Impact of Intellectual Capital on the Competitive Advantage in Jordanian Telecom Companies: "A Case Study on Orange Company"

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Abstract. The present study aimed to recognize the impact of intellectual capital in achieving competitive advantage in Jordanian telecommunications companies. The study sample consisted of (245) employees, who were selected by a simple random method, and it represents about (42.3%) of the overall study population. The study adopted a descriptive field survey methodology. Two instruments were developed by the researcher to measure the intellectual capital and the competitive advantage variables. The study aimed to answer the following two questions:

- Does the intellectual capital with its dimensions (human capital, structural capital, overhead capital) exist in Jordanian telecom companies?
- Is there an impact of intellectual capital with its dimensions (human capital, structural capital, and capital) on achieving a competitive advantage with its dimensions to the Jordanian telecom companies?.

The population of the study represented all the employees of Orange Mobile Telecommunication Companies in Jordan and the sample of the study consisted of (245) employees. After the data has been collected and analyzed the following results have been found:

- There is a significant impact of intellectual capital dimensions (human capital) on competitive advantage in the Jordanian telecommunications companies, and the value of Beta indicates a positive direction of the relationship.
- There is a significant impact on the intellectual capital dimensions (structural capital) on competitive advantage in Jordanian telecommunications companies. And the value of Beta indicates a positive direction of the relationship.
- There is a significant impact of the intellectual capital dimensions (relational capital) on competitive advantage Jordanian telecommunications companies, and the value of Beta indicates for a positive direction of the relationship.

Keywords: Intellectual Capital, Competitive Advantage, Jordanian telecom companies, Orange Company

JEL Codes: O34, D21

The environment of business organizations faces complex challenges of intense competition and rapid change. The constant transformation of the modern business environment, as a result of the use of the Internet, electronic networks and information technology, has led to an increase in the demand for highly qualified and skilled workers with expertise and skills in the best use of information technology. Successful business organizations attract, select and develop working people to enable them to lead those organizations. Therefore, the main challenge for business organizations is ensure availability of outstanding individuals, and train them, develop their abilities and their skills.

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And the need for knowledge of business organizations, the growing need to acquire, develop, and utilize them has become the most effective way to achieve the effectiveness of the activities and operations of these organizations. Intellectual Capital has become a competitive advantage for organizations to compete for and compete to acquire and get it. At the beginning of the twenty-first century, several studies have been launched to explore the possibility of benefiting from the success of business organizations in intellectual capital and to measure and transfer it to all sectors to achieve a competitive advantage, to improve the chances for organizations to succeed.

The present study aims at identifying the effect of intellectual capital on achieving competitive advantage and applying it to the telecommunications companies in the Hashemite Kingdom of Jordan. This is important for the national economy, which contributes to the gross national product and its results in the comprehensive development and raising the standard of living of Jordanian citizens.

1.1 The study problem and the research questions

The study aims to identify the impact of intellectual capital with its dimensions (human capital, structural capital, and relational capital) in achieving the competitive advantage of the Jordanian telecom companies.

1.2 Purpose of the Study

The purpose of the study can be achieved by answering the following questions:
- Does the intellectual capital with its dimensions (human capital, structural capital, and capital) exist in Jordanian telecom companies?
- Is there an impact of intellectual capital with its dimensions (human capital, structural capital, and capital) on achieving a competitive advantage with its dimensions to the Jordanian telecom companies?

1.3 The importance of the study

The study derives its importance from the following aspects:
- The business environment is continuously changing due to intense competition, therefore organizations face complex challenges which impose HR departments new tasks, including attracting new quality of human resources characterized by knowledge and high awareness.
- The importance of the study for the community represented by the Jordanian Telecom companies resides in the vitality of this sector in the national economy, specifically in the Jordanian telecom companies.
- The study is a cornerstone point for academics to build on it mainly because it provides an analysis of the intellectual capital impact in achieving the competitive advantage of Jordanian Telecom companies in the Hashemite Kingdom of Jordan.

1.4 The Hypotheses

This study attempts to test the following hypotheses:

H1: “There is not any impact of intellectual capital with its dimensions (human capital, structural capital, relational capital) on achieving the competitive advantage of Jordanian telecom companies”. It has the following sub-assumptions:
- H1.1 There is not any impact of intellectual capital (human capital) on achieving competitive advantage in Jordanian telecom companies.
- H1.2 There is not any impact of intellectual capital (structural capital) on achieving competitive advantage in Jordanian telecom companies.
- H1.3 There is not any impact of intellectual capital (relative capital) on achieving competitive advantage in Jordanian telecom companies.

1.5 Procedural Definitions

The following variables were identified for study:

**Independent variable:**

Intellectual Capital: Sullivan (1999) argues that intellectual capital is knowledge that can be converted into value. In the present study, it can be defined as intangible assets the outcome of the interactions between the expertise and the knowledge of all human resources in the organization which contribute to improving the efficiency of the internal operations of the company and includes three main elements as follows:

- Human capital: Bontis et al. (2000) believes that human capital is the individual storage of the organization which is expressed by workers, generating intellectual capital through their skills (skills, education), their attitudes (work behaviors), and the speed of intellectual intuition that enables them from thinking creatively to solve the problems.
- Structural Capital: (McElroy, 2002) refers to structural capital as all things that support human capital but remains in the company when employees leave their jobs. In the present study, it can be defined as the company's organizational capabilities, which include databases, research and development, organizational structure, regulations and procedures, which contribute to the creation of intellectual property generated from human capital, serving the organization and its internal and external interests.
- Relative capital: (Bontis, 1998) defines it as all relationships established by the company with stakeholders (customers, suppliers, partners, and government). Stewart (1997) explained that the purpose of the relationship with external stakeholders is to transfer it to funds.

**Dependent variable:**

Competitive advantage: A dynamic concept based on self-effort and creativity, and the addition of new to superior competitors through quality, high technology and marketing to attract buyers of the product. It is a milestone recognized by the customer in the facility or in the product, which gives it an added advantage over its competitors.

1.6 The limits of the study

For each practical study or theory of spatial boundaries, temporal limits as well as human boundaries, spatial boundaries are represented in the study sample institutions. The temporal boundary represents the time period extended from the beginning of work on this study to its end, as follows:

1. The spatial boundaries of this study represented by Orange Telecom.
2. Time Limits: The time limits of this study ranged from the beginning of the work of this research until the end of this research, during the period of October 2016 to December 2017.

3. Human boundaries: The Human boundaries of this study represented by Orange employees, in various administrative functions.

1. Literature review

Al-Hawajra (2010) conducted a study entitled "Studying the correlation between capital investment strategies and the competitive performance of institutions". This study aimed at analyzing the relationship between Strategies for investment in the knowledge capital by the performance of Jordanian insurance companies. The study concluded that there is a strong positive relationship between investment strategies in intellectual capital and competitive performance of the surveyed companies, The study also pointed out that there is an Interrelated relationship between the knowledge institution and competitive performance in a number of areas such as the adoption of mechanisms for the documentation, registration and classification of knowledge, indicating that these companies pay great attention to knowledge capital and solidify their knowledge base and put it into proper implementation Thereby enhancing their administrative and managerial capacity.

Al-Saed (2008) conducted a study entitled "The Impact of Intellectual Capital and Internal Audit on Institutional Governance in Jordanian Industrial Companies". The aim of this study was to identify the impact of intellectual capital and internal auditing on the institutional governance of the 64 Jordanian industrial joint-stock companies. A random sample of 20 companies was selected from the point of view of the internal audit manager, the board of directors, executives, And the Audit Committee). The study concluded with a set of results: that intellectual capital represents the most valuable asset in the twenty-first century under the so-called knowledge economy, and represents an effective and capable scientific force to make fundamental changes in the course of companies and their various activities, thus contributing to the improvement of the efficiency of corporate governance. The study also concluded that the concept of intellectual capital is a concept used by corporate departments and that there is an impact of intellectual capital and the internal audit profession on corporate governance, on the effectiveness of its activities and on achieving its objectives. The study showed that there is an impact of intellectual capital on institutional governance, which benefited the researcher in formulating the objectives of the present study.

Al-Sherbati (2008) discussed the impact of intellectual capital on the performance of Jordan's pharmaceutical industry organizations, it aimed at examining the impact of intellectual capital on the performance of Jordan's pharmaceutical industry organizations. The study sought to uncover the interrelationship between the three elements of intellectual capital: Human capital, structural capital, and relative capital (as independent variables) and their relationship with the performance of Jordanian pharmaceutical industry organizations (as a dependent variable). The study included executives, senior management and middle managers working in Jordan's fifteen pharmaceutical industry organizations in Jordan, which number about 200 managers. The study concluded with a number of results, the most important of which was: The existence of a direct and positive relationship between the intellectual capital and the performance of Jordanian pharmaceutical industry organizations. And pharmaceutical organizations focus more on human capital and the relational capital more than their concentration on structural capital. There are strong relationships, interactions and linkages between the three main components of intellectual
capital. And that the performance of the organization's intellectual capital can clearly explain productivity and profitability rather than market value.

Clarke, et al (2010) conducted a study entitled "Intellectual Capital and Firm Performance in Australia". The study aimed to measure the impact of intellectual capital on the performance of companies in Australia, listed from 2004-2008. The study uses the value-added coefficient of general intellectual capital and its components (human capital, structural capital, relative capital) as an independent variable and their relationship to performance (asset returns, profitability returns, input growth, and employee productivity). The study concluded that there is a direct relationship between intellectual capital and performance, especially the effectiveness of capital use and less effective than human capital, a positive relationship between human and structural capital and their effect on performance in the surveyed years. As well as the existence of a moderate relationship between intellectual capital and physical and financial capital, which affect the performance of companies.

Ngah & Ibrahim (2009) conducted a study in Malaysia entitled "The Relationship of Intellectual Capital, Innovation and Organizational Performance: a Preliminary Study in Malaysian SMEs". Aimed to measure the relationship between the components of intellectual capital and innovation on the organizational performance of Malaysian small and medium enterprises, through the ability of these companies to invest their knowledge assets and innovative skills to serve them for survival and continuity. The study concluded that knowledge assets play a large role in increasing SMEs' ability to innovate new goods and products. However, the knowledge capital of these companies is in the stage of childhood.

Huang & Hsueh (2007) conducted a study entitled "The Relationship between Intellectual capital and Business Performance in the Engineering Consulting Industry: A Path Analysis". The study aimed to analyze the relationship between intellectual capital and institutional performance in the engineering consultancy industry: a path analysis. The study sought to uncover the interrelationship between the three elements of intellectual capital: human capital, structural capital, and relative capital as an independent variable, and their relationship with institutional performance in the engineering consulting industry as a dependent variable. The study included (101) companies. The study concluded with a number of results: Engineering consulting companies based on structural capital and relative capital showed better performance than those based on human capital. And that human capital has an impact on structural capital and relative capital but the relative capital has a direct impact on the performance of the institution.

While Wang Chang (2005) conducted a study entitled "Intellectual Capital and Performance in Causal Models: Evidence from the Information Technology Industry in Taiwan". The study aimed to investigate the influence of the elements of intellectual capital on business performance and finding the relationship between the four elements of intellectual capital (human capital, creative capital, operational capital, and structural capital) from a causal perspective and how they affect performance. The study concluded a number of results, including: That human capital has no direct impact on performance but has a direct impact on other intellectual capital components and thus affects performance. Creative capital, operational capital have a direct impact on performance. The study also found that human capital affects creative capital and processes, creative capital and processes that affect performance, and creative capital directly affects relational capital.
Rindova & Fombrun (1999) conducted a study entitled "Building Competitive Advantage". This study attempts to describe the competitive environment through four factors that help in building and achieving competitive advantage, which is a network linking the physical and human factors in the institution, and then discuss the six operations carried out by the institution in order to link the four factors referred to, and examine the role of each factor in the achievement of competitive advantage, and has been clarified these factors and dynamics and discuss the case of (IBM) for the computer industry. The study concluded that economic theories that pointed to competitive advantage neglected the human aspects, and that competition can be clarified through a complex network of producers, suppliers and customers. According to this model, this network is based on the analysis of physical and human factors and determining the role of managers and its impact in identifying strategic Alternatives Depending on the surrounding environment and the field of competition in which the institution operates, not only by focusing on different suppliers and markets and their potential relationships but also focusing on knowledge and expectations and creating a sense of organization for the surrounding environment.

2. Methodology

Using a descriptive field survey methodology to suit the current survey and its hypotheses, the following is a description of the elements of the study methodology.

3.1 Population of the Study

The population is composed of all the employees of Orange Mobile Telecommunication Companies in Jordan. The statistics indicate that their total number (578) according to 2011 statistics, distributed in the main management and branches in the city of Amman.

3.2 The study sample

The sample of the study consisted of 245 employees and administrators in the simple random way, representing about (42.3%) of the total study population of (578) employees and administrators working in the orange company main management and branches located in the city of Amman. The following table shows the distribution of the sample population by demographic variables.

Table (1): Distribution of Study Sample Population by Demographic Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience</td>
<td>Less than 5 years</td>
<td>128</td>
<td>52.2</td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>79</td>
<td>32.2</td>
</tr>
<tr>
<td></td>
<td>10 years and more</td>
<td>38</td>
<td>15.5</td>
</tr>
<tr>
<td>Academic qualification</td>
<td>Bachelor and less</td>
<td>100</td>
<td>40.8</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>107</td>
<td>43.7</td>
</tr>
<tr>
<td>Administrative position</td>
<td>Employee</td>
<td>38</td>
<td>15.5</td>
</tr>
<tr>
<td></td>
<td>Head of the Department</td>
<td>225</td>
<td>91.8</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>20</td>
<td>8.2</td>
</tr>
</tbody>
</table>

3.3 The questionnaire
The study tool (do you refer at the Questionnaire as a tool to collect data?) was developed based on theoretical literature on intellectual capital in addition to a number of questionnaires used in previous studies related to the subject of the study to achieve the objective of the study which is represented in the impact of intellectual capital and competitive advantage:

- First part was customize to identify demographics of respondents of the telecommunications company (gender, age, years of experience, educational qualification, job location).

- The second part was dedicated to terms covering the study variables which are to identify the impact of intellectual capital in its three dimensions on the achievement of competitive advantage in telecommunications companies. The researchers used the Likert five metric scale (strongly agree, agree, neutral, disagree, and strongly disagree) to respond to the paragraphs of the questionnaire.

3.3.1 Validity of the Study Tool (questionnaire)

To ensure the validity of the tool it was presented to a group of experienced and competent faculty members in Jordanian universities, Where the arbitrators made a number of observations concerning the formulation of some paragraphs to be more appropriate within the variables that measure them, and relied on the criteria of 80% or more as a criterion for accepting the amendments proposed by the arbitrators.

3.3.2 Reliability of study tool

In order to verify the reliability of the study tools, the Kronbach Alpha equation was used. It was found that the reliability of the variables of the study was (0.82, 0.79, 0.75) for the intellectual capital variables (Human, structural, relational) respectively, for the questionnaire of competitive advantage of Coefficient of constancy was (0.85), and that all reliability coefficients were appropriate and fulfill the current study purposes.

3. Results

The present study aimed at identifying the impact of intellectual capital on the competitive advantage of Jordanian telecom companies. In order to answer the study questions and testing the hypotheses, the data was reviewed.

Results related to the first question: What is the availability of intellectual capital with its dimensions (human capital, structural capital, relational capital) in the Jordanian telecom companies?

To answer this question, the arithmetical averages, standard deviations were calculated and tables (2, 3, 4, 5) showing the results associated with this question.

Table (2) Calculation of averages and standard deviations of respondents' responses to the human capital domain

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Rank</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>The staff holds high academic and professional certificates</td>
<td>4.20</td>
<td>0.94</td>
<td>1</td>
<td>High</td>
</tr>
<tr>
<td>The employees of the company have the skills to carry out studies and research necessary to develop the work.</td>
<td>4.02</td>
<td>0.95</td>
<td>2</td>
<td>High</td>
</tr>
</tbody>
</table>
Staff has the ability to apply and use knowledge, and transfer it to practical application. 3.93 1.00 3 High
The company does its utmost to retain employees with high knowledge of work specifications. 3.91 0.93 4 High
Management believes that experience and training are the best ways to acquire practical skills. 3.90 0.98 5 High
Most of the company's knowledge is placed in databases and Manuals 3.89 1.01 6 High
The employees have the skills to solve the problems they face. 3.84 0.97 7 High
The employees have sufficient experience to perform their work efficiently. 3.72 0.96 8 High
The employees of the company know their knowledge and are in line with the latest developments. 3.56 0.89 9 Medium
General average 3.89 0.54 High

Table (2) shows that the mathematical averages ranged between (3.56 - 4.20) The highest average arithmetic was for the paragraph "the workers have high academic and vocational certificates", which averaged 4.20 and a standard deviation (0.94). And that the least arithmetic average was for the paragraph "The employees of the company know their knowledge in proportion to the latest developments" with an average of 3.56 and a standard deviation of 0.89, a general average of 3.89 and a standard deviation of 0.54, which is within the high level.

Table (3) the arithmetical averages and standard deviations of respondents' responses to the structural capital domain.

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Rank</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>The company has modern equipment to facilitate the completion of work.</td>
<td>4.25</td>
<td>0.85</td>
<td>1</td>
<td>High</td>
</tr>
<tr>
<td>The company provides an electronic system to monitor the performance of its employees and to maintain the level of services provided.</td>
<td>4.18</td>
<td>0.92</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>The company's management information systems are accurate, modern and timely.</td>
<td>4.09</td>
<td>0.93</td>
<td>3</td>
<td>High</td>
</tr>
<tr>
<td>The company documents its achievements through periodic bulletins and brochures.</td>
<td>4.08</td>
<td>0.95</td>
<td>4</td>
<td>High</td>
</tr>
<tr>
<td>The company provides sufficient computers to complete the various works.</td>
<td>4.03</td>
<td>0.94</td>
<td>5</td>
<td>High</td>
</tr>
<tr>
<td>The company has a sophisticated service system.</td>
<td>4.01</td>
<td>0.96</td>
<td>6</td>
<td>High</td>
</tr>
<tr>
<td>The company relies on a large degree and a variety of software in its work.</td>
<td>3.86</td>
<td>0.97</td>
<td>7</td>
<td>High</td>
</tr>
<tr>
<td>The company provides systems to evaluate its relationship with the client</td>
<td>3.74</td>
<td>0.96</td>
<td>8</td>
<td>High</td>
</tr>
</tbody>
</table>
The police have a detailed database of their customers and needs 3.62 0.94 9 High

The company provides a system to address the personal and administrative needs of employees. 3.56 0.86 10 Medium

General average 3.94 0.46 High

From Table (3) it is clear that the mathematical averages ranged between (3.56-4.25) and that the highest average was for the paragraph "The company has modern equipment to facilitate the completion of work", which averaged 4.25 and a standard deviation (0.85). And that the least arithmetic average was for the paragraph "The company provides a system to address the employees personal and administrative needs .The overall average is 3.94 and a standard deviation of 0.46 is within the high level.

Table (4) the arithmetical averages and the standard deviations of the responses of the study sample members to the relative capital domain items

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Rank</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>The company has a clear vision of enhancing customer loyalty.</td>
<td>4.15</td>
<td>0.96</td>
<td>1</td>
<td>High</td>
</tr>
<tr>
<td>The company works to maintain communication with customers</td>
<td>4.06</td>
<td>0.99</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>Customers of the Company express their satisfaction with the services provided.</td>
<td>3.99</td>
<td>0.97</td>
<td>3</td>
<td>High</td>
</tr>
<tr>
<td>The company maintains special programs to maintain contact with its customers</td>
<td>3.95</td>
<td>0.99</td>
<td>4</td>
<td>High</td>
</tr>
<tr>
<td>The company provides new services to meet the needs of customers</td>
<td>3.92</td>
<td>0.98</td>
<td>5</td>
<td>High</td>
</tr>
<tr>
<td>The company is keen to quickly implement the services provided to customers</td>
<td>3.87</td>
<td>0.98</td>
<td>6</td>
<td>High</td>
</tr>
<tr>
<td>There are several ways to communicate with customers and hear their opinions</td>
<td>3.85</td>
<td>1.01</td>
<td>7</td>
<td>High</td>
</tr>
<tr>
<td>The company gives special privileges to customers in order to maintain contact with them</td>
<td>3.60</td>
<td>0.90</td>
<td>8</td>
<td>Medium</td>
</tr>
<tr>
<td>General average</td>
<td>3.93</td>
<td>0.52</td>
<td></td>
<td>High</td>
</tr>
</tbody>
</table>

Table (4) shows that the mathematical averages ranged between (3.60-4.15) The highest arithmetic average was for the paragraph "the company adopts a clear vision about enhancing the affiliation of its customers" which averaged 4.15 and a standard deviation (0.96), and that the least arithmetic average was for the paragraph "The company gives special privileges to customers in order to maintain contact with them" with an average of 3.60 and a standard deviation of 0.90, and a general average of 3.93 and a standard deviation of 0.52, which is within the high level.
Table (5) The arithmetical averages and standard deviations of respondents' responses to the items of competitive advantage.

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Rank</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The company enjoys a distinct position in the local market.</td>
<td>4.32</td>
<td>0.91</td>
<td>1</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>High-end technology is used to gain a competitive advantage</td>
<td>4.25</td>
<td>0.85</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>Growth of the market share of the domestic market</td>
<td>4.18</td>
<td>0.97</td>
<td>3</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>Competition in the company requires the presence of modern technologies in providing new and diverse services to customers.</td>
<td>4.18</td>
<td>0.92</td>
<td>4</td>
<td>High</td>
</tr>
<tr>
<td>5</td>
<td>Diversity and renewal of ways and methods of work</td>
<td>4.08</td>
<td>0.95</td>
<td>5</td>
<td>High</td>
</tr>
<tr>
<td>6</td>
<td>Sales growth in general</td>
<td>4.07</td>
<td>0.99</td>
<td>6</td>
<td>High</td>
</tr>
<tr>
<td>7</td>
<td>The company's distinctive position in the local market</td>
<td>4.04</td>
<td>0.97</td>
<td>7</td>
<td>High</td>
</tr>
<tr>
<td>8</td>
<td>The quality of the services provided in the company is positively reflected on the competitive advantage</td>
<td>4.01</td>
<td>0.96</td>
<td>8</td>
<td>High</td>
</tr>
<tr>
<td>9</td>
<td>Innovation of new services contributes to competitive advantage</td>
<td>3.86</td>
<td>0.97</td>
<td>9</td>
<td>High</td>
</tr>
<tr>
<td>10</td>
<td>There are positions in the company that need to make creative decisions that contribute to the achievement of competitive advantage.</td>
<td>3.74</td>
<td>0.96</td>
<td>10</td>
<td>High</td>
</tr>
<tr>
<td>11</td>
<td>The company poses for more than one product</td>
<td>3.71</td>
<td>0.95</td>
<td>11</td>
<td>High</td>
</tr>
<tr>
<td>12</td>
<td>There is innovation for new products</td>
<td>3.63</td>
<td>0.90</td>
<td>12</td>
<td>Medium</td>
</tr>
<tr>
<td>13</td>
<td>The use of advanced technology helps to achieve a competitive advantage in the company.</td>
<td>3.56</td>
<td>0.86</td>
<td>13</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Table (5) shows that the mathematical averages ranged between (3.56-4.32) and the highest arithmetic average was for the paragraph "The company has a distinct position in the local market" which averaged 4.32 and a standard deviation (0.91), and that the least arithmetic average was for the paragraph "The use of advanced technology helps to achieve a competitive advantage in the company" with
an average of 3.56 and a standard deviation of 0.86, The general average is 3.96 and the standard deviation is 0.86 and it is within the high level.

Results related to the second question: Is there an impact of intellectual capital with its dimensions (human capital, structural capital, relational capital) on achieving competitive advantage in Jordanian telecom companies?

The second question will be answered by the following hypotheses:

The first hypothesis:

There is no impact of intellectual capital with its dimensions (human capital, structural capital, relational capital) on achieving competitive advantage in Jordanian telecom companies.

To answer this hypothesis, a multiple regression analysis was conducted to identify the impact of intellectual capital with its dimensions (human capital, structural capital, relational capital) on achieving competitive advantage in Jordanian telecom companies and Table 6 shows the results.

Table (6) Results of the multi-regression analysis of the impact of intellectual capital in its dimensions (human capital, structural capital, and capital) on achieving competitive advantage in Jordanian telecom companies

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Multi correlation</th>
<th>R²</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>First hypothesis</td>
<td>.832a</td>
<td>0.69</td>
<td>180.27</td>
<td>.000a</td>
</tr>
</tbody>
</table>

Table (6) shows that the coefficient of correlation between intellectual capital with its dimensions (human capital, structural capital, relational capital) on achieving competitive advantage in the Jordanian telecom companies (0.832) and the statistical value of 180.27 at a mean level of 0.05 and less, There is an impact of intellectual capital in terms of its dimensions (human capital, structural capital, informal capital) to achieve the competitive advantage of Jordanian telecoms companies. In order to answer the sub-hypotheses, a simple regression analysis was performed, the results of which are shown in Table (7).

Table (7) The results of the multi-regression analysis of the impact of intellectual capital in its dimensions (human capital, structural capital, relational capital) on achieving competitive advantage in Jordanian telecom companies.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Multi correlation</th>
<th>R²</th>
<th>Beta</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>.334a</td>
<td>.112</td>
<td>0.334</td>
<td>30.61</td>
<td>.000a</td>
</tr>
<tr>
<td>Second</td>
<td>.796a</td>
<td>.634</td>
<td>420.120</td>
<td>.000a</td>
<td>.796a</td>
</tr>
<tr>
<td>Third</td>
<td>.573a</td>
<td>.328</td>
<td>118.242</td>
<td>.000a</td>
<td>.573a</td>
</tr>
</tbody>
</table>

First Sub-hypothesis:

There is no impact of intellectual capital (human capital) on achieving competitive advantage in Jordanian telecoms companies. Table (7) shows that correlation coefficient between intellectual capital (human capital) to achieve the competitive advantage of Jordanian telecom companies (0.334) and that the statistical value of 30.61 at a level of significance of 0.05 and less, so there is an impact of intellectual capital
with its dimensions (Human capital) to achieve the competitive advantage of Jordanian telecoms companies. The beta force indicates that the direction of the relationship is positive.

Second Sub-hypothesis:
There is no impact of intellectual capital (structural capital) on achieving competitive advantage in Jordanian telecoms companies. Table (7) shows that the coefficient of correlation between intellectual capital (structural capital) to achieve the competitive advantage of Jordanian telecommunications companies (0.796) and that the statistical value of 420.12 at a level of significance of 0.05 and less, so there is an impact of intellectual capital with its dimensions (structural capital) to achieve the competitive advantage of Jordanian telecom companies. The beta value indicates that the direction of the relationship is positive.

Third Sub-hypothesis:
There is no impact of intellectual capital (related capital) on achieving competitive advantage in Jordanian telecoms companies. Table (7) shows that correlation coefficient between intellectual capital (related capital) to achieve the competitive advantage of Jordanian telecom companies (0.328) and that the statistical value of 118.24 at a level of significance of 0.05 and less, so there is an impact of intellectual capital with its dimensions (related capital) to achieve the competitive advantage of Jordanian telecoms companies. The beta value indicates that the direction of the relationship is positive.

4.1 Discussion of the Results

The results concerning the field of human capital showed that the highest arithmetic average was for the paragraph "The staff have high academic and professional certificates", and the lowest arithmetic average was for the paragraph "The employees of the company develop their knowledge and adapt to the latest developments". Results of the structural capital showed that the highest arithmetic mean was for the paragraph "the company has modern equipment to facilitate the completion of the work" and the lowest average was for the paragraph "The company provides a system to address the employees personal and administrative needs".

As for the results related to the responses of the study sample members on the paragraphs of the area of Relational capital, the general level is at the high level, the highest average was for the paragraph "The Company adopts a clear vision on enhancing the affiliation of its customers. The lowest average was for the paragraph "company gives a special privilege to customers in order to maintain contact with them".

The results in relation to the responses of the study sample members on the paragraphs of the field of competitive advantage occurred at the general level within the high level. The highest average account was for the paragraph "the company enjoys a privileged position in the local market" and that the lowest average was for the paragraph "The use of advanced technology helps to achieve a competitive advantage vastly and extensively in the company".

With regard to the hypotheses of the study, the results were as follows:

The first hypothesis:

There is not any impact of intellectual capital with its dimensions (human capital, structural capital, relational capital) on achieving competitive advantage in Jordanian telecoms companies. The results
indicated that there is an impact of intellectual capital with its dimensions (human capital, structural capital, relational capital) to achieve the competitive advantage of Jordanian telecoms companies.

First Sub-hypothesis:
There is not any impact of intellectual capital (human capital) to achieve the competitive advantage of Jordanian telecom operators. The results of this hypothesis indicate that there is an impact of intellectual capital with its dimensions (human capital) on achieving competitive advantage in Jordanian telecom companies. The beta value indicates that the direction of the relationship is positive.

Second Sub-hypothesis:
There is not any impact of intellectual capital (structural capital) on achieving competitive advantage in Jordanian telecoms companies. While the results showed that there is an impact of intellectual capital with its dimensions (structural capital) on achieving the competitive advantage of Jordanian telecom companies. The beta value indicates that the direction of the relationship is positive.

Third Sub-hypothesis:
There is not any impact of intellectual capital (relative capital) on achieving the competitive advantage of Jordanian telecom companies. The results showed that there is an impact of intellectual capital with its dimensions (relational capital) on achieving the competitive advantage of Jordanian telecom companies. The beta value indicates that the direction of the relationship is positive.

The second hypothesis
There is not any impact of intellectual capital with its dimensions (human capital, structural capital, relational capital) on achieving the competitive advantage of Jordanian telecom companies. The results indicated that there is an impact of intellectual capital with its dimensions (human capital, structural capital, relational capital) on achieving the competitive advantage of Jordanian telecom companies.

5. References


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