intellectual capital were determined based on the researcher's scale (Li & Yu, 2009), which included three dimensions (human capital, structural, relational)

1. The first dimension: - Human capital

Human resource is one of the most important dimensions, so it is viewed as the value of experiences, skills and knowledge in addition to the capabilities that workers possess

through which they can create wealth, so human capital is no longer an important resource that the organisation must maintain, but rather an investment and this dimension is of great importance as a source of strategic renewal and creativity (Raja Rashid Abdul Sattar 214:2020).

It is also known as (the strategic resource in the production process, as it is a resource that is difficult to copy or imitate by other organisations other than those in which it is being worked (Al-Shamiri and Nadia, 5:2008).

2. The second dimension: - Structural capital

It is considered one of the dimensions of intellectual capital, as it represents the mechanism of the organisation's structure in order to achieve a distinguished level of performance for its employees because organisations that possess structural capital characterised by strength will support innovation and creativity by relying on the opinions of employees when giving them freedom, as the organisation consists of a group of cognitive administrative systems, the reward system, information technology, and the ability that the organisation has to share and transfer knowledge through intellectual assets in the administrative information system, patents, copyright, translation or publishing, as well as the trademark.

It is also known as the knowledge that is acquired and retained by systems, procedures, and structures (Atiya, 2008: 151)

3. The third dimension: - Relational capital

It is based on developing the organisation's external relations with its customers and suppliers because the value of the organisation with the customers it deals with is similar to customer satisfaction and retention, as well as paying attention to their suggestions and addressing the problems they suffer from. And complaints and meet what they need as quickly as possible and then cooperate with them. It is also known as (the value that is generated through customer satisfaction and loyalty, as well as the suppliers that are dealt with, in addition to other external parties, and what the organisation was able to build through distinguished relationships with the parties (Middleton, 2002, p16).

2-4- The concept of competitive advantage

The opinions of writers and researchers about the concept of competitive advantage varied, as Fohy defined it as what distinguishes the organisation positively or what distinguishes its products positively from its competitors in the eyes of its customers or the eyes of end users (Hassan Ali Al-Zaghbi 2005: 1)

Or it is the specifications or characteristics that a product or brand acquires which enable it to excel over current competitors (Farhat Ghoul 2005-20060 pp. 96: 97)

Or it is a group of capabilities, skills, technology and resources that the organisation can coordinate and invest to achieve two things: producing benefits and values for customers higher than what competitors achieve (Al-Naas 2005: 111)

Or it is a group of means through which the organisation can overcome other competitors (Saba Musa Ta'ima, 2020: 23)

2-5- Types of competitive advantage

We can distinguish between two types of competitive advantages: cost advantage and excellence advantage (Hilali Al-Waleed 2008-2009, p. 26)

1. **Lower cost advantage:** This advantage means that the organisation works to design, manufacture and market a product at a lower cost compared to competing organisations, which ultimately leads to achieving greater profit. The process of reducing costs is considered one of the main components of increasing the competitive ability of the product and the continued increase of this ability, as reducing costs results

in lowering prices to an extent that exceeds the ability of current and potential competitors.

2. **Advantage of distinction:-** It is defined as the organisation's ability to provide a unique and unparalleled product, for example, the highest quality and the special characteristics of the product, in addition to the after-sales services offered by the organisation. 0
3. **Sources of competitive advantage**:- The sources of advantage differ from one organisation to another according to its capabilities and the field in which it operates. No organisation can enjoy a competitive advantage unless it has a set of sources and resources through which the latter arises. The sources are represented by the following (Muhammad Ibrahim Obeidat 2002: 87)

- ✓ Distributors are more loyal and motivated through developing an effective distribution network.
- ✓ Contributing to building a good image for the product and achieving loyalty to the brand
- ✓ Effective and successful advertisements
- ✓ Services provided to the customer through good knowledge of the various needs of sectors in the market
- ✓ Using modern and advanced technology
- ✓ Discovering marketing opportunities and trying to invest in them in the best ways and means available
- ✓ Distinguished skills and superior competencies among the organisation's employees.
- ✓ Efficient use of the organisation's available resources and capabilities.

2-6- Dimensions of competitive advantage:

The dimensions of competitive advantage are as follows:- (Akram Ahmed Al-Tawil and others 2008: 13)

1. **Cost dimension:-** Organisations seek to obtain the largest market share to ensure their success and superiority by offering their products at a lower cost than other competitors.

The institution can reduce costs through the efficient use of available production capacity, so it is necessary to continuously improve the quality of products and creativity in designing process technology, as it is an important basis for reducing costs, in addition to helping managers support and support the organisation's strategy to be a leader in the field of cost.

2. **Quality dimension:-** Customers want to obtain products that enjoy high quality and meet the characteristics required by them, which are characteristics that they may see in advertisements in the organisation that does not offer products with quality that meet the needs, desires and expectations of customers will not be able to survive and succeed in competitive behaviour (Louisa and others 2009: 8).
3. **Flexibility dimension:** Flexibility is a key element to achieving competitive advantage for the organisation through rapid response to changes that occur in product design and line with customer needs. Flexibility also means the organisation's ability to change operations to other methods, which may mean a change in the performance of its operations as well as a change in the method and time for each process. The customer needs to change it to provide four main requirements, which are as follows: -

- ✓ Product flexibility: - The ability to provide modified and new products
- ✓ Mix flexibility: Operations can produce a variety of goods.
- ✓ Volume flexibility: - Adjusting product or production levels to accommodate various sizes.
- ✓ Delivery flexibility: - Allows for product delivery timing changes.

4. **Delivery dimension:** The delivery dimension is the main basis for competition between organisations in the market by focusing on reducing the period and speed of designing new products and then presenting them to customers in the shortest possible time. There are three priorities for a delivery dimension that deal with time: (speed in delivery, delivery on time, speed in development)
5. **Creativity dimension: -** It means the ability to produce new ideas and the ability to adopt these ideas and put them into practice.

The most important thing that organisations can achieve through creativity can be summarised as follows: -

- ✓ Obtaining production factors as well as increasing sales by facing increasing competition
- ✓ Safety in the workplace reduces accidents.
- ✓ Exploring new approaches to solve problems and overcome challenges.
- ✓ Developing methods and ways of production and distribution of goods and services and achieving better levels in terms of quality and quantity in all activities that the organisation performs
- ✓ Gaining competitive superiority for the organisation by reducing the cost of manufacturing and capital and the possibilities of changing the production process and introducing new products.

3- The practical aspect:

3-1- Description of the research variables

Introduction: This thesis was devoted to a topic to determine the reality of (intellectual capital competitive advantage), through the sample answers to the questionnaire paragraphs (39) paragraphs that represented the dimensions of the research variables, the (arithmetic mean, standard deviation and coefficient of variation) were calculated, and the results were compared with the hypothetical mean, which is (3). Through the questionnaire that includes the five-point Likert scale, where the total score was (5), a comparison was made between the hypothetical mean and the arithmetic mean. If the arithmetic mean obtained is greater than the hypothetical mean, this indicates great interest in this topic and its dimensions. The variable associated with it, but if it is smaller than the hypothetical mean. This is considered a weakness in interest in this paragraph, dimension and the variable associated with it.

Table (4) Interpretations of arithmetic means when compared to the five-point Likert scale gradations.

Totally agree	Agree	Neutral	Disagree	Totally disagree
4.21-5	**3.41-4.20**	**2.61-3.40**	**1.81-2.60**	**1-1.80**
Very high	**High**	**Moderate**	**Weak**	**Very weak**

Akadiri O. P. (2011), Development of Multi-Criteria Approach for the Selection of: Wolver Hampton, U. K.

First: Analysis of the data of the "Independent Variable" intellectual capital:

It is noted from the table below:

1- **The intellectual capital variable:** It achieved an arithmetic weighted mean (3.29), the coefficient of variation reached (24.3%), and a standard deviation level (0.799), and the relational capital dimension came in first place in terms of the sample members' agreement on its importance and interest in it by the studied laboratory because it obtained the highest values, and after human capital came in last place because it received the lowest values.

2- **Human capital:** The highest value was at statement (3) with an arithmetic weighted mean (3.63), and the coefficient of variation reached (16.9%), and a standard deviation level (0.613), and this indicates that the workers in the studied laboratory can generate new ideas, while the lowest value was at paragraph (2) with an arithmetic mean (2.76), and the coefficient of variation reached (36.2%), and a standard deviation level (0.998).

3- **Structural capital:** The highest value was at statement (7) with an arithmetic mean (3.54), the coefficient of variation was (17.6%), and a standard deviation level (0.622), which indicates that the laboratory management protects basic knowledge and information to avoid losing it. The lowest value was in paragraph (10) with an arithmetic mean (3.01), and the coefficient of variation was (33.0%), and a standard deviation level (0.992).

4- **Relational capital**: The highest value was at statement (11) with an arithmetic mean (3.77), a coefficient of variation was (16.8%), and a standard deviation level (0.632), which indicates that the laboratory management seeks to establish a good relationship with its customers. The lowest value was in paragraph (15), with an arithmetic mean (of 3.02), a coefficient of variation (29.9%), and a standard deviation level (0.904).

Table (5) Display and analysis of data on the intellectual capital variable.

	Phrases	Average	S.D	C.V	relative importance	NO.
1	The laboratory workers have high skills	3.38	0.832	24.6%	67.6%	3
2	The laboratory workers have long experience in their field of work	2.76	0.998	36.2%	55.2%	5
3	The workers can generate new ideas	3.63	0.613	16.9%	72.6%	1
4	The laboratory management is keen to have its workers participate in training courses in order to improve productivity	2.82	0.891	31.6%	56.4%	4
5	The workers can find solutions to all work problems	3.44	0.754	21.9%	68.8%	2
Human capital		3.206	0.818	25.5%	64.1%	3
6	The laboratory has effective and modern information systems that contribute to the speed of completing the work	3.43	0.732	21.3%	68.6%	2
7	Laboratory management protects the basic knowledge and information to avoid losing it	3.54	0.622	17.6%	70.8%	1
8	It has an organisational structure that clarifies the relationship between the manager and the subordinate	3.19	0.888	27.8%	63.8%	4
9	The laboratory management provides its employees with all the information related to completing the work	3.34	0.851	25.5%	66.8%	3
10	The laboratory management supports new ideas	3.01	0.992	33.0%	60.2%	5
Structural capital		3.302	0.817	24.7%	66.0%	2
11	The laboratory management seeks to establish a good relationship with its customers	3.77	0.632	16.8%	75.4%	1
12	The laboratory management seeks to establish good relationships with suppliers	3.21	0.818	25.5%	64.2%	4
13	The laboratory management seeks to study the competitive environment in order to keep pace with developments	3.54	0.717	20.3%	70.8%	2
14	The laboratory management seeks to provide value-added services to its customers	3.31	0.745	22.5%	66.2%	3
15	The laboratory management studies the market continuously in order to determine the needs of its customers	3.02	0.904	29.9%	60.4%	5
Relational Capital		3.37	0.763	22.6%	67.4%	1
Overall Average of Intellectual Capital Variable		3.29	0.799	24.3%	65.9%	

"Source: Researcher-prepared from SPSS V 26 outputs".

Second: Analysis of the data of the dependent variable, competitive advantage:

It is noted from the table below:

1- **The competitive advantage variable:** It achieved an arithmetic weighted mean (3.28), the coefficient of variation reached (23.2%), and a standard deviation level (0.763), and the cost dimension came in first place in terms of the sample members' agreement on its importance and interest in it by the studied laboratory because it obtained the highest values, while creativity came in last place because it received the lowest values.

2- **Cost:** The highest value was at statement (2) with an arithmetic weighted mean (3.69), and the coefficient of variation reached (16.2%), and a standard deviation level (0.598), which indicates that the laboratory management offers a discount on the prices of its products, while the lowest value was at paragraph (3) with an arithmetic mean (2.98), and the coefficient of variation reached (31.0%), and a standard deviation level (0.923).

3- **Quality:** The highest value was at statement (6) with an arithmetic mean (3.91), a coefficient of variation was (14.9%), and a standard deviation level (0.582), which indicates that the factory management seeks to improve the quality of its products to be the best in the market. The lowest value was in paragraph (8) with an arithmetic mean (2.71), and the coefficient of variation was (36.5%), and a standard deviation level (0.988). 4- Flexibility: The highest value was at statement (12) with an arithmetic mean (3.82), the coefficient of variation was (16.2%), and a standard deviation level (0.618), which indicates that the factory management has early knowledge of everything that happens in the market. The lowest value was in paragraph (13), with an arithmetic mean (2.66), a coefficient of variation (34.5%), and a standard deviation level (0.917).

4- **Creativity:** The highest value was at statement (15) with an arithmetic mean (3.51), the coefficient of variation was (17.6%), and a standard deviation level (0.618), which indicates that the laboratory management is keen to innovate new products, while the lowest value was at paragraph (16) with an arithmetic mean (2.69), and the coefficient of variation was (36.2%), and a standard deviation level (0.974).

5- **Delivery:** The highest value was at statement (24) with an arithmetic mean (3.47), a coefficient of variation was (17.1%), and a standard deviation level (0.594), which indicates that the laboratory management follows up on customer complaints and is quick to solve their problems, while the lowest value was at paragraph (22) with an arithmetic mean (2.88), and the coefficient of variation was (32.3%), and a standard deviation level (0.931).

Table (6) data for the variable competitive advantage

	Phrases	Average	S.D	C.V	relative importance	NO.
1	The laboratory management seeks to reduce costs without compromising quality	3.54	0.742	21.0%	70.8%	3
2	The laboratory management offers a reduction in the prices of its products	3.69	0.598	16.2%	73.8%	1
3	The ideas of the workers contribute to innovating methods and techniques that contribute to reducing costs	2.98	0.923	31.0%	59.6%	5
4	The use of information technology contributes to saving time and effort that contributes to reducing costs	3.61	0.611	16.9%	72.2%	2
5	The speed of completing work saves effort and reduces costs	3.47	0.825	23.8%	69.4%	4
	Cost	3.46	0.740	21.4%	69.2%	1
6	The laboratory management seeks to improve the quality of its products to be the best in the market	3.91	0.582	14.9%	78.2%	1
7	The quality of the products is generally acceptable, appropriate and competitive from the customers' point of view	3.22	0.862	26.8%	64.4%	4
8	The ideas of the workers contribute to improving the quality of the products	2.71	0.988	36.5%	54.2%	5
9	The laboratory management cares about its customers in order to know their opinions regarding the quality of the products	3.79	0.651	17.2%	75.8%	2
10	The interest in applying quality standards to all its activities and levels	3.52	0.692	19.7%	70.4%	3
	Quality	3.43	3.91	0.582	14.9%	2
11	The laboratory management can respond quickly to the tastes of its customers	3.72	0.712	19.1%	74.4%	2
12	Early knowledge of everything that happens in the market	3.82	0.618	16.2%	76.4%	1
13	The ability to respond to market changes	2.66	0.917	34.5%	53.2%	4
14	The use of technology contributes to the speed of response to market changes	3.02	0.845	28.0%	60.4%	3
	Flexibility	3.31	0.773	23.4%	66.1%	3
15	The laboratory management is keen to innovate new products	3.51	0.618	17.6%	70.2%	1
16	The laboratory management seeks to improve its current products in order to keep pace with the change in the tastes of its customers	2.69	0.974	36.2%	53.8%	5
17	The laboratory management uses new and modern methods in promoting its products	3.22	0.711	22.1%	64.4%	2
18	The regulatory procedures help secure opportunities for creativity and initiative	2.79	0.851	30.5%	55.8%	4
19	Creativity is a priority for the laboratory management to be the best in the market	3.11	0.774	24.9%	62.2%	3
	Creativity	3.06	0.786	25.6%	61.3%	5
20	The laboratory management is committed to delivery on time	3.19	0.754	23.6%	63.8%	3
21	The laboratory management is distinguished by the speed of delivery of products to its customers	3.38	0.674	19.9%	67.6%	2
22	The laboratory management has a reserve stock of products	2.88	0.931	32.3%	57.6%	5
23	The laboratory management follows periodic and accurate maintenance programs for machines to avoid malfunctions that may affect delivery dates	3.04	0.861	28.3%	60.8%	4
24	The laboratory management follows up on customer complaints and is quick to solve their problems	3.47	0.594	17.1%	69.4%	1
	Delivery	3.19	0.763	23.9%	63.8%	4
	Overall average of competitive advantage variable	3.29	0.763	23.2%	65.8%	

"Source: Researcher-prepared from SPSS V 26 outputs".

3-2- Hypothesis testing and analysis of its results for the research variables

In this section, we reviewed the testing of the main and sub-hypotheses of the research by identifying and finding the strength and direction of the relationship between the research

variables and their dimensions using Pearson's correlation coefficient. Since the data is normally distributed, the researcher chose the simple and multiple linear regression coefficient to determine the effect of the "Independent Variable" (intellectual capital) in all its dimensions on the "Dependent variable (competitive advantage)". The value of the correlation coefficient is always limited to (1+/1-), while the strength of the relationship in its direct and inverse directions is weak to (0<->0.30), and medium strength (0.30-<0.50) and (0.50->1) is strong. A- The studied laboratory

3-2-1- Verifying the correlation hypothesis

Testing the main hypothesis: ((There is a significant correlation with statistical significance between intellectual capital and competitive advantage)) and the following secondary hypotheses branch out from it:

- There is a significant correlation with statistical significance between the dimension (human capital) and competitive advantage.
- There is a significant correlation with statistical significance between the dimension (structural capital) and competitive advantage.
- There is a significant correlation with statistical significance between the dimension (relational capital) and competitive advantage.

Table (7) Correlation matrix of intellectual capital and its dimensions with competitive advantage and its dimensions

		human capital	structural capital	relational capital	intellectual capital
competitive advantage	R	.865**	.626**	.907**	.922**
	Sig	.000	.000	.000	.000
	N	138	138	138	138
	Type of association	Positive	Positive	Positive	Positive
	Strength of association	Strong	Middle	Very strong	Very strong

"Source: Researcher-prepared from SPSS V 26 outputs".

Note:

** Statistical correlation at a significance level of 1%

* Significant correlation at a significance level of 0.05

By reviewing the table below, we note:

- **Verification of the first main hypothesis:** The "Independent Variable", intellectual capital, achieved a direct correlation at a very high level (0.922) with the dependent variable, the respondent, competitive advantage, at a significance level of (.0000), which is smaller than the significance level of 0.05 and 0.01, as the increase in intellectual capital will lead to enhancing the competitive advantage by the value of this (parameter), and accordingly this "hypothesis is accepted, and the alternative hypothesis is rejected".
- **Verification of the first sub-hypothesis:** The human capital dimension achieved a direct correlation at a high level (0.865) with the dependent variable responding competitive advantage at a significance level (.0000), which is smaller than the significance level of 0.05 and 0.01, as the increase in human capital will lead to enhancing the competitive advantage by the value of this (parameter), and accordingly this "hypothesis is accepted, and the alternative hypothesis is rejected".
- **Verification of the second sub-hypothesis:** The structural capital dimension achieved a direct correlation at a medium level (0.626) with the dependent variable responding

competitive advantage at a significance level (.0000), which is smaller than the significance level of 0.05 and 0.01, as the increase in structural capital will lead to enhancing the competitive advantage by the value of this (parameter), and accordingly this "hypothesis is accepted, and the alternative hypothesis is rejected".

- **Verification of the third sub-hypothesis:** The dimension of relational capital achieved a direct correlation at a very high level (0.907) with the dependent variable responding to competitive advantage at a significance level (.0000), which is smaller than the significance level of 0.05 and 0.01, as the increase in relational capital will lead to enhancing the competitive advantage by the amount of the value of this (parameter), and accordingly this "hypothesis is accepted, and the alternative hypothesis is rejected".

3-2-2- Confirmatory factor analysis of study variables

The table below shows that all estimations of the standard parameters for the paragraph (intellectual capital, competitive advantage) surpass (0.40), as evidenced by the arrows linking the five sub-dimensions to their paragraphs. The critical ratios (CR) in the table are more than (2.56) at the significance level (0.01), proving these parameters' feasibility and efficacy. The results showed that all model consistency indicators fulfil the acceptance standards. Hence, the structural model obtains good consistency without any of the recommended adjustment indicators. This confirmed that 39 paragraphs evenly dispersed over seven interrelated parameters examined intellectual capital and competitive advantage.

Table (8): Values of parameter estimates, critical ratio, standard error, and significance level for the study variables

COD		PATH	Estimate	S.E.	C.R.	P
HA1	<---		.723	.090	9.730	***
HA2	<---		.819	.083	11.764	***
HA3	<---	Human Capital	.837	.084	12.181	***
HA4	<---		.764	.088	10.561	***
HA5	<---		.803			
SA1	<---		.653	.102	7.713	***
SA2	<---		.773	.102	9.364	***
SA3	<---	Structural Capital	.775	.097	9.385	***
SA4	<---		.829	.106	10.145	***
SA5	<---		.771			
RA1	<---		.843	.069	13.814	***
RA2	<---		.874	.065	14.929	***
RA3	<---	Relational Capital	.828	.062	13.321	***
RA4	<---		.793	.074	12.264	***
RA5	<---		.893			
CT1	<---		.789			
CT2	<---		.869	.093	13.214	***
CT3	<---	Cost	.805	.096	11.623	***
CT4	<---		.776	.105	10.970	***
CT5	<---		.825	.090	12.085	***
QU1	<---		.875			
QU2	<---		.825	.081	12.626	***
QU3	<---	Quality	.772	.078	11.254	***
QU4	<---		.733	.084	10.351	***
QU5	<---		.640	.080	8.503	***

CA1	<---	Creativity	.769			
CA2	<---		.818	.095	10.292	***
CA3	<---		.781	.093	9.729	***
CA4	<---		.730	.096	8.974	***
CA5	<---		.855	.093	10.863	***
DE1	<---	Delivery	.641			
DE2	<---		.770	.146	7.685	***
DE3	<---		.896	.166	8.583	***
DE4	<---		.840	.149	8.207	***
DE5	<---		.844	.161	8.236	***
LF1	<---	Flexibility	.849			
LF2	<---		.866	.086	12.584	***
LF3	<---		.841	.087	12.044	***
LF4	<---		.827	.090	11.737	***

"Source: Researcher-prepared from AMOS V 24 outputs"

3-3- Testing the impact of intellectual capital on competitive advantage:

The second main hypothesis of the research was determined: ((There is a "significant statistically" significant moral impact of intellectual capital on competitive advantage)), and the following sub-hypotheses emerge from it:

1. There is a "significant statistically" significant moral impact of the human capital dimension on competitive advantage.
2. There is a "significant statistically" significant moral impact of the structural capital dimension on competitive advantage.
3. There is a "significant statistically" significant moral impact of the relational capital dimension on competitive advantage.

Table (9) The impact of intellectual capital on competitive advantage

"Independent Variable"	"Dependent variable (competitive advantage)"						
	α	B	R^2	adj. R^2	T	F	Sig
Intellectual capital	1.71	0.78	0.85	0.87	15.87	168.21	0.00

"Source: Researcher-prepared from SPSS V 26 outputs".

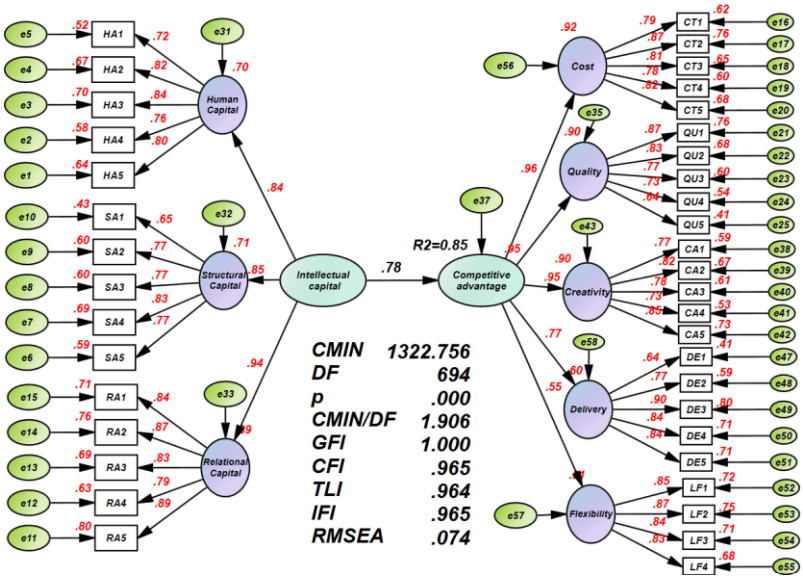


Figure (2) Structural model of study variables

"Source: Researcher-prepared from AMOS V 24 outputs"

The table and figure above show that the explanatory coefficient R² reached (0.85) at the significance level (0.00), which explains that the "Independent Variable" (intellectual capital) explained (85%) of the change in the responding "variable competitive advantage" and "the remaining percentage" (15%) is attributed to other factors outside the study model, and this is a fairly good model for interpretation. The value of (F) that was calculated reached (168.21) at the significance percentage (0.00) of the model, which indicates that there is a direct "effect of intellectual capital estimated" at (0.78), and the value of the regression (constant) reached (1.71) at the significance level (0.00). The "calculated value "of (T) (15.87) is "greater than the tabular value "of (1.14) at the "significance percentage level" (5%) and with a degree of freedom (137). Accordingly, the "hypothesis is accepted, and the alternative hypothesis is rejected".

Table (10) The impact of the dimension (human capital) on competitive advantage

"Independent Variable"	"Dependent variable (competitive advantage)"						
	α	B	R²	adj. R²	T	F	Sig
Human capital	1.39	0.72	0.75	0.77	8.987	110.432	0.00

"Source: Researcher-prepared from SPSS V 26 outputs".

The above table shows that the explanatory coefficient R² reached (0.75) at the significance level (0.00), which explains that the dimension (human capital) explained (75%) of the change in the responding "variable competitive advantage". "the remaining percentage" (25%) is attributed to other factors outside the study model, and this is a fairly good model for interpretation. The value of (F) that was calculated reached (110.432) at the significance percentage (0.00) of the model, which indicates that there is a direct effect of human capital estimated at (0.72), and the value of (constant) regression reached (1.39) at the significance level (0.00). The "calculated value "of (T) (8.987) is "greater than the tabular value "of (1.14) at the "significance percentage level" (5%) and with a degree of freedom (137). Accordingly, the first sub-"hypothesis is accepted, and the alternative hypothesis is rejected".

Table (11) The impact of the dimension (structural capital) on competitive advantage

"Independent Variable"	"Dependent variable (competitive advantage)"						
	A	B	R²	adj. R²	T	F	Sig
Structural capital	1.13	0.546	0.39	0.41	6.112	33.453	0.00

"Source: Researcher-prepared from SPSS V 26 outputs".

The above table shows that the explanatory coefficient R² reached (0.39) at the significance level (0.00), which explains that the dimension (structural capital) explained (39%) of the change in the responding "variable competitive advantage". "the remaining percentage" (61%) is attributed to other factors outside the study model, and this is a fairly good model for interpretation. The value of (F) that was calculated reached (33.453) at the significance percentage (0.00) of the model, which indicates that there is a direct effect of the dimension of structural capital estimated at (0.546), and the value of the regression (constant) reached (1.13) at the significance level (0.0000). The "calculated value "of (T) (6.112) is "greater than the tabular value "of (1.14) at the "significance percentage level" (5%) and with a degree of freedom (137). Accordingly, the second sub-"hypothesis is accepted, and the alternative hypothesis is rejected".

Table (12) The impact of the dimension (relational capital) on competitive advantage

"Independent Variable"	"Dependent variable (competitive advantage)"						
	α	B	R²	adj. R²	T	F	Sig
Relational Capital	1.92	0.84	0.82	0.83	16.77	177.324	0.00

"Source: Researcher-prepared from SPSS V 26 outputs".

The above table shows that the explanatory coefficient R² reached (0.82) at the significance

level (0.00), which explains that the dimension of (relational capital) explained (82%) of the change in the responding "variable competitive advantage". "the remaining percentage" (18%) is attributed to other factors outside the study model, and this is a fairly good model for interpretation and the value of (F) that was calculated reached (177.324) at the significance percentage (0.00) of the model, which indicates that there is a direct effect of the dimension of relational capital estimated at (0.84), and the value of the regression (constant) reached (1.92) at the significance level (0.0000). The "calculated value "of (T) (16.77) is "greater than the tabular value "of (1.14) at the "significance percentage level" (5%) and with a degree of freedom (137). Accordingly, the third sub-"hypothesis is accepted, and the alternative hypothesis is rejected".

4- Conclusions and Recommendations:

4-1- Conclusions: In light of the results of the research in both (theoretical and practical) aspects, we will discuss the findings as follows: -

1- Intellectual capital contributes positively to the development and improvement of competitive advantage.

2- The research results proved that there is an impact of the dimensions of intellectual capital on the competitive advantage of the studied laboratory with statistical significance at the level of 0.05.

3- That interest in the human capital of the studied laboratory by supporting new ideas for workers, providing employees with all the information related to completing the work, and securing basic knowledge and information to avoid losing it contributes to achieving a competitive advantage.

4- That interest in the human capital of the studied laboratory through the laboratory management's keenness to participate with its workers in training courses to improve productivity, enhance their ability to generate new ideas, and enhance their high skills contributes to achieving competitive advantage.

5- Paying attention to the relational capital of the studied laboratory by establishing a good relationship with its customers and suppliers and analysing the competitive environment in order to keep pace with developments contributes to achieving a competitive advantage. 6- There is a significant correlation between the variable of intellectual capital and competitive advantage. The more the studied laboratory cares about intellectual capital, the more it helps it achieve a competitive advantage, as follows:

1. The studied laboratory achieved the highest positive correlation between the study variables, at a rate of (0.922) among the studied laboratory, as the dimension of relational capital obtained a rate of (0.907) in the correlation with competitive advantage, followed by the dimension of human capital, which achieved a correlation rate of (0.865),. The lowest rate was for the dimension of structural human capital, which amounted to (0.626).

4-2- Recommendations

Considering our analysis of the problem, especially the impact of intellectual capital on competitive advantage, we can develop the following set of recommendations that would enhance this impact and help achieve the specified objectives:

1. Continuous training and development:

- Implementing training programs for workers on new technological solutions within the clothing industry and integrating them into design, cutting and sewing.

- Implementing leadership and management training by focusing on talents at the highest level of the organisation.

2. Attracting Talents:

- Organising continuous recruitment campaigns to bring in young talents and fresh graduates for fashion design and clothing manufacturing.
- Financial and moral incentives to attract talents from outside the governorate.
- Building a strong corporate culture through:
- Enhancing the spirit of creativity and innovation among workers.
- Building a cohesive and cooperative work team
- Enhancing the values of quality and commitment to deadlines

3. Intellectual Capital:

- Innovation in design:
- Motivating designers to create new and contemporary styles that will attract customers and meet market requirements.
- Keeping pace with global fashion to meet the needs of the local market.

4. Product Development:

- Developing new products with quality and competitive prices.
- Diversifying products to meet the needs of diverse customer segments.

5. Research and Development:

- Investing in research and development of new materials and fabrics to meet quality and durability.
- Developing new technologies in the clothing industry.
- Building strong relationships with customers:
- Some strong points to attract customer loyalty.
- Listening to the customer's voice and meeting their needs.
- Launching effective marketing campaigns for new products and company offers.

6. Structural Capital:

- Updating Technology:
- Updating all machines and equipment used in the production process.
- To invest in computer programs specialised in fashion design and production management.

A. Arabic sources

1. Hassan Ali Al-Zoubi: Strategic Information Systems, a Strategic Approach, ed. 1, Dar Wael Amman, Jordan, 2005,
2. Ahmed Khalaf Binian, & Abdullah Rizk. (2022). The role of human capital in creating a competitive advantage for modern organisations. Index Journal of Survey Studies Volume 2 Issue 6.
3. Akram Ahmed Al-Tawil, Raghad Ibrahim Ismail: The relationship between types of technical innovation and dimensions of competitive advantage, a field study in a selected group of industrial companies in Nineveh Governorate, College of Administration and Economics, Department of Industrial Administration, University of Mosul, Iraq, 2008, p. 13
4. Al-Amri, Saleh, and Al-Ghalbi, Taher, (2009) Administration and Business, 2nd ed. Amman: Dar Wael for Publishing and Distribution

5. Al-Anzi, Saad Obaid, Nagham Hussein Ne'mah (2001) The Impact of Intellectual Capital on Organizational Performance: A Field Study in a Sample of Mixed Industrial Sector Companies, Journal of Economic and Administrative Sciences, Issue (28), Volume (8)
6. Al-Hilal Al-Sharbini (July, 2011) Capital Management Intellectual Capital, Its Measurement and Development as Part of Knowledge Management in Higher Education Institutions, Journal of Qualitative Education Research (22) p. 23
7. Al-Naas, my friend, The importance of information systems in strengthening competitive advantage, unpublished master's thesis in marketing, Faculty of Economic Sciences, Facilitation and Commercial Sciences, Saad Dahlab University, Blida, Algeria, 2005, p. 111
8. Al-Saeed, Hani (2008), Intellectual Capital, Contemporary Administrative Launch, 1st ed. Egypt: Dar Al-Sahab for Publishing and Distribution
9. Al-Shajri, Saleh (2017) Performance Measurement and Evaluation Indicators, Nile for Publishing and Distribution, Cairo
10. Bani Hamdan, Khaled Muhammad (2001) The Impact of the Human Resources System on Intellectual Capital, Unpublished PhD Thesis, College of Administration and Economics, University of Baghdad
11. Farhat Ghoul, Indicators of Competitiveness of Economic Institutions in Light of Economic Globalization (The Case of Economic Institutions), PhD Thesis in Economic Sciences, Facilitation Specialization, Faculty of Economic Sciences and Facilitation Sciences, University of Algiers, 2005-2006, pp. 96-97
12. Farhat Louisa (2016) The Role of Intellectual Capital in Achieving Competitive Advantage for Economic Institutions in a Market Economy (PhD Thesis) University of Biskra: Specialisation in Human Resources Organization
13. Harbi, Nour Reem (2012) Intellectual capital management as a strategy for distinguishing service organisations -
14. Hashem Al-Shamiri and Nadia Al-Laithi (2008) Knowledge Economy, Jordan, Amman: Safa Publishing and Distribution House
15. Hilal Al-Waleed: General foundations for building competitive advantages and their role in creating value, a case study of Algerian competitive mobile phone companies, unpublished master's thesis in marketing, Faculty of Economics, Facilitation and Commercial Sciences, University of Mohamed Boudiaf, Algeria, 2008-2009, p. 26
16. Latif Abdul-Ridha Attia (2008) Intellectual Capital and Knowledge Management (Relationship and Impact), Al-Qadisiyah Journal of Administrative and Economic Sciences, Issue 6
17. Mohamed Ibrahim Obeidat: Marketing strategy, a behavioral approach, 3rd edition, Wael Publishing and Distribution House, Amman, Jordan, 2002, p. 87
18. Qwaider Louisa. Kashida Habiba: The role of competitive advantage in the business environment and its sources, the scientific forum on knowledge in the digital economy and its contribution to the formation of competitive advantages for countries, Habiba Ben Moali University, Chlef, Algeria, p. 8
19. Raja Rashid Abdul Sattar, City of Science Magazine, Analysis of the Relationship between the Dimensions of Intellectual Capital and the Performance of Employees in Educational Institutions, Institute of Management - Al-Rusafa, Department of Financial and Banking Technologies, Issue 1, Volume 2020, 12, pp. 213-214

B. Foreign sources

1. Akadiri O. P. (2011), Development of Multi-Criteria Approach for the Selection of: Wolver Hampton, U. K.
2. Hair, Jr. J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). "Multivariate Data Analysis: A Global Perspective". London: Pearson.
3. Li-Gen, Y. & Yu, Z. (2009). Research on the core competence evaluation model of construction enterprise based on knowledge capital theory. IJCAI International Joint Conference on Artificial Intelligence. p.pp. 163–166.
4. Middleton . J (2002) Organisational Behavior(first published ed) United Kingdom :capstone publishing.
5. Serenko, A., & Bontis, N. (2004). Meta-review of knowledge management and intellectual capital literature: Citation impact and research productivity rankings. *Knowledge and process management*, *11*(3), 185-198.
6. Wagner, A. (1999). Tertiary education and lifelong learning: Perspectives, findings and issues from OECD work. *Higher Education Management*, *11*, 55-68.