

The Effect of Knowledge-Based Human Resource Management in Sustainable Competitive Advantage - Field Research

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Abstract

The research seeks to determine the level of variables in the companies surveyed, to clarify the impact of knowledge-based human resource management in its four dimensions on the sustainable competitive advantage. The research was applied in Internet companies (EarthLink, Al-Hayat, Al-Jazeera, Hala Al-Rafidain, Orient, Supercell, Al-Dash Net) in the city of Baghdad, because this sector is vital and in direct contact with the daily needs of customers by providing them with the Internet and information security.

The problem of the research was the lack of some companies' mechanisms and policies to enhance the loyalty of these valuable resources, which resulted in the difficulties of generating knowledge, producing information, storing it, and investing it appropriately in order to achieve a sustainable competitive advantage, in addition to that, companies are still working with the traditional wage system (monthly salaries), which makes individuals not think about adding The value of the work and through that the following question was raised why the reliance of the managers of the surveyed companies on knowledge-based human resources management decreased in achieving sustainable competitive advantage? In the light of which the importance and objectives of the research were determined, and the hypotheses of correlation and influence were formulated and the negative impact and moral differences of the research variables were addressed, A methodology was relied upon in this research, which is the exploratory approach, which relies on analyzing the questionnaire based on theoretical hypotheses that are proven through practical tests and comparing the results between the seven companies. After evaluating and testing the validity and

reliability of the research measurement tools, the data was analyzed and hypotheses were tested using appropriate statistical tools such as the arithmetic mean and standard deviation.

The results showed the validity of the correlation and influence relationships at the level of the variables.

Keywords: knowledge-based human resources, sustainable competitive advantage

1. Introduction

The subject of knowledge-based human resources management is considered one of the important topics that have appeared recently in a modern way, idiomatically. Its roots are deep in management literature, and its concept sometimes overlaps with knowledge makers as its first appearance, but it differs with them because they are only knowledge makers, and sometimes with intellectual capital. Between knowledge-based human resource management and intellectual capital, knowledge-based human resource management is an integrated process in all the organization's movements for working individuals, starting from attracting them to the process of distributing wages and feedback to them. As for intellectual capital, it is a model of multiple knowledge-based human resource management models, which represents knowledge that adds value to work. In addition to the importance of human resources management based on knowledge, providing a creative environment for the organization is no less important than that, as companies try to create an appropriate work environment based on leadership support for creativity and changing the culture from traditional to creative and renewable. The goal of building a creative culture is to create a work climate and a work style that mobilizes the energy of the company's employees is directly behind the efforts exerted to implement the strategy creatively and efficiently. Strong employees and their commitment to the company's vision, performance goals and strategy. The issue of competitive advantage has always been the subject of much discussion among researchers, even with the change in the form of competitive advantage and monopoly of natural resources thanks to the information revolution, big data and digitization, and it has become economies of a special kind, for example many companies (Google, LinkedIn, Facebook, etc.) equal to many times what the resources are achieved normal for companies or economies. The sustainable competitive advantage is based on the importance of the time dimension in the long term and how to respond to environmental variables to include all the actions of the organization that would narrow or block the way for competitors to imitate the strengths and unique strategic capabilities of the organization or replace them through the use of any resources other

Locally, the companies surveyed in this sector witnessed an increase in competition for human resources based on local knowledge of experts and technicians, and the fact that the Iraqi environment is going through political and security changes. There is difficulty in attracting knowledgeable human resources from different countries and transferring experiences in the technological sector, and some companies lack mechanisms and policies to enhance the loyalty of these valuable resources, which resulted in the difficulties of generating knowledge, producing information, storing it, and investing it appropriately in order to achieve a sustainable competitive advantage. In addition, companies are still working with the traditional wage system (monthly salaries), which makes individuals not think about adding value to work. Among other indicators related to the weak positive impression of society towards this sector, and accordingly, the success in drawing a positive image, the need to work on employing expertise and individuals with knowledge gives a motive that contributes to making a change in the level of confidence and gaining customers, and through the interviews conducted by the researcher that these departments suffer from a clear decrease in the awareness of the research variables and their importance, despite the application of some of these variables by them and their use in the implementation of many of their different operations. The sustainable competitive advantage through the mediating role of the organizational innovation climate), and the research will be an opportunity to identify and diagnose the causes and problems in this sector in a practical and accurate way by trying to employ qualitative and reliable measures and support the results of cognitive measures, which gives a broader scope for studying companies to understand the causes of decline, and the trends of the innovation climate from Halal Support management, leadership and creative culture, and the level of sustainable competitive advantage.

2. Literature review

The environment of business organizations operating in various knowledge sectors is characterized by a rapid rate of change accompanied by a wave of complex and unexpected fluctuations (Gatea, 2020), as the fluctuating business environment witnesses the emergence of new concepts that contribute to clarifying the procedures and mechanisms of competition between existing companies and those wishing to enter the labor market, so the focus is on the mentality of individuals with knowledge (Almusawi & Alubadi, 2021), the element of knowledge is the one that reflects the common characteristics between working individuals and the organization. As work via the Internet and electronic networks has become the most important work of the twenty-first century and the most profitable (Raheemah, et.al, 2018), as the need for information technology has become urgent and

indispensable in the continuity of the organization (Hassan & Hamed, 2022), and in order to achieve a sustainable competitive advantage It works to keep pace with change and respond to events in application of strategic flexibility (Hussein & Salman, 2022), and speed in delivering the customer to satisfy his needs and dealing with confidence and honesty (Hamood, 2023), which prompted companies to acquire organizational learning skills and the ability to solve problems in order to avoid drifting away from the competition race (Hasan, 2021 Ibrahim&).therefore, the two topics were chosen to suit the fluctuating environment variables , and that the modern strategic directions are based on the competitive advantage based on knowledge and rationality in producing products that are more compatible with life and more creative, and giving human resources the utmost importance (Danook &Al.obaidy,2022) , will discuss the two topics as follows

2.1 knowledge-based human resource management

Barney presented the resource-based point of view in his famous article (1991) titled Firm Resources and Sustained Competitive Advantage (Firm Resources and Sustained Competitive Advantage). It is the one that provides the greatest amount of work requirements as a source, competitive advantage, and sustainable excellence (Reus, et.al, 2009). Knowledge-based resources refer to valuable assets that are protected from imitation through knowledge barriers, as they are accurate and difficult to understand because they involve elusive talents. It is difficult to come up with something similar (Nieves, et.al, 2014). Thus, the theory considers that the knowledge of individuals is the most important strategic resource that the organization can possess (Lamprey, 2021). Among the important differences is that the organizational theories such as the economic theory that focuses on the organization as a factory to produce goods and services and reduce costs and maximize profits, and the social theory that sees the organization as a field for social work and the spirit of cooperation and harmony and the creation of a positive atmosphere, the theory based on knowledge came as a culmination of the collection of these theories at the present time. Its focus on the role of the individual as the main actor in the formation of knowledge and the main repository for it as well as its retention (Grant, 1996:). Human analytics in the writings of Boxall et.al, 2008 (Boxall & Purcell, 2007 & Watson, 2006). This approach emphasizes the process of collecting data and converting it into information and then knowledge, as well as using techniques, programs and statistical methods that help the organization to make decisions in the right direction (Thakre, 2020).

Knowledge-based human resources management works to extrapolate human capital with a high degree of effectiveness and efficiency in order to benefit from it in the organization, and the mere existence of knowledge is not particularly useful unless it is applied and disseminated. It includes human resource management systems that

have the applicability of knowledge and planning Workforce, training and development, job analysis, performance appraisal, personnel administration, selection, hiring, compensation, payroll record keeping, and labor management relations. The term appeared for the first time in a published research by the researchers (Uzoka & Akinyokun, 2002) about providing a conceptual model to motivate individuals to benefit human resources from databases and expert systems in decision support in the United States of America, then it developed into many contents and uses

(Vasiljevienė, 2004) defines a method that urges individuals to acquire and master knowledge in order to increase the economic effectiveness of the organization, while (Almohammdi, 2014) added a method that integrates human resource management with knowledge management and aims to enhance the knowledge environment and develop human resources in the organization (Lin & Tang, 2016). Sees practices that have a strategic role aimed directly at enhancing the performance of organizational knowledge

2.2 sustainable competitive advantage

(Webster) dictionary defines the term advantage as superiority in the position or distinctive benefit resulting from the course of the organization's work, while competitiveness is the characteristics that characterize it compared to competitors or based on competition. Sustainability is defined as retention or prolongation, and thus the meaning of sustainable competitive advantage is interpreted as obtaining a position or situation superior to competitors in a long-term period (Omar, et.al, 2011). As the concept of sustainable competitive advantage constituted a major issue in the field of strategic management, marketing and organization theory in the last half of the twentieth century (Salimi, et.al, 2020) from several perspectives as it shifted from the perspective of the industry to the perspective of the organization, the first is the perspective of the industry that emphasizes The necessity of market power and its intensity, and the second resource-based perspective focuses on organizational efficiency (Lado, et.al, 1992). The perspectives of (Miles & Snow1978, Porter1980, Mintzberg 1983, Barney, 1991) provided strong foundations for researchers in organization, strategic management and marketing in the secrets of dismantling the subject in a more elaborate and clear form (Chereau, 2012). He divided (Ma, et.al, 2019) the competitive advantage into two types: fixed and sustainable. Temporary is a short-term competitive advantage that can, after a period of time, be similar to other organizations, and it is transferable. Either sustainable is the one that cannot be repeated or In the same context, (Yan, et.al, 2018) believes that the sustainable competitive advantage has two characteristics, the first property is possession of a certain point in a long period of continuity and maintenance, and the second is that it is a

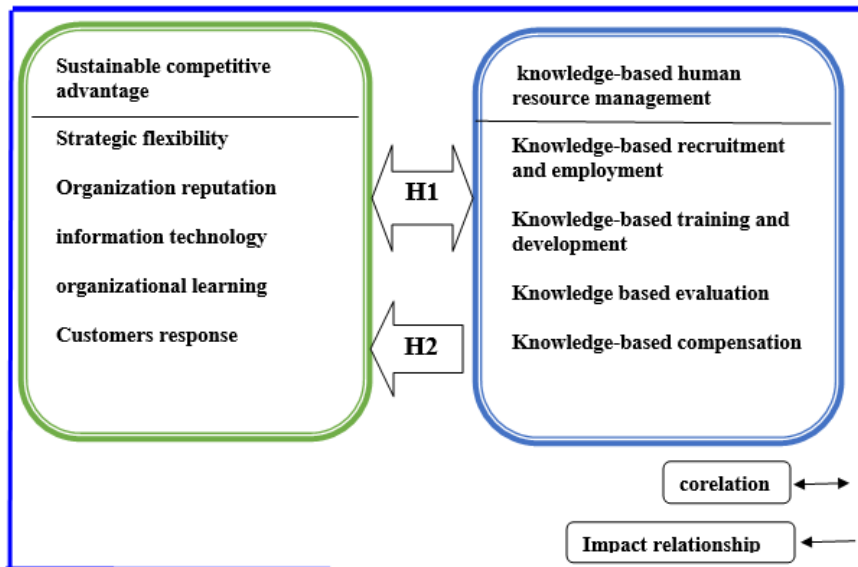
continuous combination of many short advantages. In order for it to be said that the organization has a sustainable competitive advantage, (Coyne, 1986) set three conditions for its possession, which is the awareness of customers that there is a constant difference in the important characteristics between the organization's product and its competitors, and then this difference is a direct result that gave the organization the ability to create a gap between the product that The production and products of its competitors, as well as the continuity of the difference in the important characteristics of the products and the continuous innovation for a long period of time. Many researchers have described the sustainable competitive advantage as a multi-dimensional and relative concept without a globally approved definition, as researchers and practitioners in management are not in complete agreement with regard to the determinants and sources of competitiveness. Inside or outside the organization, the physical or intangible nature of the sources of competitive advantage are subjects of intellectual debate

ustainable competitive advantage as the organization's unique position in relation to its competitors, which allows it to constantly outperform them. (Ngaruko, et.al, 2014) indicated that it is the organization's philosophy in Providing flexibility and alternatives in the sources and means of production to outperform competitors, while (Florence, et.al, 2014) indicated that it is the benefits that are gained by providing greater value to customers, either by reducing prices or by providing greater benefits and services that justify a higher price. Prices, also defined as the organization's method of achieving a series of benefits necessary for customer response over time (Yu, et.al, 2017)

3. Material and Methods

3.1 Hypothetical research plan

Figure (1) shows the hypothesis diagram of the research



3.2 Research hypotheses

The first main hypothesis: There is a statistically significant correlation between knowledge-based human resource management and sustainable competitive advantage, and the following sub-hypotheses emerge from it:

- A- There is a statistically significant correlation between Knowledge-based recruitment and employment and sustainable competitive advantage
- B- There is a statistically significant correlation between Knowledge-based training and development and sustainable competitive advantage
- C- There is a statistically significant correlation between Knowledge based evaluation and sustainable competitive advantage
- D- There is a statistically significant correlation between Knowledge-based compensation and sustainable competitive

The second main hypothesis: There is a statistically significant effect relationship of the knowledge-based human resource management on sustainable competitive advantage, and the following sub-hypotheses emerge from it:

- A- There is a statistically significant effect of Knowledge-based recruitment and employment on sustainable competitive advantage
- B- There is a statistically significant effect of Knowledge-based training and development on sustainable competitive advantage

C- There is a statistically significant effect of Knowledge based evaluation on sustainable competitive advantage

D- There is a statistically significant effect of Knowledge-based compensation on sustainable competitive advantage

4. Discussion of Results

4.1 Correlation hypothesis test

This hypothesis was formulated from the fact that there is a statistically significant correlation knowledge-based human resource management of with its dimensions (Knowledge-based recruitment and employment, Knowledge-based training and development ,Knowledge based evaluation ,Knowledge-based compensation).Table (1) makes it possible to determine the possibility of acceptance of this hypothesis or not by examining the correlation values and their significance as follows:

Table (1) test the link hypothesis of Sustainable competitive advantage and knowledge-based human resource management

Variables						
	Strategic flexibility	Organization reputation	information technology	Customers response	organizational learning	Sustainable competitive advantage
Knowledge-based recruitment and employment	0.277**	0.115	0.329**	0.102	0.359**	0.322**
Knowledge-based training and development	0.138	0.203**	0.339**	0.126	0.340**	0.320**
Knowledge based evaluation	0.175*	0.132	0.390**	0.120	0.281**	0.318**
Knowledge-based compensation	0.189*	0.065	0.259**	0.001	0.325**	0.237**
knowledge-based human resource management	0.250**	0.161*	0.419**	0.109	0.416**	0.381**
N =167	significant at 0.05					

According to Table (1), it is clear that:

A- Discussion and interpretation of the correlations between polarization and knowledge-based employment (X1) and sustainable competitive advantage (Y) and its dimensions: It is clear from Table (1) that there is a correlation between polarization and knowledge-based employment and three dimensions of sustainable competitive advantage, a significant level relationship (0.000).) The illusion of strategic flexibility, information technology and organizational learning, as the values reached (0.277**, 0.329**, 0.359**), respectively, which are positive direct relationships. Significant (0.000), and this indicates

that companies can benefit from the experiences of recruiters and employ them to help the organization get rid of problems and set up workshops and trainings that provide an addition to organizations to gain organizational immunity, while there was no correlation with a significant level of the dimension of polarization and employment based on knowledge with two dimensions of The dimensions of the sustainable competitive advantage are the reputation of the organization and the response to customers, as the values reached (0.115, 0.102), and in general, the relationship between polarization and employment based on knowledge with the competitive advantage, the value of the correlation between them reached 0.322 (**)) at a significant level (0.000), and based on this result It can be said that knowledge-based recruitment or recruitment plays an important role in achieving a sustainable competitive advantage by providing companies with expertise, skills and leading minds in the field of technology that will make a difference because of their capabilities to achieve sustainability for companies and reduce their negative effects as well as rationalizing decisions and investing in opportunities This gives a strong indication of the acceptance of the first sub-hypothesis (there is a significant correlation between recruitment and employment based on knowledge and sustainable competitive advantage), and this research was consistent with the research of (Alfawaire & Atan, 2021).

B- Discussion and interpretation of the correlations between knowledge-based training and development (X2) and sustainable competitive advantage (Y) and its dimensions: It is clear from Table (1) that there is a correlation between knowledge-based training and development and three dimensions of sustainable competitive advantage at a significant level (0.000).) The illusion of strategic flexibility, information technology and organizational learning, as the values reached (0.203**, 0.339**, 0.340**), respectively, which are positive direct relationships. Significant (0.000), and this indicates that there is a mutual role between organizational learning, training and continuous development of workers in proportion to the development of their skills in the technological sector in order to return positive feedback as well as their acquisition of experiences and the discovery of new knowledge. While there was no correlation with a significant level of the knowledge-based training and development dimension with two dimensions of sustainable competitive advantage, namely strategic flexibility and responsiveness to customers, as the values reached (0.138, 0.126), but in general the relationship between knowledge-based training and development with sustainable competitive advantage reached The value of the correlation between them (0.320**) at a significant level (0.000), and based on this result, it can be said that training and development based on knowledge plays an important role in achieving sustainable competitive advantage through the establishment of workshops, seminars and courses that help workers to refine their skills and experience, especially in The

technological or cyber security aspect to reduce the phenomena of espionage, forgery, data theft, or disclosure of information pertaining to each company. This results in the acceptance of the second sub-hypothesis (there is a significant correlation between training and development based on knowledge and sustainable competitive advantage). This research was consistent with the research of (Banmairuoy, et.al, 2022).

C- Discussion and interpretation of the correlations between knowledge-based assessment (X3) and sustainable competitive advantage (Y) and its dimensions: It is clear from Table (1) that there is a correlation between knowledge-based assessment and three dimensions of sustainable competitive advantage at a significant level (0.000). The reputation of the organization, information technology, and organizational learning, as the values reached (0.175*, 0.390**, 0.281**), respectively, which are positive direct relationships. It indicates that there is an important role for information technology in knowledge-based evaluation through computers and the Internet, keeping records and easy reference to them in evaluating workers, as well as a longer storage period and disposal of paper evaluation, in addition to adopting more accurate statistical programs in evaluation. While there was no correlation with a significant level of the knowledge-based assessment dimension with two dimensions of the sustainable competitive advantage, namely the reputation of the organization and the response to customers, as the values reached (0.132, 0.120), but in general the relationship between the knowledge-based evaluation with the competitive advantage, the value of the correlation between them reached 0.318**) at a significant level (0.000), and based on this result, it can be said that knowledge-based evaluation is very important for competitive advantage, as through it companies can know the daily performance of workers and publish work completion rates for each worker and his general level, which gives knowledge to workers who They add knowledge and who constitute a real investment in it, and this indicates the acceptance of the third sub-hypothesis (there is a significant correlation between knowledge-based assessment and sustainable competitive advantage).

D- Discussion and interpretation of the correlations between knowledge-based compensation (X4) and sustainable competitive advantage (Y) and its dimensions: It is clear from Table (1) that there is a correlation between knowledge-based compensation and three dimensions of sustainable competitive advantage at a significant level (0.000). Strategic flexibility, information technology and organizational learning, as the values reached (0.189 *, 0.259 **, 0.325 **), respectively, which are positive direct relationships. This indicates that there is a role for knowledge-based or compensation-based compensation in stimulating learning. While there was no correlation with a significant level of the knowledge-based evaluation dimension

with two dimensions of the sustainable competitive advantage, namely the reputation of the organization and the response to customers, as the values reached (0.001, 0.065), but in general the relationship between compensation based on knowledge with the competitive advantage reached the value of the correlation between them). 0.381**) at a significant level (0.002), and based on this result, it can be said that compensation based on knowledge gives importance to the survival of workers with capabilities or talents and their feeling of comfort and simplicity to work, which makes the organization stable and continuous to generate more knowledge and creativity, which creates for it the advantage of controlling resources Humans with knowledge that gives power in the labor market, and this means accepting the fourth sub-hypothesis (there is a correlation between knowledge-based compensation and sustainable competitive advantage)

Referring to Table (1), the relationship between knowledge-based human resources and competitive advantage in general was achieved at a significant level (0.000) and with a correlation value of (0.381**), and this result confirms that knowledge-based human resources have an important role in helping companies in the field of application of competitive advantage Sustainable in terms of how to deal with these individuals, seize them, attract them and train them to create opportunities and invest them in the labor market, as well as the ability of these individuals to face the challenges that can constantly occur in such changing sectors that require mental effort and read the ideas of customers and what is going on in their thoughts. It is possible for knowledgeable individuals to participate in the development of plans and strategies and express their opinions, and this reflects the value of their investment. In the light of these data, the first main hypothesis is accepted (there is a correlation between knowledge-based human resource management and sustainable competitive advantage). This research fits with the research of (Alfawaire & Atan, 2021), (Arsawan, et.al, 2020)

3.4 Impact Hypothesis Test

The contents of Table (2) reflect the data on the hypothesis of the effect of organizational innovation climate on the Sustainable competitive advantage, which states that there is a statistically significant effect of organizational innovation climate in the Sustainable competitive advantage.

Table (2) Impact hypothesis test

Variables	Sustainable competitive advantage					
	(a)	(β)	R ²	calculated (F)	tabular (f)	Sig
Knowledge-based recruitment and employment	3.293	0.185	0.104	19.119	6.79	0.000
Knowledge-based training and development	3.179	0.104	0.102	18.828	6.79	0.000
Knowledge based evaluation	3.300	0.169	0.101	18.595	6.79	0.000
Knowledge-based compensation	3.547	0.028	0.056	9.794	6.79	0.000
knowledge-based human resource management	2.786	0.381	0.145	27.953	6.79	0.000
N =167	significant at 0.05					

According to Table (2), it is clear that:

A- Through Table (2), the calculated (F) value of knowledge-based recruitment and recruitment in sustainable competitive advantage was (19.11), which is greater than the tabular (F) value of (6.79) at the level of significance (0.01), with a confidence level of (99). %) That is, polarization and employment based on knowledge have an impact on achieving sustainable competitive advantage. Through the value of the coefficient of determination (²R) of (0.104), it is clear that after polarization and employment based on knowledge, it explains (10%) of the variables that occur in the sustainable competitive advantage, while the remaining percentage (90%) is due to other variables that are not included in Search form. It is evident through the value of the marginal slope coefficient (β) of (0.185) that an increase in the polarization dimension and knowledge-based employment by one unit will lead to an increase in sustainable competitive advantage by (18%). The value of the constant (a) in the equation was (3.293), meaning when the polarization and knowledge-based employment dimension is equal to zero, the sustainable competitive advantage will not be less than this value, as shown in the following equation: $Y = 3.293 + 0.185 (X)$. This gives evidence that attracting people with knowledge, competencies and skills gives a positive force in the competition race and a qualitative addition to companies, since mental effort is the main reason for continuity. Thus, the first sub-hypothesis is accepted (there is a significant effect of polarization and knowledge-based employment on sustainable competitive advantage).

B- Testing the second sub-hypothesis: From table (2) the calculated (F) value for knowledge-based training and development in sustainable competitive advantage amounted to (18.828), which is greater than the tabular (F) value of (6.79) at the level of significance (0.01). That is, with a degree of confidence (99%), meaning that knowledge-based training and development has an impact on achieving sustainable competitive advantage. Through the value of the determination coefficient (²R) of (0.102), it is clear that after training and development based on knowledge, it explains (10%) of the variables that occur in the sustainable competitive advantage, while the remaining percentage

(90%) is due to other variables that are not included in Search form. It is evident through the value of the marginal tendency coefficient (β) of (0.104) that an increase in the knowledge-based training and development dimension by one unit will lead to an increase in competitive superiority by (10%). The value of the constant (α) in the equation was (3.179), meaning when the training and development dimension based on knowledge is equal to zero, the sustainable competitive advantage will not be less than this value, as shown in the following equation: $Y = 3.179 + 0.104 (X)$. This means that continuous education and continuous training creates a state of knowledge absorption for workers, which means their ability to innovate services that meet the needs and desires of customers, and then leads to preference for choosing customers and achieving an advantage for the company. Thus, the second sub-hypothesis is accepted (there is a significant effect of knowledge-based training and development on sustainable competitive advantage).

C- Testing the third sub-hypothesis: According to Table (2), the value of (F) calculated for the knowledge-based assessment of sustainable competitive advantage was (18.595), which is greater than the tabular (F) value of (6.79) at the level of significance (0.01), i.e. With a degree of confidence (99%), meaning that knowledge-based assessment has an impact on achieving sustainable competitive advantage. Through the value of the coefficient of determination (R^2) amounting to (0.101), it is clear that after the knowledge-based evaluation, it explains (10%) of the variables that occur in the sustainable competitive advantage, while the remaining (90%) is due to other variables that are not included in the model. search. It is clear from the value of the marginal slope coefficient (β) of (0.169) that an increase in the knowledge-based evaluation dimension by one unit will lead to an increase in sustainable competitive advantage by (16%). The value of the constant (α) in the equation was (3.300), meaning when the knowledge-based evaluation dimension is equal to zero, the sustainable competitive advantage will not be less than this value, as shown in the following equation: $Y = 3.300 + 0.169 (X)$. This indicates that the continuous evaluation To know the individuals makes them search for the best and present as they have to improve the image or to gain monetary incentives and thus reflect on the organization that the cognitive performance in it flows in a positive manner, and thus the third sub-hypothesis is accepted (there is a significant effect of knowledge-based evaluation on sustainable competitive advantage)

D- Testing the fourth sub-hypothesis: According to Table (2), the calculated (F) value for knowledge-based compensation in sustainable competitive advantage was (9.794), which is greater than the tabular (F) value of (6.79) at the significance level (0.01), that is, with a degree Confidence (99%), meaning that knowledge-based compensation has an impact on achieving sustainable competitive advantage. Through the value of the coefficient of determination (R^2) amounting to (0.056), it is

clear that the knowledge-based compensation dimension explains (5%) of the variables that occur in the sustainable competitive advantage, while the remaining percentage (95%) is due to other variables that are not included in the model. search. It is clear from the value of the marginal slope coefficient (β) of (0.028) that increasing knowledge-based compensation by one unit will lead to an increase in sustainable competitive advantage by (3%). The value of the constant (α) in the equation was (3.547), meaning when the dimension of knowledge-based compensation is equal to zero, the sustainable competitive advantage will not be less than this value, as shown in the following equation: $Y = 3.547 + 0.028 (X)$, and this means that the wage system Incentives are dependent on what workers add value to work and gives motivation to workers to think of creating new ways and methods to deal with technology or solve problems that occur during work, and thus the fourth sub-hypothesis is accepted (there is a significant effect of knowledge-based compensation on sustainable competitive advantage).

4. Conclusions

1 - It is clear that possessing advanced information technology is the basis for building an interactive system with individuals with knowledge and its reflection on the ability to save information and data and establish a supportive information base that facilitates the flow of work.

2 - It was found that Internet companies have cooperative relations and partnerships with academic and educational institutions and development and training institutions in Iraq to provide these companies with qualified individuals to work in them to achieve sustainable competitive advantage.

3 - It is clear from the testing of interdependencies that there is a clear interest role on the part of companies in supporting the competitive advantage by providing the organization with knowledge-based human resources, and it is also considered a real investment for individuals through training and development by holding workshops, courses and scientific seminars that contribute to enhancing their personal and functional capabilities

4 - It is clear that companies have paid sufficient attention to encouraging the climate of organizational creativity to achieve sustainable competitive advantage through the role of leaders stimulating creativity, as well as encouraging creative culture, supporting teamwork, encouraging individual behaviors, creating a positive atmosphere among workers and spreading morale

5 - Human resource management based on knowledge enhances the climate of organizational creativity, and this is something taken for granted that knowledge generates creativity, innovation, development

of services, and the introduction of different ideas, methods and ways of working in the companies surveyed.

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