Using Knowledge Management To Gain Competitve Advantage In

Jordanian Pharmaceutical Industrial Organization

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ABSTRACT

The ability to store, capture, and disseminate knowledge within and across pharmaceutical organizational boundaries has challenged manager for many years. However, as product lifecycles have decreased and environmental complexity and volatility have increase, the need tom manage knowledge is intensifying, particularly across the value chain. Firm view knowledge and knowledge management as part of their strategic orientation. The difficulties of managing knowledge of are faced by pharmaceutical firms of all size. Low - cost strategies may emphasize knowledge that can be used to cut costs, lower prices, and short cycle times whereas differentiation strategies may emphasize, knowledge that adds value to a product giving it unique characteristics that serve to differentiate it from the competition. This research examines the process of acquisition, retention, maintenance, and retrieval of knowledge both within the firm through organizational memory and across the value chain through knowledge management and compares these practices for small and large firms(Chang, Ching-Hsun, 2011)

This study focused on the relationship between knowledge management and competitive advantages in pharmaceutical firm, it also reviewed in the research objectives, and its problems to find out solutions and to write down recommendations and suggestion that may be helpful for others. The study has reviewed some of the assumptions associated with this matter and the theories that worked out for the collection of information is a questionnaire which was adopted in the analysis the final, after collecting the information analyzed used SPSS program and reviewed and discussed the results and explaining them in tables and figures, at the end, results and recommendations reached.

Key words: knowledge management, competitive advantage, pharmaceutical organizational

1. INTRODUCTION:

Theoretically, scholars and researchers focused on relationship between knowledge management (KM) and competitive advantage (CA), since most international organizations are using knowledge and science, based on new technologies, utmost, this advantage provided leading position in international markets(Davenport, Tomm,2008).

For the purpose of this paper, a proposed organization in Jordan pharmaceutical form is a large organization, 260 employees are working inside, beside 20 sales representatives outside the organization. This organization, even as a leading pharmaceutical faces competitive advantage since new pharmaceutical foreign companies has been established in the last few years. Practically, this paper finds out main factors affected this organization, and introduces some recommendations and solutions (Survary, M., 2005)

> The importance of knowledge to the complex, competitive and global business environments which exist in the 21st century cannot be overemphasized, and those businesses that know how to effectively acquire, capture, share, and manage this information will be the leaders in their respective industries. We have moved into a period where competitive advantage is gained not just

merely through access to information but, also- more importantly - from new knowledge creation Knowledge management is an emerging, interdisciplinary business model dealing with all aspects of knowledge within the context of the firm, including knowledge creation, codification, sharing, and using these activities to promote learning and innovation (A. Bollinger, R. Smith 2001)

In today's economy, the basic economic resource is no longer capital, or labour, or natural resources, but knowledge. Peter Drunker coined the term knowledge work in the early 1960, but only in recent years have managers begun to recognize knowledge as an important resource that should be managed, just as the manage cash flow, human resources or raw materials particularly for companies that are striving to be learning organizationsthe question her that, what do we mean by knowledge? To answer this question we should distinguish knowledge from data and information, Amore simplistic view considers knowledge to be at the highest level in a hierarchy with information at the middle level and data to be at the lowest levelAccording to this view, it is important to emphasize that data, information, and knowledge are not interchangeable concepts. However, Davenport and Prusak(C. Haxel, 2001). pointing that organizational success and failure can often depend on knowledge which of them you need, which you have, and what you can or can't do with each.

Most working definitions, in the literature point to fundamentally the common idea that knowledge management can incorporate any or all of the following four components, business processes information technologies, knowledge repositories and individual behaviors, with the aim of improving organization productivity and competitiveness (P. Heisig, 2001).

However suggesting that for an organization to remain competitive it must effectively and efficiently create, locate, capture and share knowledge and expertise in order to apply that knowledge to solve problem and exploit opportunities (Agha, Sabah; Alrubaiee, Laith & Jamhour, manar, 2012),

Many others think that order to improve its competitive advantage, an organization should have to processes which acquire new knowledge.

We believe that one of the ways to achieve this is to create, generate, develop, build and construct knowledge. It may be created through conducting research and development or via individual learning(Chang, Ching-Hsun, 2011).

2. Statement:

The research problem focuses, in general, on high competitiveness that faces industrial organizations, and Jordanian pharmaceutical ones particular, especially after many foreign firms established its factories here in Jordan. Most of these companies have their competitive advantages, while they are using modern technology and scientific methodologies in their manufacturing process, marketing.

Our proposed pharmaceutical company faces many problems, including;

- It has a major problem in identifying and using knowledge management through its managerial levels.
- The proposed company does not apply knowledge management strategies in facing its competitiveness advantages from other competitors.

3. Hypothesis

This research paper examines the following hypotheses:

Main hypotheses:

Using knowledge Management leads to gain competitive advantage.

Sub hypotheses:

Hypotheses 1: structural knowledge management has significant

Positive influence on the competitive advantage.

Hypotheses 2: Relation knowledge management has significant

Positive influence on the competitive advantage.

Hypotheses 3: structural and Relation knowledge management will be

Positively correlated with one other.

4. Importance of the study

The literature review reveals that there are several organizations that have spent substantial amounts of money on applying KM, which implies that KM is very important to these companies in their pursuit of competitive advantage. Grey (A. Bollinger, R. Smith ,2001) mentioned that companies are applying KM to serve customers well, and they must reduce their cycle times, operate with minimum fixed assets and overhead (people, inventory and facilities), shorten product development time, improve customer service, empower employees, innovate and deliver high quality products, enhance flexibility and adoption, capture information, create knowledge, share, and learn. Further he suggested that none of this is possible without a continual concentration on the creation, updating, availability, quality, and use of knowledge by all employees and teams, at work and in the marketplace.

5. Goals and Aims of the study

- Access to the full knowledge of the concept of competitive advantage.
- To illustrate the importance and benefits of using knowledge management in companies.
- To clarify the standards that companies must obtain while introducing knowledge management.
- To identify the relationship between knowledge management and competitive advantage.

- Measuring of the extent to increase competitive advantage through pharmaceutical companies in Jordan.

6. Methodology:

The methodology followed for conducting the study includes the specifications of research design, sample design, questionnaire design, data collection and statistical tools used for analyzing the collected data.

6.1 Research Design:

The research paper tries to find out the relationship between using knowledge management in Jordanian pharmaceutical companies to gain competitive advantage in the local market, the research has been divided to three chapters, where chapter one introduces the problem, importance, goals and aims and the research hypotheses.

Chapter 2, introduces the definition of <u>knowledge</u> <u>management</u> <u>competitive</u> advantages, and the synergy between theses two concepts.

Chapter three introduces the research results and analysis of the <u>individual's</u> point of view to test the research hypotheses.

6.2 Population and Sample

The research population consists of all employees who works in the Jordanian pharmaceutical companies, since it is very difficult to reach all of the population, the researcher has chosen a random sample consists of 50 employees working in two big pharmaceutical companies here in Jordan, DAD, and Dar AL-Hekmeh.

7-Results

7.1 Demographic Data

The researcher found out the respondent's answers by using frequencies and percentages of their answers. The following table illustrates the findings of the respondent's answers.

Factor	Factor Item		Percentage%
	Less than 25yrs	7	15.7%
A.c.a.	25-35yrs	12	25.5%
Age	35-45yrs	25	53.2%
	More than 45yrs	3	6.4%
Gender	Male	29	61.7%
Gender	Female	18	38.3%
	Single	11	23.5%
Marital Status	Married	31	65.9%
	Other	5	10.6%
	Less than 5yrs	11	23.4%
Experience	5-10yrs	26	55.3%
	More than 10yrs	10	21.3%
Total		47	100%

 Table (1): Frequencies and Percentages of the respondents

The previous table shows the followings:

- More than 50% of the sample is in middle age.

- Male are more than female in the sample.
- More than half of the sample are married.

- More than half of the sample has practical experience higher than 5 years.

The researcher use liker scale to find out the respondent's point of view and attitudes towards the research questions, these answers has been distributed as follows;

- Strongly agree: 5points
- Agree: 4 points
- Neutral: 3pionts
- Disagree: 2points
- Strongly disagree: 1point'
- -

7.2 Data Analysis

The following tables show the results of the empirical test.

Table 3 through Table 6 is outputs of SPSS Statistics software.

Table (2): Means and Standard Deviations of the respondents on the first hypothesis statement

No.	Statement	Mean	Std
1.	Human skills residing with and utilized by employees	4.23	1.02
2.	Human knowledge residing with and utilized by employees		0.93
3.	Human abilities residing with and utilized by employees	3.56	0.95
4.	The company's employees are wildly considered the best in our services	4.55	0.54
5.	The company's employees are experts in their jobs and functions	3.12	1.16
6.	The company's employees are developing new ideas and innovation	4.66	0.61
7.	The company's organizational environment and shared values provide great support to innovation	4.88	0.57
Grand M	N ean	4.08	0.38

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As shown in the table (2) the highest mean was item #7 "organizational environment shared values provide great support to innovation"(4.88) with(0.57) Standard deviation (Std), while item #5 " Our employee are experts in their jobs and functions" scored the lowest mean (3.12) with (1.16) Std. where the grand mean of all the answers where (4.08) with (0.38) Std. which shows that the overall point attitude of the respondents are highly concerned in knowledge management.

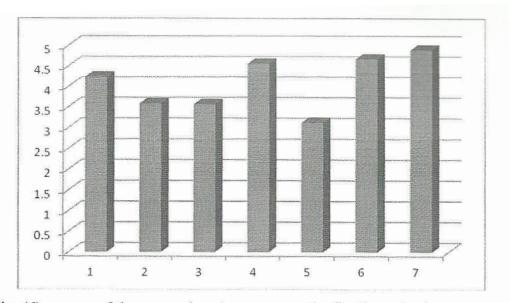


Fig. (6): means of the respondents' answers on the first hypothesis statements



No.	Statement	Mean	Std
8.	Our organization has self controls units cars in knowledge	3.44	0.88
9.	Our origination structure adjust according to environment changing	4.01	1.06
10.	Our organization uses patents and licenses, brand, as way to keep and store knowledge	3.56	0.97
11.	Our organization encourage informal relationship to exchange knowledge	3.65	0.76
12.	Our organization's culture contains valuable ideas ways of doing business	4.21	1.25
13.	Our organization has enough data bases and access for that	4.11	1.22
14.	Our organization embeds much of its knowledge and information in structures, systems and process	3.89	1.14
15.	Our organization has its own out and inside communicate net that helpful in exchange knowledge	4.09	1.17
Grand I	Mean	3.87	0.41

Table (3): Means and Standard Deviations of the respondents on the second hypothesis statements

As shown in Table(3) the highest mean was item #12 " Our organization's culture contains valuable ideas ways of doing business " (4.21) with (0.57) Standard deviation(Std), while item #8 " Our organization has self controls units cars in knowledge " scored the lowest mean (3.44) with (0.88) Std. Where the grand mean of all the answers where (3.87) with (0.41) Std.which that the overall point attitude of the respondents are highly concerned in knowledge management.

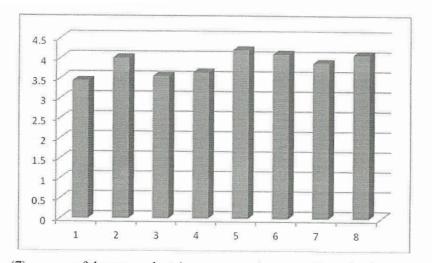


Fig. (7): means of the respondents' answers on the second hypothesis statements

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	Table (4): Means and Standard Deviations of the respondents on the third hypothesi.	s statements	
No.	Statement	Mean	Std
16.	Employees are skilled at collaborating with each other to diagnose and solve problems		1.12
17.	Employees share information and learn from other	4.02	1.21
18.	Employees exchange and interact ideas with people from different areas of the company	3.66	1.04
19.	Management encourage employees to develop their own skills, knowledge and information through employees	3.52	1.11
20.	Management present motivations and rewards for exchange knowledge and information through employees	3.14	0.97
21.	Employees partner with customers, Develop solutions	4.12	0.86
22.	Employees apply knowledge to solve problem and catch opportunities that arise around	4.09	1.13
23.	Management present net business for all partner: suppliers, importers, srakeholders, etc.	3.01	0.54
Grand	Mean	3.72	0.42

As shown in Table (5) the highest mean was item #16 " Employees are skilled at collaborating with each other to diagnose and solve problems " (4.23) with (1.12) Standard collaborating with each other to diagnose and solve problems " (4.23) with standard deviation (Std), while item #20 " Management present motivations and rewards for exchange knowledge and information through employees " scored the lowest mean (3.14) with (0.97) Sts. Where the grand mean of all the answers where (3.71) with (0.42) std. which shows that the overall point attitude of the respondent are highly concerned in knowledge management.

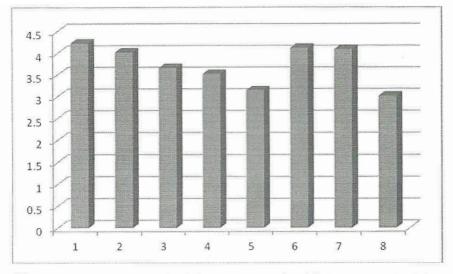


Fig. (8): means of the respondents' answers on the third hypothesis statements

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No.	Statement	Mean	Std
24.	Our organization achieved a competitive advantage due to its cost leadership strategy	3.87	0.73
25.	Our organization identify a position in the market commensurate with the resources and capabilities of the business	3.65	0.75
26.	Our organization's competitive advantage generate customer's value	4.08	1.02
27.	Our organization developing competitive advantage to identify its relevant competitors	4.22	1.25
28.	Our organization achieved a competitive advantage due to its differentiation strategy	4.23	1.31
29.	Service flexibility is one of a competitive advantage resources	4.12	1.02
30.	Speed of offering services led to achieve a competitive advantage	4.32	0.66
31.	Our organization's products and services diversity is one of a competitive advantage resources	3.96	0.89
Grand Mean 4.06			0.68

Table (5): Means and Standard Deviation of the respondents on the fourth hypothesis statements

As shown in Table (5) the highest mean was item #30 " Speed of offering services led to achieve a competitive advantage " (4.32) with (0.66) standard deviation (Std), while item #15 " Our organization identify a position in the market commensurate with the resources and capabilities of the business " scored the lowest mean (4.06) with (0.42) std. which shows that the overall point attitude of the respondents are highly concerned in knowledge management.

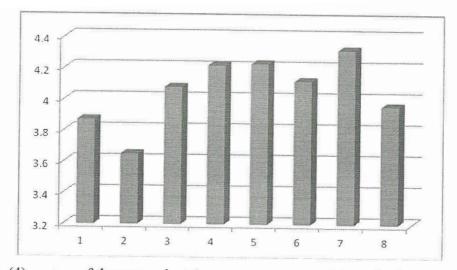


Fig. (4): means of the respondents' answers on the fourth hypothesis statements

7.3 Correlations among variables

As shown in table (6) we presents the mean, standard deviation, zero-order correlation and Cronbach's alphas for all variables, with regard to our hypothesis based on the rationale that intellectual knowledge management effect on competitive advantage, we found that knowledge management high significantly and positively correlated with competitive advantage (r= 0.61, p<.05). Thereby more interested in skills, knowledge, and capabilities of employees will achieve more competitive advantage in organization. Also structural knowledge management with competitive advantage was highly significantly and positively correlated (r= 0.73, p<.05). Similarly relational knowledge management with competitive advantage as moderately significantly and positively correlated (r=0.39, p<.05). Thereby employee's interaction and exchange knowledge and information's will increase organizational competitive advantage. Also there were significantly and positively correlated between hypothesis 1, 2 and 3 with the mean hypothesis. (r>0.29, p<.05).

Tuote (0). Descriptive Statistics and Correlations							
Hypothesis #	df	Mean	Std	R	Sig.(P)	Result	
Main	46	4.08	0.38	0.73	0.01	Agree	
One	46	3.87	0.41	0.29	0.02	Agree	
Two	46	3.72	0.42	0.56	0.03	Agree	
Three	46	4.06	0.68	0.61	0.00	Agree	

Table (6): Descriptive Statistics and Correlations

8. Conclusions & Recommendations 8.1 conclusions

8.1 conclusions

Overall our findings to specific hypothesis were:

- H1 provide strong significant and positive influences on competitive advantage were supported.
- H2 Structural knowledge management will have strong and positive influence on competitive advantage was supported.
- H3 Relational knowledge management with competitive advantage was moderately significant and positive supported.
- The main hypothesis of knowledge management will have strong and positive influence to gain competitive advantage.

Firm will achieve higher levels of competitive advantage when they practice a combination of knowledge management, which implies acquisition, dissemination and responsiveness to knowledge and market orientation that has the customer and competitor as the center of attention.

This intrinsic linkage in developing a com-petitive advantage requires appropriate capabilities and a fair balance of these two resources. The quality and type of market information acquired and disseminated in the organization determine the level of knowledge management and the ability to build a competitive advantage. The results further depict the direct and indirect influential path on competitive advantage by knowledge management.

8.2 Recommendations

The company is interested in its employees' knowledge management, and tried to create the appropriate atmosphere for the staff to work enthusiastically with their proposed careers, and interest shall undertake the following to their importance and that between them there a lack interest from the company.

The research recommends the following:

- To support knowledge management inside and outside company's strategies.
- To support human capital in developing its knowledge management criteria.
- To find out the most factors that effect lowering the company's competitive advantage within the local market for increasing its market share.
- The more knowledge management that pharmaceutical companies uses the more competitive advantages they can gain.

9- References

A. Bollinger, R. Smith (2001) Managing organizational knowledge as a strategic asset Journal of knowledge management, Vol. 5, No. 1, pp. 8-18.

B. Durrance (2000) Some Explicit Troughs on Tacit Learning. In Hermans, J. (ed). Knowledge Management Yearbook 1999-2000. Pp. 28-36. USA: Butterworth-Heinemann.

B. Gupta, and L. Iyer, (2000) knowledge Management System: An Imperative for supporting the E- commerce customer, proceeding of the 2000 IRMA International Conference, An charge, Alaska.

C. Haxel, (2001). Knowledge Management Best Practices In Europe. New York: Library of congress Cataloging. P. Heisig, (2001). Business Process Oriented Knowledge Management. In Mertins,K., Heising, P., and Vorbeck,J. (eds). Knowledge Management Best Practices in Europe.pp.1-57. Berlin, Springer-Verlag.

T. Davenport and L. Prusak, (1998b). know WhatYou Know, Reprinted with permission of Harvard Business School Press & Special arrangement with CIO.

Survary, M. (2005) Knowledge Management and Competition in Consulting Industry.

Management Review, Vol. 41, No2.

Davenport, Tom (2008). "Enterprise 2.0: The New, New Knowledge Management?". Harvard Business Online, Feb. 19, 2008

Luban, F., & Hincu, D. (2009). Interdependency between simulation model development and knowledge management. Theoretical and Empirical Researches in Urban Management, 4(1(10)), 75-85.

Agha, Sabah; Alrubaiee, Laith & Jamhour, manar, (2012), "Effect of Core Competence on Competitive Advantage and Organizational Performance", *International Journal of Business and Management*, Vol. 7, No. 1: 192 – 204

Chang, Ching-Hsun, (2011), "The Influence of Corporate Environmental Ethics on Competitive Advantage: The Mediation Role of Green Innovation", *Journal of Business Ethics*, Vol.104:361–370

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