The Role of Human Capital in Supporting Knowledge Management Processes in Saudi Industrial Establishments of Food and Beverages

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Abstract

Human capital represents the main supporter of industrial enterprises in light of the knowledge and the information revolution as well as the transition to a knowledge-based economy, with the increasing informational openness and is characterized by the Kingdom of Saudi Arabia attracted to people with experience and skills of technicians and administrators in all industrial fields. So, in the current time it has become imperative for the industrial enterprises attention to human capital related accumulated skills, abilities, capabilities and knowledge, so is the importance of research of modern and the few studies of its kind - to the knowledge of the researcher - which aims to raise the level of knowledge among workers in the industrial area of institutional and competitive performance, as it aims to get results describes how to take advantage of the capital in support of human knowledge management processes. So, this article seeks to answer the following research question: What is the role of human capital in support of knowledge management processes in industrial enterprises of food and beverage? Where the research on all the city of Jeddah factories, which covered the food and beverage, is applied to achieve the aim of the research questionnaire was designed to obtain the necessary data and the work of personal interviews, researchers used the descriptive approach to conduct a survey of statistical mathematical operations. Among the most important and achieved results of the human capital is its supports to the knowledge management processes with an arithmetic average of 2.58 of the axis of human capital.

Keywords: human capital, intellectual capital, knowledge management processes, the food industry, beverage industry.

1. Introduction

Attention to human capital has increased as a source of competitive advantage of industrial enterprises in the context of the era of knowledge to become a real wealth, and is considered by economists first productive element in industrial processes, making it one of the priorities of administrative leaders in industrial enterprises to create the necessary environment for investment in the human element as a modern management strategies focused on raising worker productivity through the application of knowledge management processes and technical use to develop skills, creative abilities and the challenge that faced administrative leadership is the extent to which experienced staff to share knowledge, experience and skills with other employees in industrial organization, so research focuses on the knowledge of the role of human capital in support knowledge management processes in the food and beverage industry, institutions, Saudi Arabia, and in the end of the research the researchers gave the necessary recommendations to preserve the human capital in industrial enterprises.

The researchers has introduced the human capital and knowledge management processes based on the intangible assets of cognitive (skills, abilities and experience) the administrative, technical that all industrial enterprises seeks to preserve and benefit from it as a result of competitive strength between industrial enterprise. [1] defines human capital as a "distinct or a talented group of employees who enjoy enhanced high-end knowledge and expertise that will enable them to renewed tender and transform the organization's resources to the possibilities of practical levels of advanced process capabilities." The researchers define human capital that all of what is owned by the individual of the mentality, the talent, skills, experience the power and the potential for innovation, creativity and respect its behavior, the culture, values of the administrative processes and knowledge of techniques and information systems, and is distinguished by its external relationships with customers to narrow the knowledge gap to build additional value to the organization and check her competitive advantage in the industrial sector under the skilled administrative leadership. The human capital characteristics as indicated [2] provides the skills, high and varied expertise among workers in industrial enterprises and prefer to work within a flexible organizational structures and in the administrative climate which is characterized by decentralization. The importance of human capital lies in competitiveness in the industrial field by focusing on the transfer of knowledge among employees, where he [3] sees that this knowledge can be managed in an exemplary manner at all administrative levels, particularly supervisors to increase the realized value and profits from the innovations, [4] has pointed out to build human capital requirements, which include the creation of appropriate administrative environment, integration policy, scientific research, instilling the concept of knowledge, create a knowledge base.

Both Bateman & Zethami has provided definition of the American Society for Training and Development of the concept of knowledge is why and how and is considered one of the most assets of the Foundation of physical assets as described. So it is clear that knowledge is a product of data processing to turn into information and the promise of understanding the facts, beliefs, concepts, experience, skills of self and capacity to be utilized through the analysis and reasoning to create added value for industrial institution to get excellence in its field. [5,6] refer that knowledge includes properties, it can be generated and eliminated, possesed, storaged, ranked, shared and did not consume the use of which is rooted in individuals. [7] class knowledge into three types namely the fundamental knowledge, advanced knowledge and knowledge innovation. It is here illustrated the concept of knowledge management as stated by [8] that "knowledge management has derived from the concept of intellectual capital after it had been focused on the acquisition and sharing of knowledge." It is knowledge management characteristics and referred to by a number of researchers [9,10] that form organized knowledge map and identify gaps to be covered with a good knowledge of the stores management and attention to human capital as a source of excellence. For the application of knowledge management in institutions must have the basic requirements are available to create the conditions necessary for the success of the application of knowledge management, where he sees the environment [11] that knowledge management has three essential requirements, namely: (1) technological requirement, (2) regulatory requirements, (3) a social requirement, and the knowledge management processes are working in relays among them, it was reported in the intellectual output a set of processes, where researchers determine the variation in the special operations knowledge management Titles, as he used the term stages [12,13] and another called operations [14], and after reviewing the intellectual output of the types of knowledge management processes, the researchers adopted in the

preparation of this research the five knowledge management processes and the Industrial enterprise Manager reliable depending on cognitive and creative properties, that should be enjoyed by supervisors, which mean the acquisition, Creation, organization and accessibility, Co, application.

2. Related Works

It is clear previous studies, obtained by the researchers, that discuss intellectual capital through human capital study, which made many of the industrial enterprises interest with a intellectual capital to enhance the competitive performance in response to various environmental changes, and researchers have sought to review the published intellectual production for the importance of the subject of research between 2010 - 2014 are as follows:

- In the study of [15] entitled "intellectual capital development in the industrial business organizations strategy: a field study on the managers in the Yemeni pharmaceutical manufacturer organizations " The purpose of this research to identify the level of interest in the development of intellectual capital in the Yemeni pharmaceutical manufacturer organizations, and to identify the level of practice of strategy formulation the research. It contains a community of all employees in the pharmaceutical factories. It is applied on the number of (8) factories, were selected sample according to intentionality sample of members of the senior, middle management style, and the number of respondents (71) individuals, and to achieve the objectives of the research and collection data, the researcher designed a questionnaire study and adopted the descriptive analytical method. Search results highlight that the level of interest in the development of intellectual capital in the organizations under study, where the head of the structural money and money for clients came, finally came human capital came. The main recommendations of the research is focusing on the head of intellectual capital, treating with as major strategic source and maintaining an ongoing development, the allocation of the budget to activate the research and development department with the development of product quality, attracting and maintaining the best human talent.
- The study of [16], entitled "The impact of intellectual capital development in the effectiveness of strategic information systems in the food industry companies in Jeddah" The purpose of this research is to identify the impact of intellectual capital development in the effectiveness of strategic information systems in the food industry companies in Jeddah. The research community of the food industry companies operating in the city of Jeddah, for the purpose of achieving the objectives of the research. The desktop scanning was carried and look at the theoretical side and previous studies relevant to the subject and to achieve objectives of the research. The questionnaire was developed for the purpose of data collection, were distributed 401 questionnaires to a sample research community vocabulary consisted of employees in supervisory positions in the food industry companies and travel by (7) companies, and the number of valid questionnaires and recovered for analysis (328) questionnaire. Search results highlight that the perceptions of the respondents in the food industry companies to the level of intellectual capital development and the level of effectiveness of the managers came a low level. The main recommendations of the research researched guide to the need to connect attracting human resources efficiency and attention to the head of intellectual capital standards by clarifying the rights and obligations and opportunities for development policy departments.

The study of [17] entitled "The Impact of Human Resource Creations on Intellectual Capital in the Australian Biotechnology Industry". The purpose of the research is to study the impact of human resource Creations on capital intellectual in the Australian biotechnology industry. The research used descriptive analytical method and conducted various stages of data analysis to test hypotheses, including the preliminary analysis, confirmatory factor analysis and regression analysis. The research sample reached (43) plants. The main results of the study are the six components of human resources, which is (recruitment, selection, training, development, documentation, information systems, equality and cooperation) and all related to the enterprise level of intellectual capital, human, organizational, social, respectively, contribute to the intellectual capital theory development, and the intellectual capital is still at an early stage in terms of construction, composition, measurement, evaluation and finally reporting. The main recommendations of the study concerns on the components of human resources for its effective role in the development of intellectual capital theory and support the enterprise management to the development of intellectual capital. The research presented administrative, useful and specific guidelines to manage intellectual capital of effective practitioners in the field of Australian biotechnology industry.

Our vision in the last related works can be analyzed as follows: the researchers noted, through what had been reviewed Arab and former foreign studies, that no Arab study directly addressed the subject of intellectual capital in support of knowledge management processes in industrial enterprises of food and drinks in Saudi Arabia, and the Arab Studies, which touched on the subject of human capital in general are recent studies, where human capital concept in the Arab environment is still a new subject in the process of discovery and morphology. [18] refers to the low level of interest in human capital in the pharmaceutical factories in Yemen, and the need for attention to the head of intellectual capital in general, does not address search over the support of the intellectual capital of the knowledge management processes, while [19] explains in his study of the effectiveness of human capital when managers level was low, which refers to the researcher with a intellectual capital level, according to the themes focus on information systems, as well as research does not consider knowledge management processes. The research does not have great interest to the level of specialization and information in libraries in the Arab world, because it is one of the modern subjects, while we find that the study of [20] addressed to the study of the impact of human resource components, linked in the industrialized and it did not address to link human capital as one of the intellectual capital components in support knowledge management processes. The research focuses on the role of intellectual capital in support of knowledge management processes in industrial enterprises of the food and beverage products.

3. The Problem Formulation

Saudi Arabia is characterized as a magnet for people with expertise, skills and knowledge of the technical staff and administrators in all industrial fields, where they are attracted all levels to work in the food and beverage industry institutions paid a high functional features. [21] refers that workers Saudis rate generally in the private sector is (15.15%), while the proportion of non-Saudis is (84.85%), while workers in occupations of industrial chemical processes and food industries estimated (10.67%), while the proportion of non-Saudis estimated (89.33%), and that the number of visas issued to the same industry

amounted to (11533) for the year 2013, and studies indicate such a study [20], which indicates the high level of attention to the head of intellectual capital in the Yemeni pharmaceutical industry organizations, but it came attention human capital in the third level, while came study [22] to the low level of interest in intellectual capital in the food and beverage industry, institutions focusing on information systems, and that problem embodied in the extent of the reservation to knowledge held by employees and the level of adoption of industrial enterprises scientific methods to document the experiences and skills of workers in the industrial field, so this research seeks to find out the role of human capital in support of knowledge management processes in the food and beverage industry institutions. The research topic focuses on following research question: What is the role of human capital in support of knowledge management processes in the food and beverage industry institutions?

4. The Methodology of solution

4.1 Curriculum, Limits and sources of search data collection

This study is based on the survey method, the researchers designed a questionnaire directed to the administrators of factories to collect data and conduct interviews to know their views and touch current and future plans on the subject of the study. The research focuses on the role of human capital in support of knowledge management processes in the food and beverage industry organizations where do not have other sector, including in the industrial field, and are applied in the city of Jeddah. Note that the distribution of the questionnaire, work and interviews during the period from 22/5/1435 to the end of 10/28/1435 from the academic year 1435 AH.

4.2 Entire Community and the Research Sample

The number of Saudi factories is (6519) factories. (Ministry of Trade and Industry 0.2013 m) represents the total community, and applies research on the food and beverage industry, institutions, and directes "supervisors" in the city of Jeddah, of (113) factories (https://eservices.sidf. gov.sa/factoryguide/default.aspx). The number of valid questionnaires and recovered for analysis is (89) questionnaires (82%).

4.3 Statistical Methods Applied in This Work

After getting the questionnaire in its final form, it has been processed statistically using the Statistical Package for Social Sciences program Statistical Package for Social Sciences and symbolized by the symbol (SPSS), has been used in data processing statistically the following methods:

- It used reliability coefficient "Alpha Cronbach" to measure the stability of search tool.
- It used the arithmetic mean and standard deviation of the major axes to see high or low
 opinions of respondents also stated in the order of axes in terms of the degree of
 response by the highest arithmetic average.
- It used test (C) or the comparison test of the two sets of independent variables test was used (Kndependent-Samples T Test), to indicate statistically significant differences (which are at the level of 0.05 or less) in the views of the research sample according to the variables of human capital and operations of management knowledge.

• The test (P) has been used or variance analysis (One-Way ANOVA) to demonstrate statistically significant differences (which are at the level of 0.05 or less) in the views of the research sample according to the variables of human capital and knowledge management processes, which have more than sneaky.

4.4 Scale of the Averages Length

To achieve the objectives of the research and analysis of the collected data, and to determine the length of the cells Likert quartet scale (minimum and upper) used in the second and third section of the questionnaire research-oriented supervisors at the factory, where the account-term (4-1=3), and then was dividing by the number of cells measure for the correct length of the cell is estimated (3/4=0.75), and the length of the average search variables as follows: (1 to 1.75) = Disagree strongly, (1.75 to 2.50) is disagree, (2.50 to 3.25) = agree, (3.25 to 4) = strongly agree.

4.5 Measuring the Sincerity of the Questionnaire

The test of virtual honesty has been relying on, through the presentation of the questionnaire in the initial image on the eight arbitrators from a number of agencies as King Abdulaziz University, Institute of Public Administration, experts in the Ministry of Planning, specialists from the factories in question, due to the multiplicity of areas of research researchers were keen on diversity arbitrators to include in the field of technical and human resources management, public administration and information science. The researchers made some amendments agreed to by the majority of the arbitrators, based on the observations made by the arbitrators.

4.6 Measuring the Stability of the Questionnaire

The internal consistency coefficient "Alpha Cronbach" was used and determined the stability of search tool as the researchers used random exploratory sample strength (30) plants, the internal consistency coefficient of Cronbach's alpha was account to the axis of human capital is equal to (78%), while the sub-axes (knowledge, training, skills, abilities and practical experience) respectively equal to (0.820, 0.786, 0.785, 0.760), while the axis of knowledge management processes is equal to (82%), while the sub-axes equal to (the acquisition, Creation, organization, accessibility, participation and application) respectively (0.780, 0.795, 0.763, 0.781, 0.820), which shows the stability of the axis phrases, and this value is very reassuring to the extent of stability Search tool, and refers to the stability of the results that can be produced by this study tool when applied.

5. Chart Analysis and Numerical Results

During this review of research data, which includes answers to the sample individuals "supervisors" and covering human capital axes and knowledge management processes through the analysis of the following themes:-

5.1 Relationship of human capital to support knowledge management processes

Table (1) shows human capital axis containing the number of sub-themes that illustrate the interest of human capital in industrial enterprises, according to the views of supervisor's focus of a research sample:

Table 1: Relationship showing the sub-themes of human capital in the factories by the views of the supervisors of the research sample

N	axis of human capital		strongly agree	agree	disagree	strongly disagree	arithmetic mean	standard deviation	arrangement	Axis case
1	training	R %	18 30.2	61 68.5	18 11.2	-	3.09	.557	2	Agree
2	skills and abilities	R	-	79	10	-	2.89	0.318	3	agree
		%	-	88.8	11.2	-				
3	scientific expertise	R	-	66	23	-	2.74	0.440	4	Agree
		%	-	73.2	25.8	-				
4	knowledge	R	-	64	25	-	2.72	0.452	1	agree
		%	-	71.9	28.1	-				agree
General Human capital		R	-	52	37	-	2.58	.0496	-	agree
		%	-	41.6	58.4	-				

Table 1. also shows repeatability distributions, values of averages, standard drift to the axis of human capital and its branches by the views of the supervisors of the research sample, researchers offered number (4) sub-axes represent human capital, it was found that the arithmetic mean of the Sub-axes estimated between (2 0.72 to 3.09) and standard deviation between (0.318 to 0.557), and the results appeared to the axis of the head of general human capital refers to the approval of supervisors rate of (58.4%), and not corresponding to a rate of (41.6%), with a mean (2.58) and a standard deviation (0.496). And that the most influential sub-themes, which contributed to the axis is "training" the consent of the estimated (68.5%) and the mean of the ability of (3.09) and standard deviation (0.557). In addition to less influential in the center of a sub-human capital is the focus of "knowledge" by the consent of (71.9%) and the mean of the ability of (2.72) and standard deviation (0452). We conclude from the foregoing that the majority of the supervisors of the research sample (agree) in general on human capital and of its incoming axis in each of the sub-themes phrases axis.

5.2 The axes of knowledge management processes

Table 2 shows axes of knowledge management processes, which consists of the acquisition, Creation, organization, accessibility, participation and application, which includes a number of phrases that illustrate the interest of industrial enterprises conduct knowledge management, according to the opinion of "supervisors" sample as follows:

Table 2 Relationship showing the arithmetic mean and standard deviation of the sub-themes to the axis of knowledge management processes

N	the axis of knowledge management processes		strongly agree	agree	disagree	strongly disagree	arithmetic mean	standard deviation	arrangement	Axis case
1	Creation	R	-	59	30	-	3.03	0.280	2	Agree
		%	-	66.3	33.7	-				
2	application	R	5	82	2	-	3.03	0.280	5	agree
		%	5.6	92.2	2.2	-				
3	sharing	R	-	89	-	-	3	000	4	Agree
		%	-	100	-	-				
4	Acquisition	R	-	84	5		2.94	0.232	1	agree
		%	-	94.4	5.6	-				
5	regulation and availability	R	-	69	20	-	2.78	0.420	3	agree
3		%	-	66.5	22.5	-				
Ge	General knowledge		-	87	2	-	2.98	0.149	-	agree
management processes		%	-	97.8	2.2	-				

Table 2 shows repeatability distributions and values of averages and standard drift to the axis of knowledge management processes and its subsidiaries by the views of the supervisors of the research sample, researchers offered (5) branches axes represent knowledge management processes, it was found that the arithmetic mean of the axes estimated between (1.64 to 2.88) and standard deviation between (0.271 to 0.496), while the knowledge management processes in general refers to the approval of supervisors through an agreement rate of (97.8%) and the lack of corresponding rate of (2.2%) of them, with a mean (2.98) and the deviation standard (0.149). The most influential themes which have contributed to knowledge management processes is the focus of "Creation" the consent of the estimated (66.3%) and the mean of the ability of (3.03) and standard deviation (0.280). the less influential axis in knowledge management processes is the "regulation and availability" where the results appeared to approve a rate of (66.5%) and the mean of the ability of (2.78) and standard deviation (0.420). We conclude from the foregoing that the majority of the supervisors of the research sample (agree). In general the knowledge management processes and of its incoming axis in each of the sub-themes phrases.

6. Conclusion and Recommendations

In the presented work, the research problem is concentrated in trying to figure out the role of human capital in the food and beverage industry organizations in support of knowledge management processes, and the number of respondents (89) plants representing "supervisor's category" The rate of response rate (82%). The research included the first two axes of human capital with four sub-axis, and the second knowledge management processes with five sub - axis, researchers have tried to answer the research question: What is the role of human capital in the industrial enterprises of food and beverages in support of knowledge management? The study applied to all city of Jeddah factories which covered the food and beverage, questionnaire was designed to obtain the necessary personal interviews data to achieve the goal of research, and researchers used the descriptive approach to conduct the survey mathematical analysis of statistical operations.

The results indicate that supervisors study sample agree on human capital and its subthemes axis (knowledge, training, skills, abilities and practical experience) with a mean (2.58) it supports knowledge management processes, and industrial enterprises have an interest in human capital, and the most influential sub-themes that have contributed to human capital axis is the axis of "training" by the consent of (68.5%), and a mean (3.09). The results indicate that the supervisors sample agree on knowledge management processes and of its sub-themes (acquisition, Creation, organization, accessibility, participation and application) with a mean (2.98). That industrial enterprises have directed application of knowledge management to focus on human capital as one of the intellectual capital components, and the most prominent influential themes and that contributed to the knowledge management processes is the "Creation" axis by approval of (66.3%) and a mean (3.03) standard deviation (0.280). Among the most important results that the human capital that supports knowledge management processes and is supported by the arithmetic average (2.58) of the axis of human capital, and in the light of the most prominent findings of the researchers, submit the following the most important recommendations:-

- 6.1. Strategic management is supported administratively, technically and financially the policies and procedures that support the development of knowledge management processes.
- 6.2. The need to establish a comprehensive plan to adopt the provision of types of administrative support for the success of knowledge management processes through the necessary technical and administrative environment secure.
- 6.3. There is an importance of identifying training needs for each employee to provide appropriate training for knowledge management processes.
- 6.4. Provide appropriate physical environment for employees in the organization to work on training workers about knowledge exchange in collaboration with specialized in that area on the domestic, regional and international-scale training centers.
- 6.5. There is an importance of issuing the culture of informational cooperation between workers in the industrial organization for the exchange of information, knowledge, experiences and ideas through the use of information technology.
- 6.6. There is an importance of building an organizational culture that supports knowledge management processes among workers in the industrial establishment to maintain the diverse knowledge which cannot be obtained easily.
- 6.7. It is necessary to devise ways and means of incentive pushing workers to deal with all the knowledge management processes to take advantage of their experience and knowledge and dissemination in the workplace.

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