January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

Received: 24 December 2023, Accepted: 18 January 2024

DOI: https://doi.org/10.33282/rr.vx9il.97

The Role of Intellectual capital in achieving competitive advantage Field study at AL-Hassan Industrial City in the Hashemite Kingdom of Jordan.

PhD. Khalid Hussein Shlash Al-Mahdawi<sup>1</sup>, Dr. soumiadendougui<sup>2</sup>

#### Abstract:

This study aimed at revealing the effect of Intellectual capital on competitive advantage at business organizations of Al-Hassan industrial city in Jordan. The study population consists of managers, heads of HR departments, production operations, financial, marketing and IT departments in 137 different domain business organizations in the Al- Hassan industrial city in the Hashemite Kingdom of Jordan.

A 20% sample was randomly taken from these organizations as the sample is inconsistent. 30 organizations was selected based on complete census as per the following categories, 10 clothes organizations, 10 chemical organizations and 10 food production organizations. 8 questionnaires were distributed in each organization to managers, their deputies and assistants, heads of HR, production operations, financial, marketing, and IT departments.

So, 240 questionnaires were distributed, 187 were retrieved, 3 of them were invalid, 184 questionnaire were analyzed (76%). The results of this study were that the degree of practicing of intellectual capital represented by the human, Structural and relational capital and the competitive were medium. There is no effect for human, Structural and relational capital in achieving competitive advantage. The study recommended to enhance the intellectual capital as it has an essential role to achieve competitive advantage.

2147

<sup>&</sup>lt;sup>1</sup>- Santiago de Compostela University, Spain, Khalid.almahdawi@rai.usc.es

<sup>&</sup>lt;sup>2</sup>- The national higher school of political sciences, Algeria, soumia.dendougui@enssp.dz

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

**Keywords**: Intellectual capital, human capital, Structural capital, relational capital, competitive advantage, Al-Hassan Industrial city, Jordan.

#### 1. Introduction:

Developments in all aspects of life have affected the functioning of business organizations, requiring them to make fundamental changes in all their parts without exception. (Mehdi, Belqasem, 2014, p286). This coincides with business organizations working together to interact with market trends determined by the general wishes of customers and with what they look forward to through products or services provided (Madhani, 2016). The product no longer plays such a major role in the process of building a competitive advantage because of its easily copied and transmitted features that today determine the power of products and services in the knowledge used in its creation (Igielski, 2018).

In order to ensure the success of organizations, the organization's own subjective factors must be studied, and the focus on information and knowledge and its knowledge-oriented role must be addressed through its interest in intellectual capital. The response of organizations to the achievement of intellectual capital has a profound effect on competitiveness, which is at the core of the organizations' work, especially in today's world, and the competition of national organizations with international organizations that have considerable experience and managerial power. (Alvino, et.al. 2021).

The ability of the Organization to exploit its own elements to contribute to competitive advantage by identifying its resources, which are transformed by its own capacities into core competencies and which are important in distinguishing it from other organizations (Al-Rashidi, 2019), comes as the present study links intellectual capital and recognizes its effect on competitive advantage as a field study.

#### **Problem Statement:**

The problem with the study, which came to light following previous studies, stems from the fact that intellectual capital is an important component of organizations, a research topic that is increasingly important for academics and workers in different organizations (Rehman, et.al, 2021), but it was found that there were differences and a lack of agreement to name it clearly in its definition, with its great importance and effect on organizations. Non-material capital, intellectual assets or knowledge assets, which led to many definitions and was reflected in the study of its indicators (Ababessa, Govi, 2016), which the current study suggests is that the term study can be adapted to the knowledge background in its study and linked to the competitive advantage of business organizations, and the many projections in the Corona pandemic that required high-quality and high-speed management work by the intellectual capital in the different sections of the organizations in the study population to ensure that organizations continue to be a key factor in exceptional circumstances.

The relationship between intellectual capital and competitive advantage has the advantage of overlap. The process of linking intellectual capital with competitive advantage opens the door to

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

recognition of the durability of organizations under different circumstances to be competitive. Intellectual capital plays an important role in maintaining competitive advantage. Intellectual capital is one of the Structural capacities that have a positive effect on competitive advantage. (Chahal & Bakshi, 2014), intellectual capital is more important as a source of competitive advantage in organizations, and the external environments of organizations differ in the effect of intellectual capital on competitive advantage (Fait, et.al, 2023), the current study answers the following question: What is the effect of the dimensions of intellectual capital on the competitive advantage of business organizations in Al-Hassan industrial city in the Hashemite Kingdom of Jordan?

## The Importance of the Study:

The Scientific importance of the study:

The importance of the topic in dealing with intellectual capital and the importance and usefulness it represents for different organizations because of its importance and role in the excellence and stability of organizations in different markets. The lack of intellectual capital means that the decision-maker is very dispersed and is not fully aware of how to deal with the current situation.

The study also brings together the possibility of regulating the most important indicators underlying intellectual capital in the measurement process to determine the degree of practice, by tracking the various studies and learning what previous studies on the subject have established to play a key role.

## The Practical importance of the study:

The practical importance of the study comes from the fact that it can be applied in the business organizations in the Al- Hassan industrial city in the Hashemite Kingdom of Jordan, and the challenges it needs for those organizations and their work from the Corona pandemic. It is reflected in the different working strategies and adaptations to the current situation. In the absence of a mental capacity for employees, it has become inevitable that organizations have failed, especially in the abnormal circumstances dealt with in the study period, which assumed that the organizations were dealing with different situations. On the one hand, they are obliged by the Government of Jordan to spend their financial expenses on employees. On the other hand, they are required to work on a small scale and require staff to work remotely. This means that organizational workers enjoy the accuracy, speed and control of administrative work in order to keep a profit margin out of the situation of the organizations in the study population.

The importance of the applied study also stems from the fact that it attempts to assess the effect of intellectual capital on the competitive advantage of showing weaknesses, if any, in order to strengthen them and to emphasize strengths, thereby enhancing its work by positively affecting the Jordanian domestic market through an effective contribution to national output and the utilization of competencies to the success of the decision-maker's management work.

Objectives of the study:

- To identify the dimensions of the intellectual capital in the business organizations of the Al-Hassan industrial city in the Hashemite Kingdom of Jordan and to try to assess it, identify weaknesses

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

and focus on and maintain strengths;

- To identify the dimensions and extent of competitive advantage in the business organizations of the Al-Hassan industrial city in the Hashemite Kingdom of Jordan;
- To reveal the effect of intellectual capital on the competitive advantage of business organizations in Al-Hassan industrial city in the Hashemite Kingdom of Jordan.

## **Study Hypotheses:**

Based on the study problem, the researcher formulated the study's hypotheses as follows:

**Ho1:** There is no statistically significant effect at ( $\alpha \le 0.05$ ) of human capital in achieving the competitive advantage of business organizations in the Al- Hassan industrial city in the Hashemite Kingdom of Jordan.

**Ho2:** There is no statistically significant effect at the level ( $\alpha \le 0.05$ ) of Structural capital in achieving the competitive advantage of business organizations in the Al- Hassan industrial city in the Hashemite Kingdom of Jordan.

**Ho3:** There is no statistically significant effect at the level ( $\alpha \le 0.05$ ) of relational capital in achieving the competitive advantage of business organizations in the Al- Hassan industrial city in the Hashemite Kingdom of Jordan.

#### **Previous Studies:**

While (Jardon & Martos, 2012) study aimed to identify intellectual capital as a competitive advantage for small and medium-sized organizations with slow growth, the study found that the competitive advantage of emerging groups of small and medium-sized organizations affected organizational capacities, thereby improving performance, and recommended that competencies should be developed to maintain a better position in the competitive market because of their effect on the organization as a whole.

While (Chahal & Bakshi, 2014) study aimed at identifying the role of innovation in the relationship between intellectual capital and competitive advantage, found that innovation is a major reason for positively influencing the relationship between intellectual capital and the competitive advantage of organizations, the study recommended that attention should be paid and human capital should be raised to what is expected of its positive effect in achieving competitive advantage for organizations.

From the other hand, (Todericati & Sanit, 2015) study aimed at identifying intellectual capital as a key to sustainable competition and its contribution to the advantage of the small and medium-sized organization sector. The study found that intellectual capital plays an important and positive role in the small and medium-sized organization sector in order to gain a real and sustainable competitive advantage.

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

Moreover, (Ababseh, Hashemi, Goofi, Abdal-Hamid, 2016) study which aimed to identify intellectual capital in terms of its most important indicators, found that there was a problem with the concept of intellectual capital by understanding the term through a variety of researchers' views based on the study of the term intellectual capital according to the views they were studying in addition to their cognitive backgrounds.

While (Bosahara, Nazir, 2016) study aimed at defining the role of intellectual capital in achieving the competitive advantage of business organizations, the study found that intellectual capital is a value of the organization in intangible assets and that intellectual capital is more important than financial capital and other components of production, the study recommended that difficulties in creating intellectual capital with competitive advantage for the organization should be overcome through its development and the consideration of financial capital(Abu Said, Masood, 2017) study found that there was a positive relationship between the effect of intellectual capital and the performance of the organizations in question. The study recommended that attention should be paid to intellectual capital to create intellectual capital based on adding value to the work of the organizations.

(Sadalia & Irawati & Syafitri, 2018) study aimed to identify the effect of intellectual capital on competitive advantage, and the results showed that human capital as a whole has an average effect on the achievement of competitive advantage, and recommended that intellectual capital should continue to be improved, not only personal knowledge, but also the relationship with internal and external environments that need care to improve competitive advantage.

Finally, (Igielski, 2018) study aimed at identifying the role of intellectual capital in organizations to build a competitive advantage, and an analysis of the role of intellectual capital in building a competitive advantage, recommended the need to abandon traditional methods of competition and the importance of adopting a competitive advantage commensurate with the adjustment of internal processes and changing external circumstances of organizations if they plan to increase their effectiveness.

A study (Barakat, Ahmed, 2020), aimed at identifying the importance of and how to measure intellectual capital through a theoretical study, found that the concept of intellectual capital is constantly regenerating and evolving and is influenced by the surrounding environment and is of great importance to the organization regardless of the nature of its work.

While the (Al-Mansi, Mahmoud and Abdul Hani, 2020) study, which aimed to test the relationship between intellectual capital and leadership orientation and their effect on the performance of small and medium-sized enterprises, found the importance of a positive moral effect of intellectual capital dimensions in the pilot orientation, and revealed that there was a positive moral effect of leadership orientation dimensions in performance indicators, the study recommended that more attention should be paid to improving the level of availability of intellectual capital.

## Discussions of the previous studies, and the contribution of this study:

The current study has benefited from previous studies in identifying the theoretical and research problems with which the subject matter is concerned, and in how the concepts of study variables are measured, it has had the obvious effect of guiding the researcher in the current study as an application study, which in a different environment is an advantage of the current study, owing to the different

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

external environments of organizations in the effect of intellectual capital on competitive advantage.

## **Intellectual Capital**

Tangible assets have long been considered the main and sometimes the only source of value for the organization, except that today the situation has changed considerably with intellectual capital income as the main determinant of organization value (Lowry, 2008).

Although some scholars have some views on the importance of intellectual capital as a basis for some investor's investment decision, today's knowledge-based economy emphasizes the importance and place of knowledge and thought as a major source of competition and the growth and development of organizations. A key function of knowledge management is to identify, measure and evaluate intellectual capital in the organization, and most OECD organizations have increased investment in intangible assets or in intangible assets or intellectual properties, such as R & D, software, human resource development, customer relations and others(Giacosa, et.al, 2017).

It should be noted that the characteristics of intellectual capital than traditional capital do not seek to develop value and its concentration is only physical. (Noraldine, Muhammad, 2020), intellectual capital means knowledge of staff and the organization in general that contributes to a sustainable competitive advantage and is a multiplying function of efficiency and commitment, seen as an intangible resource that can generate value in the future and pave the way for the development of ideas useful to the growth of the organization (Chahal & Bakshi, 2014).

## Components of the Intellectual capital

Owing to the reflection of intellectual capital on the market value of the organization, it has been necessary to rely on elements to support the value of the organization, including intellectual capital (Yusuf, 2005).

First direction: It seeks to highlight the importance and characteristics of intellectual capital across its components with a view to facilitating its discovery, management and preservation.

First: Origins of the internal structure: Includes patents, copyright, trademarks, management philosophy, organizational culture, financial relations and technological processes.

Second: Assets of the external structure: includes market share, customer satisfaction, distribution channels, licensing and concession agreements and quality standards.

Third: The origins of the human structure include several elements, the most important of which is knowledge stored in the minds of workers, education, qualifications, entrepreneurship and innovation, while some owners of this trend have adopted the division of intellectual capital into the **following three components:** 

- Human capital.
- Structural capital.
- And relational capital.

Second direction: The pioneers of this perspective to describe the dimensions of intellectual capital consider the need for a careful separation of its components, defined by the following components:

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

- Market assets: Market-related intangible aspects include branding, customers, distribution outlets and accumulated orders.
- Human assets: Accumulated experience, innovation and problem-solving capabilities and indicators mean that individuals can solve problems and respond appropriately and effectively to situations.
- Intellectual assets: They include relationships, trade secrets, patents and knowledge rights.
- Infrastructure assets: It includes all elements that define the way the organization operates, such as its culture, methods of managing the salesforce, the financial structure, customer databases and communications systems (Hakashi, 2013).

While there have been studies that have followed many indicators of intellectual capital, namely, capital for innovation and development, as well as research and intellectual property (Kwashi, mashriq, 2017). It is noted that the variables in the measurement process are different and stem from different measurement according to the background of the researchers, but it should be noted that all researchers agreed on the existence of human, Structural, and relational capital.

## First: Human Capital

Human capital is the knowledge, skills and experience of employees. Some of this knowledge is specific to the individual and some of it may be general. It is the ability to innovate, innovate, know-how, Previous experience, teamwork, ability, staff resilience, tolerance of ambiguity, motivation, satisfaction, learning ability, loyalty, formal training and education (Ting & Lean, 2009).

Successful organizations seek to build their human capital on scientific foundations based on situational analysis of their situations, and to determine the value of the human capital of competing organizations, as they are the human resource with the skills, experience and knowledge at the head of the investment pyramid within the intellectual investment pyramid of any organization (Chen & Yuan, 2004).

Human capital is the core component of the process of intellectual capital, which acts as the driving force in the work and is a summary of employees' skills, abilities, experience, education and attitudes towards work that reflects on their competence, behavior and intellectual agility (Chahal & Bakshi, 2014).

#### **Second: Structural Capital:**

Knowledge that remains within the Organization and consists of structural procedures, procedures, regulations, cultures and databases: Structural flexibility, documentation service, knowledge center, general use of information techniques and structural learning capacity (Ting & Lean, 2009).

## Third: Relational Capital:

All resources associated with a company's external relations - with customers, suppliers or partners, which is part of the human and structural capital involved in the organization's relations with stakeholders (investors, creditors, customers and suppliers), as well as their perceptions of the organization, represented by: image, customer loyalty, customer satisfaction, supplier linkages, and ability to negotiate with financial entities and environmental activities (Ting & Lean, 2009).

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

## **Competitive Advantage:**

As a result of the highly complex and increasingly complex competitive landscape in which most organizations operate, which results in considerable uncertainty as to whether to build a competitive advantage in such environments and why organizations must respond effectively to competitors (Sirmon, et al., 2011).

The idea of competitive advantage began to spread and expand after the emergence of literature. In his research on competition strategy, Mike Porter presented a method of analysis in which he pointed out that competitive advantage is achieved by finding out new ways that are more effective than those used by competitors, where they can reflect this discovery in the field, in other words simply by creating innovation in its broad sense (Porter, 1993).

Competitive advantage occurs when an organization develops or acquires a set of features (or implements actions) that allow it to outperform its competitors, so it is one of the things in the organization's strategy (Wang, 2014), a concept that means much more than financial performance and the value of contributors to today's global competitive environment that requires: Speed, dynamic capabilities, rapid response and flexibility shift the goal of organizations from profit maximization to value maximization, hence the value of a company created through intangible assets and more specifically through thought (Rehman, et.al, 2021).

## **Dimensions of competitive advantage**

The advantage of reducing the cost of work: "the ability of the Organization to design products or services at the lowest possible cost, and here it leads to talk about and exploit existing technological matters by integrating cross-cutting quality elements into service creation and attempting to reduce costs in their final form to be competitive and have competing and different characteristics."

Effectiveness advantage: This advantage is "the timely delivery of products or services from the Organization, which means judging the delivery of time control and excellence over competitors, with the importance of maintaining the quality, quality or strategy of the Organization.

The advantage of developing work through creativity and innovation: "They are the set of activities or administrative processes that bring advantage to the company to enable it to achieve its competitiveness and objectives (Sanchez, Lago, Ferras & Ribera, 2011)," and include: Innovative individual: A person who has unique characteristics, of which the most important are accepting challenges - enjoying situations of uncertainty and complexity, accepting ideas from others and loving exploration (Jellyfish, 2010), technical innovation: "The Kit of Technical Tools, Equipment and Software to Enable Innovative Ideas to Be Transformed into Reality (Shane, 2008)," Innovative Climate: "is the environment surrounding an innovative individual that motivates him/her to innovate and makes him/her an innovator (thin, 2016, p24)," Product or innovative service: "is the output of an innovative system in the form of a product or service in which the meaning of innovation is realized (Jendel, 2010)."

Rapid accomplishment advantage: "It is the one that is based on the response of the organized elements as required by the clients, playing time and quality, by responding in a time frame through rapid

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

delivery, which affects the fulfilment of the wishes of the clients, is based on the satisfaction of their needs and is based on empowering them in a way that achieves value to the customers (Hajjaj, Omari, 2020)."

Finally, the competitive advantage can be said to come from different places, such as the regular activities of the organizations, such as meeting with clients, collecting products and training staff to sense the market, because it sets client trends and enables the organization to fulfill their wishes (Martinette, et al. 2014), and that learning, market response, entrepreneurship and innovation are key capabilities for competitive advantage that can contribute positively, it has been shown that innovative organizations can easily gain a competitive advantage, although they are not the only ones as mentioned the dimensions advantage that arise from market in of Responsiveness and openness or client orientation (Rajagukguk, 2018).

## Study Population and Sample:

The study population consists of directors and heads of the Human Resources, Production Operations, Finance, Marketing and Information Technology Sections of the business organizations of the Al-Hassan industrial city in the Hashemite Kingdom of Jordan, a sample of 20%, was taken from these organizations randomly, (Sekaran, 2000). 30 different organizations were taken divided into 10 clothing organizations, (10) chemical organizations and (10) food organizations. The global inventory method was taken by taking managers, his assistant and deputy, and the heads of the Human Resources, Production Operations, Finance, Marketing and Technology Section. (8) questionnaires in each company, where (240) has been distributed and (187) recovered, 3 had been excluded from statistical analysis and 184 had been analyzed with a percentage of (0.76)

#### Instrument Validity:

The validity of the instrument (questionnaire) was confirmed by its presentation to a group of arbitrators, with expertise and competence in the subject matter, and appropriate adjustments were made in the light of the valuable observations they had made, and their views were considered to be a sufficiently honest indication of the study instrument.

## **Instrument Reliability:**

To verify the Reliability of the study instrument, internal consistency factor (Cronbach's Alpha) was calculated through the following table, these percentages were considered suitable for the purposes ofthis study.

Table (1) Internal Consistency, Cronbach's Alpha

Dimension	Internal Consistency
Human Capital	0.76
Structural Capital	0.75
Relational Capital	0.74

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

Intellectual Capital as a whole	0.91
Reducing work cost	0.71
Rapid accomplishment of work	0.79
Achieving efficiency at work	0.75
Developing the work	0.73
Competitive advantage as a whole	0.93

# **Statistical Analysis**

Identifying the level of practicing Intellectual capital and achieving competitive advantage in Business organizations of Al- Hassan Industrial city in the Hashemite Kingdom of Jordan.

Variable	Mean	Standard Deviations	Degree
Human capital	3.34	0.725	Moderate
Structural capital	3.34	0.707	Moderate
Relational Capital	3.29	0.690	Moderate
Intellectual Capital as a whole	3.32	0.679	Moderate

Variable	Means	Standard Deviations	Degree
Acheiving Effeceincy	3.15	0.749	Moderate
Reducing the cost of work	3.13	0.811	Moderate
Develping work	3.11	0.689	Moderate
differentiation and rapid	3.02	0.697	Moderate
Acheiving Competitive advantage as a whole	3.10	0.672	Moderate

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

# **Testing Hypotheses:**

Testing the first Sub-hypothesis:

Ho1: There is no statistically significant effect at ( $\alpha \le 0.05$ ) of human capital in achieving the competitive advantage of business organizations at Al-Hassan industrial city in the Hashemite Kingdom of Jordan.

To test the first sub-hypothesis, simple linear test was used, the results were as follows: **Table (3)** 

Results of simple linear regression test for the effect of human capital in achieving competitive advantage in business organizations al Al-Hassan Industrial City in the Hashemite Kingdom of Jordan.

Dependent variable	Model summar	y	ANOVA					Coefficients			
	R	$\mathbb{R}^2$	Calculate	Degrees	F	Domain	В	Standard	Calculat	Significant t	
	Correla	Coeffi	d F	of				Error	ed T		
	tion	cient		Freedom							
	coeffic	of									
	ient	determ									
		ination									
Achieving	0.042	0.002	0.158	1	0.692	Human	0.05	0.128	0.397	0.692	
competitive						Capital	1				
advantage											

The results indicate that there is no statistically significant effect of human capital in achieving competitive advantage, with the correlation factor R being (0.042) Indicating a statistically significant correlation between human capital and competitive advantage. R2 was (0.002) indicating that human capital explained 0.2% of the variance in the achievement of competitive advantage. F was (0.158) at a confidence level of 0.692, this confirms the non-significant of the regression at  $(\alpha \le 0.05)$ , and Thus we accept the first sub-hypothesis.

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

## **Testing the second sub-hypothesis:**

Ho2: There is no statistically significant effect at the level ( $\alpha \le 0.05$ ) of Structural capital in achieving the competitive advantage of business organizations in the Al- Hassan industrial city in the Hashemite Kingdomof Jordan.

To test the second sub-hypothesis, simple linear test was used, the results were as follows

#### Table (4)

Results of simple linear regression test for the effect of structural capital in achieving competitive advantage in business organizations al Al-Hassam Industrial City in the Hashemite Kingdom of Jordan.

Dependent	Model		ANOVA			Coefficients				
variable	summary									
	R	$\mathbb{R}^2$	Calculat	Degrees of	F	Domai	В	Standard	Calcula	Significant t
	Correl		ed F	Freedom		n		Error	ted T	
	ation	Coeffi								
	coeffic	cient								
	ient	of								
		deter								
		minati								
		on								
Achieving	0.016	0.000	0.022	1	0.884	Struct	0.019	0.132	0.147	0.884
competitive						ural				
advantage						Capita				
						1				

The results indicate that there is no statistically significant effect of structural capital in achieving competitive advantage, with the correlation factor R being (0.016) Indicating a statistically significant correlation between human capital and competitive advantage. R2 was (0.000) indicating that structural capital explained 0.00% of the variance in the achievement of competitive advantage. F was (0.022) at a remittancesreview.com

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

confidence level of 0.884, this confirms the non-significant of the regression at ( $\alpha \le 0.05$ ), and Thus we accept the second sub-hypothesis.

## Testing the third sub-hypothesis:

Ho3: There is no statistically significant effect at the level ( $\alpha \le 0.05$ ) of relational capital in achieving the competitive advantage of business organizations in the Al- Hassan industrial city in the Hashemite Kingdom of Jordan.

To test the second sub-hypothesis, simple linear test was used, the results were as follows:

## **Table (5)**

Results of simple linear regression test for the effect of relational capital in achieving competitive advantage in business organizations al Al-Hassan Industrial City in the Hashemite Kingdom of Jordan.

Dependent variable	Model sı	ummary	ANOVA				Coefficients			
	R	$\mathbb{R}^2$	Calculate	Degrees of	F	Domain	В	Standard	Calculat	Significant t
	Correla		d F	Freedom				Error	ed T	
	tion	Coeffi								
	coeffici	cient								
	ent	of								
		determ								
		ination								
Achieving	0.084	0.007	0.623	1	0.432	relationa	0.097	0.123	0.0789	0.432
competitive						1 Capital				
advantage										

The results indicate that there is no statistically significant effect of structural capital in achieving competitive advantage, with the correlation factor R being (0.084) Indicating a statistically significant correlation between human capital and competitive advantage. R2 was (0.007) indicating that structural capital explained 0.007% of the variance in the achievement of competitive advantage. F was (0.623) at a confidence level of 0.432, this confirms the non-significant of the regression at ( $\alpha \le 0.05$ ), and Thus we accept the third sub-hypothesis.

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

**Results:** The degree to which intellectual capital is practiced as human, structural and relational has been moderate, which means that the Department has focused on it in the organizations of the study population. (Todericati & Sanit, 2015), which came up with intellectual capital that plays an important and positive role in the SME sector in order to gain a real and sustainable competitive advantage.

The competitive advantage has also been a moderate practice, which is aware that the organizations in the study population are in a position to reflect their modest competitiveness, which has a negative effet

on the profits and employment of the organizations and thus on the owners. This means that many of their employees are threatened to leave the job and are subject to unemployment if the situation continues. The problem is further exacerbated by the simultaneous output of Covid-19 pandemic in the form of high unemployment in Jordan.

It has been shown that there is no statistically significant effect of human capital in achieving competitive advantage, with a statistically significant correlation between human capital and competitive advantage, and this finding is consistent with a study (Sadalia & Irawati & Syafitri, 2018) which found that human capital has an average effect on competitive advantage.

There is no statistically significant effect of structural capital on the achievement of competitive advantage, with a statistically significant correlation between structural capital and competitive advantage.

There was no statistically significant effect of relational capital in achieving competitive advantage with a statistically significant correlation between relational capital and competitive advantage.

As a result of the above, the current study differed from (Rehman, et.al, 2021) study, which found that intellectual capital is based on the provision of solutions to business problems, as well as affecting the activation of the organization's creative work. It also differed from a study (Abusaid, Masood, 2017) that there is a positive relationship between the effect of capital.

#### **Recommendations:**

- Organizations in the study population must follow a system of attraction that is different from what exists and that is based on the attraction of competencies and expertise and the exchange of knowledge among workers, as it has an effect on the human capital of the company.
- The need for organizations in the study population to encourage the modernization of their management systems, which must be based on knowledge storage and accessibility, as well as the ease of administrative communication between employees, which is based on the transfer of knowledge among them to enrich the work, as it has an effect on the structural capital of the company.
- Working to update the rules of the firm's public relations office in the study population by trying to reach out to customers and possibly solving the problems they can face, as well as building strategic alliances with organizations to strengthen their competitive position, because of its effect on the remittances review.com

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

company's relational capital.

• Enhancing the competitiveness of the firms of the study population through the existence of intellectual capital, which means that it reflects on the competitive advantage of the business by: Reducing the cost of work, speed in delivery, efficiency, and business development, which will be reflected in better results in their work, ranking and market share, confirms the findings of a study (Igielski, 2018) which found the role of intellectual capital in organizations to build competitive advantage.

#### References

Ababseh, H, Goofy, A. H. (2000). Intellectual capital: It's problematic, okay? Economic and Management Research, University of Mohamed Khayder Biskal, 167-188

Abu Said, M. 2017. The Effect of Intellectual Capital on the Performance of Organizations: Guide from Financial Organizations Listed on Amman Stock Exchange, Master's thesis, Yarmouk University.

AlHajjaj, A. Omari, M. (2020). The Effect of Intellectual Capital on Competitive Advantage: Applied Study on Traditional Jordanian Banks, *Journal of the Arab University of Amman Research - Management Research Series*, 4 (1). 281-326

Al-Mansi, M. Abdu, S. (2020). The Relationship Between Amal's Intellectual Head and Organizational Performance: The Intermediate Role of Leadership, *Journal of Business Research*, 42 (3). 288-339

Al-Rashidi, B. (2019), Entry and Strategies for Competitive Advantage: Analytical Study and Integrative Vision, *Journal of the Faculty of Education, Penha University*. 30(120). 388-405

Alvino, F., Di Vaio, A., Hassan, R., & Palladino, R. 2021. Intellectual capital and sustainable development: A systematic literature review. *Journal of Intellectual Capital*, 22(1), 76-94

Barakat, A. (2020). The importance and measurement of Intellectual capital, *Arabic Journal* in *Humanities and social sciences*, 12(4). 930-942

Bossahra, N. (2016). Intellectual Capital as a Tool for Competitive Advantage, *Journal of Rights and Humanities*, (28) 75-86

Bou Hadid, Laila. Yahiawi, E. 2018. The Role of Human Capital in Achieving the Competitive Advantage of Industrial Enterprise, *Open University of Jerusalem Journal of Human and Social Research*, 1(43). 221-234

Chahal, H., & Bakshi, P. (2014). Effect of intellectual capital on competitive advantage and business performance: Role of innovation and learning culture. International Journal of Learning and Intellectual Capital, 11(1), 52-70.

Fait, M., Cillo, V., Papa, A., Meissner, D., &Scorrano, P. (2023). The roots of "volunteer"

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

employees' engagement: The silent role of intellectual capital in knowledge-sharing intentions. *Journal of Intellectual Capital*, 24(2), 399-429

Giacosa, E., Ferraris, A., & Bresciani, S. (2017). Exploring voluntary external disclosure of intellectual capital in listed companies: an integrated intellectual capital disclosure conceptual model. *Journal of Intellectual Capital*, 18(1), 149-169

Hakashi, Nader, (2013). Effect of Intellectual Capital on the Performance of Industrial Organizations Listed on Amman Stock Exchange, Master's Thesis, Jordan, Yarmouk University, Faculty of Economics and Management Sciences.

Igielski, M. (2018). The role of intellectual capital in building a competitive advantage for organizations from the Baltic Sea Region in the transport, shipping and logistic industry (TSL). In SHS Web of Conferences (Vol. 57, p. 01015). EDP Sciences.

Jardon, C. M., & Martos, M. S. (2012). Intellectuel capital as competitive advantage in emerging clusters in Latin America. *Journal of intellectual capital*.

Kwashi, M. Shawqy, J. (2017). The Role of Intellectual Capital in Improving the organization's performance Well-Being, *Humanities Journal*, (8). 409-432

Loury, K. (2008). Wealth management: Using the balance sheet methodology. *The journal of wealth management*, 11(2), 19-28.

Madhani, P. M. (2016). Sales and marketing integration: Enhancing competitive advantages. *The IUP Journal of business strategy*, 13(4), 50-77.

Martinette, L., Obenchain-Leeson, A., Gomez, G., & Webb, J. (2014). Relationship Between Learning Orientation And Business Performance And The Moderating Effect Of Competitive Advantage: An Accounting Services Firms Perspective. *International Business & Economics Research Journal (IBER)*, 13(4), 779-792.

Mehdi, J. Madi, B, (2014). Electronic Marketing Mix and Its Effect on Business Organization Performance, Field Study on Several Manufacturing Organizations of the City of Annaba, *Jerusalem University Journal of Research and Studies*. (39). 283-318

Noraldine, T. Ben Bozian, M. (2020). Intellectual Capital: Multi-Approach Vision, *Journal of Economic Promise*, 6 (1). 419-439

Porter, M. (1993). "Compétitive advantage: Creating Sustaining Performance". London: Oxford Press.

Qandeel, A. M. (2010). Management Leadership and Innovation Management, Amman-Jordan: Dar Al-Fikr publishers and distributors.

Rajagukguk, S. M. 2018. Accounting Control Systems, Open Innovation and Sustainable Competitive Advantage. *KnE Social Sciences*.85-74

Raqueq, Z. (2016). The Effect of Marketing Innovation on the Quality of Banking Services: Study of remittancesreview.com

January, 2024 Volume: 9, No: 1, pp.2147-2163 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

the Case of the Gulf Bank of Algeria AGB Al Masila, Master's thesis, University of Mohamed Khedir, Faculty of Economic, Commercial and Fencing Sciences, Algeria.

Rehman, S. U., Elrehail, H., Alsaad, A., & Bhatti, A. (2021). Intellectual capital and innovative performance: a mediation-moderation perspective. *Journal of Intellectual* Capital, (ahead-of-print)

Sadalia, I., Irawati, N., & Syafitri, I. (2018).(January). The Influence of Intellectual Capital on Competitive Advantage on Universities in Medan City. In 1st Economics and Business International Conference 2017 (EBIC 2017) (pp. 599-602). Atlantis Press.

Sánchez, A., Lago, A., Ferràs, X., & Ribera, J. (2011). Innovation management practices, strategic adaptation, and business results: evidence from the electronics industry. *Journal of technology management & innovation*, 6(2), 14-39.

Sekaran, U. (2000). Research methods For Business (Third Edit). John Willey & Sons.

Shane, S. (Ed.). 2009. The handbook of technology and innovation management. John Wiley & Sons. Sirmon, D. G., Hitt, M. A., Ireland, R. D., & Gilbert, B. A. (2011). Resource orchestration to create competitive advantage: Breadth, depth, and life cycle effects. *Journal of management*, 37(5), 1390-1412.

Ting, I. W. K., Lean, H. H. (2009). Intellectual capital performance of financial institutions in Malaysia. *Journal of Intellectual capital*.599-588

Todericiu, R., Stăniţ, A. 2015 Intellectual capital—The key for sustainable competitive advantage for the SME's sector. *Procedia Economics and Finance*, 27, 676-681.

Wang, Hui-Ling.(2014). Theories for Competitive Advantage, University of Wollongong Research Online.

Yusuf, H.(2005). Information Technology and Its Effect on Intellectual Capital, Amman-Jordan, University of Jordan.