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Impact of knowledge workers characteristics in promoting organizational creativity: An applied study in a sample of Smart organizations

Dr. Abbas G. Atiyah

University of Thi-Qar \Abbas-al-khalidi@utq.edu.iq

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Abstract:

This research aims to test the effect of knowledge workers in enhancing the level of organizational creativity. For this purpose, the hypothesis of the research was developed and field-tested. The study sample included (194) managers and sub-managers in Asiacell company, and the researcher used the questionnaire in collecting data and he analyzed it statistically by using the (SPSS V.23) program. Accordingly, he recommended a number of recommendations, the most important of which is giving the highest importance to knowledge workers in the organization because of their great role in smart organizations.

In order for these successful organizations to continue to function properly, and also to enhance their level of success, they need to possess the tacit knowledge,

1. Introduction

Knowledge is an important element in organizations because organizations cannot achieve success without possessing knowledge that distinguishes them from other competing organizations in the industry. In order for these successful organizations to continue to function properly, and also to enhance their level of success, they need to possess tacit knowledge. , which is the knowledge that is usually in the heads of individuals, that is, it is the knowledge that is not recorded in books or records and is not recorded in video tapes, so these organizations need to possess the knowledgeable human mind, which is characterized by the ability to be creative in the product and process, and this matter It is integrated with providing the appropriate tools for this type of individuals, who are called knowledge workers or knowledge makers, and they are individuals who are usually in important positions and have the ability to produce important and fateful decisions for organizations, and therefore their role is a major role in sustaining the success of the organization.

Based on what was mentioned, this research was conducted to test the model for which it was prepared. The research may consist of several parts. The most important of which is the methodological aspect of the research, which includes the importance and objectives as well as the hypothesis of the research. The research also included the selection of the sample and the validity of the scale used in it. As for the other side, it included the intellectual background of the variables, from which the relationship between these variables arose. In addition, the work related to the statistical analysis of the research was embodied in it, which resulted in a set of statistical results. Based on those results, the researcher developed a set of conclusions and recommendations.

2. Methodology

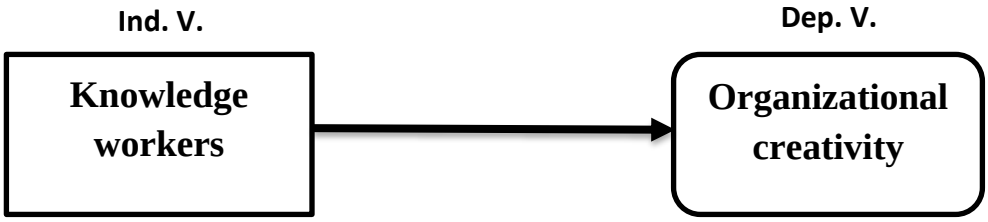
Research Importance

The importance of this research is reflected in alerting companies to the role played by knowledge workers in the organization, which is represented in the tools owned by its distinguished members who are experienced, efficient and able to solve problems creatively. Therefore, this study aimed to measure the level of influence of these individuals in developing and enhancing the creativity processes of the organization and maintaining its competitive level in the industry.

Research framework

The research frame work of this study reflects nature of the relationship between its variables, On field level, it shows the influencing relationship of knowledge workers (an explanatory variable) on organizational creativity (a responsive variable)**.** As this scheme was built and the shapes were designed based on(Sekaran & Bougie, 2016:75) as shown in Figure (1).

Figure (1) Research framework



Sample selection and validity of questionnaire

This study aimed to test its scheme in one of the organizations that adopt technology widely, which the researcher believes is one of the organizations that are characterized by intelligence. The study sample included the main and subsidiary managers of the Asia Cell Company, with a number of (194) members. In collecting data, the researcher relied on a questionnaire that was built based on two studies(Moultrie & Young, 2009:312) & (Hussien Yaas, 2017:15) .

The validity of the search measurement tool was also tested based on (Cronbach's Alpha), where the results as shown in Table (1), as these results indicate that the values of the reliability coefficient are statistically acceptable in administrative and behavioral research because it is greater than (0.70),(Tavakol & Dennick, 2011:54), which indicates that measuring instrument is characterized by internal consistency and stability.

Table (1) Reliability coefficients values

Variable	Researcher	Cronbach's Alpha
KW	)Yaas,2017:15(	.912
OC	)Moultrie& Young,2009:312(	.911

3. Literature review and hypothesis development

The organization's ability to make use of existing knowledge, in addition to generating new knowledge, is the main and influential factor in achieving success(Egan et al., 2004:275) and thus this knowledge is an important source of sustainable competitive advantage. Indeed, there seems to be agreement in management that knowledge is one of the most important intangible resources that twenty-first century companies can have. This belief indicates that knowledge workers in the organization must also be a valuable asset because, as explained(Lee & Maurer, 1997:255), knowledge workers are individuals with the ability to work with ideas, symbols, and other abstractions.

(Peter Drucker) was the first person use the term (knowledge workers) and he explained this concept in several terms, including that the knowledge worker is usually the only person in the organization who is distinguished from others and whose role is a great importance to the organization, or a person who can use and apply knowledge in his work (Mladkova, 2011: 250). In an interview with Peter Drucker (2005) once, the way we study has not changed much since the introduction of printed books 550 years ago, but the Internet is on its way to fundamentally changing the way people learn. Therefore, the emerging knowledge societies will witness a knowledge revolution along with many other dramatic changes(Eschenbach, 2010:475) .

Knowledge workers are also expected to immerse themselves in thinking and engage in creative behaviors as part of the knowledge formation process. Previous research has shown that intrinsic motivation can influence one's creativity. And (Cooper & Jayatilaka, 2006) showed in his experience that the internal motive, and not the external motives or obligatory motives, has a positive and strong relationship to the achievement and continuation of creativity (Markova & Ford, 2011:816). Where one of these cases is presented by knowledge workers, as jobs that require extensive knowledge are complex and involve elements that cannot be monitored and controlled, making evaluation and thus compensation difficult. It is also difficult to codify most of the desirable job-related behaviors (such as thinking), which is very different from the nature of management and control over detailed work (Osterloh & Frey, 2000:21). On the other hand, individuals and not the organization hold that knowledge that can achieve success when employees are ready to apply their knowledge towards productive activities. In this sense, employees have a relative appreciation for the amount of time and effort spent on creative tasks.

Creativity is an individual and cultural phenomenon that allows individuals to transform capabilities into reality (Tan, 2007:345). It represents the individual's awareness and ability to create and develop new, creative and useful ideas about the company's products, practices, services or procedures (Mumford, 2003:108). It is also the responsibility of his creativity. When the ideas generated in creativity are successfully implemented, they become an innovation. Creative theorists have argued that an individual's creativity is an important precedent and precondition for innovation, since creativity has been proposed as an important and primary precursor to individual innovation. Creativity: in general is the production of new ideas or the integration of old ideas in a new way, but it is also the main driver of innovation. Innovation: is the transformation of a new idea into a new product or service, or an improvement in the

organization or process (Heye, 2006:253). A team member with a higher ability to generate new, creative and useful ideas is more likely to create own innovation, which in turn contributes to team and organizational innovation. (Shin et al, 2012) found that creative self-efficacy significantly mitigated the relationship between team cognitive diversity and individual creativity, also between (Shin et al., 2012:207) that employees with proactive personality showed the highest creativity in their jobs, helped by job creativity and support requirements. supervisory. In theory, it follows that the ability to generate and develop new and useful ideas increases the potential for creativity. Where creativity requires absolute novelty of the idea, while innovation requires only the relative novelty of the idea for the unit of adoption. Therefore, adopting a new policy from another organization to the existing one would be innovative but not creative. The definition of creativity also includes a prerequisite for the idea or product to be useful, as the theory suggests that there is a positive relationship between creativity and innovation, the individual and the organization. Based on all of the above, it is clearly indicated that knowledge workers have a major role in enhancing the level of creativity in organizations, and therefore we can formulate the following hypothesis:

There is a significant effect of the characteristics of knowledge workers in promoting organizational creativity

4. Descriptive statistics

The descriptive analysis shows the availability of the study variables in Asia Cell, which appear in Tables (2) and (3), as we review in Table (1) the results of the independent variable (KW), while Table (2) shows the results of the dependent variable (OC) note that they are single variables.

Table (2) Descriptive Statistics of KW

Items	Mean	Std. D.	Relative import.
The company has employees with innovative ideas.	4.0619	.46235	.81
The company has highly skilled and experienced employees.	4.0155	.74442	.80
The company relies on internal experts to solve its problems.	3.7680	.66971	.75

The company has the ability to modify the service.	3.7216	.75140	.74
The company has the ability to adjust in the process.	3.6959	.70180	.74
The company feels the importance of the role of its employees.	4.0773	.60155	.82
The company has the internal capabilities to set up workshops and scientific seminars.	4.1443	.67509	.83
The company participates in exhibitions of offering services and new ideas.	3.9536	.71470	.79
The company is interested in developing the capabilities of its employees.	3.7629	.73792	.75
The company is always ready to preserve the health of its employees.	3.6701	.73013	.73
General Average	**3.8871**	**.6789**	**.7774**

Table (2) shows the means, standard deviations, and the relative importance of answers of study sample towards the (KW) variable. It is noted in this table that item (7) had the highest averages (4.1443) and a standard deviation (.67509), which shows the consistency of the study sample's answers to this item, the relative importance of this item (83%). While item (10) obtained the lowest means, (3.6701), with a standard deviation of (.73013), which shows the consistency of answers of the individuals in study sample, the relative importance of this item was (73%). Based on the foregoing, the general average for this variable was (3.8871), with a general standard deviation of (.6789). Its relative importance was (..7774), compared with the variable (OC) located in the sequence (1).

Table (3) Descriptive Statistics of CO

Items	Mean	Std. D.	Relative import.
The company senses the value of creativity.	3.7784	.60853	.76
The company considers creativity one of the most important elements of its existence.	3.8093	.59333	.76
The level of creativity of the company is high compared to its competitors.	3.8763	.59806	.78
There are many factors that hinder the level of creativity in the company.	4.0206	.74081	.80
Organizational culture helps to achieve creativity.	4.1804	.58781	.84
The company's management has a broad understanding of the concepts of creativity and how to achieve them.	3.7371	.68889	.75
Does the company need more tools to keep pace with achieving creativity?	3.8402	.66771	.77
What are the manifestations of creativity at the internal level of the company?	3.8557	.82688	.77
What are the manifestations of creativity at the external level of the company?	3.8557	.66737	.77
Is solving the problem in the best way one of the forms of creativity?	3.7577	.59189	.75
General Average	**3.8711**	**.6571**	**.7742**

Table (3) shows the means, standard deviations and the relative importance of the answers of study sample towards the variable (OC). It is noted in this table that item (5) has obtained the highest averages, which amounted to (4.1804) and with a standard deviation (.58781), which shows the consistency of answers of the study sample towards this item, where the relative importance of this item (84%). While item (6) obtained the lowest means, which amounted to (3.7371), with a standard deviation (.68889), which shows the consistency the answers of the individuals in the study sample, the relative importance of this item was (75%). According to the foregoing, the general average for this variable was (3.8711), with a general standard deviation

of (.6571). Its relative importance was (.7742), compared with the (KW) variable located in the sequence (2).

Analysis and results

In order to reach accurate results regarding the research hypothesis, the researcher used Simple Regression Analysis to determine the direct effect between the variables. In order to test the significance of the simple linear regression model, the researcher also used the (F) test. If the calculated (F) value is greater than the tabular (F) value, there is a significant effect. And there is no significant effect if the calculated (F) value is smaller than the tabular (F) value at the level ((0.01 and (0.05). Using spss v.23) and regarding making an accurate decision about the research hypothesis, we explain the following:

Table (4) ANOVA[a] Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.236	1	33.236	466.408	.000[b]
	Residual	13.682	192	.071		
	Total	46.918	193			

a. Dependent Variable: OC

b. Predictors: (Constant), KW

Table (4) shows the results of simple linear regression analysis for the purpose of estimating the effect of (KW) on (OC), as the following becomes clear:

First: The calculated value of (F) for the estimated model amounted to (466.408) at the level of significance (1%), and accordingly the hypothesis is accepted, and this means that there is a significant effect of (KW) in (OC) with a confidence degree of (99%).

Second: It is clear from the value of (R^2) of (.708) shown in Table (5) that (KW) is able to explain (70.8%) of the changes that occur in (OC) in the study sample Asiacell. The percentage of (29.2%) is attributed to the contribution of other variables not included in the study model.

Table (5) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.842[a]	.708	.707	.26695

a. Predictors: (Constant), KW

Third: It is clear from the value of (β) of (.811) in Table (6) that increasing the levels of availability (KW) by one standard deviation will lead to an increase (OC) by (81%) from one standard deviation, So the hypothesis is accepted.

Table (6) Coefficients[a]

Model		Unstand. Coefficients		Stand. Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.718	.147		4.873	.000
	KW	.811	.038	.842	21.596	.000
a. Dependent Variable: OC						

Conclusion:

1. The results of the analysis show that there is a clear influence of knowledge workers in promoting organizational creativity.
2. These results show the importance of the role of knowledge workers in raising the value of the company in the market and thus maintaining its role in the industry.
3. The results of the study show the role that knowledge workers play in smart organizations, as these results highlight the importance of the characteristics that characterize knowledge workers in smart organizations.
4. The results of the study show that creativity is achieved only with the participation of individuals with knowledge and high skills who are able to acquire knowledge and transfer it properly.
5. The results of the study warn of the importance of retaining knowledge workers and constantly developing their capabilities.

Recommendation:

1. In order for the results of the study to be applied successfully, the organization must empower its more knowledgeable workers to better demonstrate their capabilities.

2. It is important for the organization to provide knowledgeable workers with the appropriate infrastructure, which has an important role in raising the level of exchange of visions and ideas between them.
3. The organization must provide its employees with good wages. These wages have an important role in feeling stability in the job and thus achieving creativity at work.
4. The organization is responsible for spreading the culture of teamwork, learning from others with knowledge and helping individuals in this matter.
5. The organization must harness its energies towards how to continuously refine the talents of individuals so that there is no gap in such type of workers during successive periods of time.
6. The implementation of these recommendations requires the organization to prepare plans, budgets and programs through which these plans are implemented. Otherwise, they will remain mere words that do not rise to the level of application.

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