

Knowledge Management Processes and their Impact on Leadership Skills: An Exploratory Study of the Opinions of a Sample of Managers in the Iraqi General Cement Company

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Abstract : The research aims to study the processes of knowledge management and its impact on the classifications of leadership skills in the General Company for Iraqi Cement by selecting a group of managers in the company.

In order to analyze the results of the research, find out the correlation and measure the impact, the statistical program (SPSS) was adopted.

Among the most important conclusions obtained: There is an impact of knowledge management processes in the classifications of leadership skills, as it was found that there is a correlation between knowledge management processes and classifications of leadership skills, and with regard to the research recommendations, attention must be paid to the strategic vision of the company and ways to implement it, and knowledge management processes must be applied And develop them continuously because of their effective contribution to administrative leadership skills.

Key Word: Knowledge management, Knowledge management processes, leadership skills, classifications of leadership skills.

INTRODUCTION: The concept of knowledge management has become one of the most important concepts in modern institutions, but the challenge facing administrative institutions lies in the necessity of the emergence of new generations of leaders who adopt modern administrative concepts, the most important of which is knowledge management and its operations, as well as attention to leadership competencies qualified to lead institutions with competence and competence. Adopting modern administrative concepts based on control and oversight, and its practices are characterized by resistance to change and renewal.

The recent administrative studies that have been conducted also indicate that it is necessary to select administrative leaders with professional competencies that qualify them to assume leadership roles and positions in institutions, take appropriate decisions, and use scientific methods to solve problems to move institutions to more innovation, creativity, excellence and quality.

The first: Research methodology

1-1 / Research Problem:

- 1) Is there an impact of knowledge management processes on leadership skills ratings?
- 2) Is there a correlation between knowledge management processes and leadership skills ratings?

1-2 / Research Important:

- 1) Indicating the extent to which the company under study benefits from knowledge management processes and the importance of its impact on leadership skills.
- 2) Knowledge management is one of the modern topics for the company's research community, as well as the lack of interest in its operations.
- 3) Leadership skills and their ratings are critical to Iraqi companies in general.

1-3 / Research Objective:

The aim of the research is manifested through:

- 1) Providing a conceptual framework to link the research variables to knowledge management processes in general and leadership skills classifications in particular.
- 2) Provide a clear view of how knowledge management processes contribute to leadership skills rankings.

1-4 / Research Hypotheses:

The research aims to test the following two hypotheses:

- 1) There is an impact of knowledge management processes on leadership skills ratings.
- 2) There is a significant correlation between knowledge management processes and leadership skills classifications.

1-5 / the research model:

Figure (1) shows the correlation and impact measurement relationship between the two research variables:

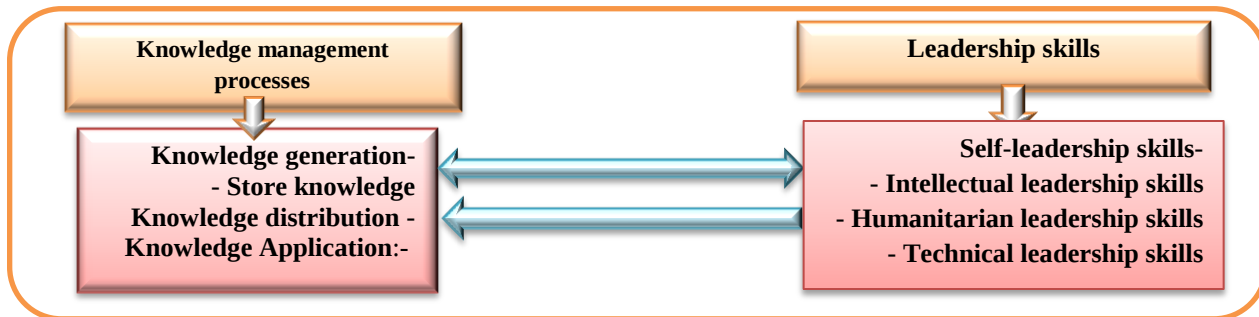


Figure (1) Research form

The second: The theoretical framework

2-1 / knowledge management

Knowledge is the understanding gained through experiences (Awad and Chazir, 2004: 33). Knowledge management can be defined from different points of view, some of which came from the point of view of information systems, and some of them from the point of view of human resources, and other definitions reflect the point of view of strategic management, as knowledge management processes have become important to achieve competitive advantage (Jashapara, 2011: 11).

And (Schermerhorn, 2010: 43) defines it as the set of processes by which organizations can rely on information technology to develop, organize and share knowledge and to achieve successful performance.

2-2 / Knowledge management processes

They are continuous learning processes and these processes can be transferred qualitatively and quantitatively to wider limits which lead to the expansion of knowledge (Nonak, et al., 2000: 45). Finding, acquiring, storing, transferring and applying knowledge effectively to support and enhance the goals set (Arora and Raosheb, 2011: 239).

1) Knowledge generation: It means all the activities that organizations rely on to obtain knowledge, and it includes the processes of acquiring knowledge from various sources such as experts, specialists, competitors and information bases through learning, scientific research and technical development (Cohen, W. and Levinthal, D., 1999: 35).

2) Knowledge storage: Knowledge storage processes are those that refer to organizational memory as it consists of knowledge in various forms including written documents, information stored in electronic databases, knowledge stored in expert systems, knowledge of procedures, and knowledge of organizational processes that are either reliable or tacit knowledge gained from individuals and business networks (Gottschalk, 2005: 93).

3) Knowledge distribution: It is the knowledge that is transferred between workers from one worker to another, or from one group to another in order to assimilate or create and transfer knowledge not only through books and magazines, but it can be through the transfer between friends is more widespread (Pearlson and Sunder, 2004: 11). support organizational arrangements and cultures for its transfer and sharing between departments of institutions, and knowledge transfer and sharing must depend on the existence of effective mechanisms (Bullinger and Couillard, 2009: 90).

These mechanisms can be formal such as reports, work manuals, training; planned formal meetings and on-the-job learning, or they may be informal such as informal meetings, seminars and seminars, which are often in working hours (Audregs and Rebert, 2001: 8-18).

4) Knowledge application: Knowledge that is not shared in real business problems will not add any value and in order to obtain a return on investment, organizational knowledge must be a systematic part of managerial decision making and within decision support systems (Lodun and Loudoun, 2007: 435).

2-3 / Leadership Skills:

Leadership is the main social and educational role played by the leader while interacting with the workers within the same organization, and the leader must possess the power and ability to influence the workers to direct their behavior in order for the organization to achieve its goals.

For the success of the reciprocal relationship between the leader and the workers, a set of managerial skills must be available, which management scholars agreed on its importance for the success of the leader's management and the performance of all tasks and tasks assigned to him accurately and quickly and can be summarized as follows: (Ford, 2004: 15).

1) Self-leadership skills: Skills are the ability to build the character of workers to become leaders such as mental traits, lofty principles, innovation, and self-control (Hanne, 2003: 13)

2) Intellectual leadership skills: This skill depends on the leader's awareness of his duties and how to deal with crises facing the work and the organization together through deep and critical thinking of his ideas and trying to provoke others' ideas in different ways to reach sound decisions on clear scientific grounds. Also reflected in the leader's ability to think logically, judge things correctly and the ability to predict and make the right decisions (Foley, 2005: 11).

3) Human leadership skills: Administrative leaders must spend a significant amount of time with employees as well as their interaction with them on an ongoing basis through meetings (scheduled and unscheduled) and face-to-face contacts that are effective human skills and produce managerial leaders and increase their motivation towards workers and help them develop leading to Achieving the best performance in the desired goals (Fred, 2010: 7).

4) Technical leadership skills: It is the specialized knowledge of the branches of science and the efficiency in using them, and it requires the success of administrative work by adopting methods adopted by the manager when doing his work and how to deal with situations.

This skill can be acquired through study, experience and training, and one of the most important attributes of it is responsibility, deep understanding, assertiveness, and belief in purpose (Ford, 2004: 15).

The third: the applied side of the research

3-1/ Research community and sample

3-1-1/ Research community: The General Company for Iraqi Cement, an Iraqi governmental company established in (1936) in Iraq, and it is one of the largest companies affiliated with the Ministry of Industry and Minerals and is subject to the Public Companies Law No. (22) For the year (1997), and its competencies are determined according to its bylaw as follows:

- Production of all types of cement according to the prescribed specifications.
- Marketing the cement produced inside Iraq and exporting it abroad according to the established plans and programmers.
- Manufacture of cement packing bags.

The company has made great strides in the cement industry towards development in establishing modern factories with large production capacity that adopt the latest methods and techniques in managing production processes and quality control.

This led to a rise in the annual design production capacities. The (Iraq Cement) factory is considered the first factory specialized in the cement industry and the various economic industries associated with it and seeks to support its industry and the parties that deal with it.

3-1-2/ The Research Sample: It consists of the director of the company, the assistant director, and heads of departments, sections and units. A set of questionnaires was distributed totaling (64), from which (60) valid forms were extracted for use. With regard to the distribution of the research sample members in terms of their personal data, Table (1) shows that:

Table (1) Description of the research sample

sequence	variable	Categories and Designations	the number	percentage
1	Sex	Male	45	75%
		female	15	25%
		Total	60	100%
2	Age	25-29	15	25%
		34-30	10	17%
		44-40	15	25%
		49-45	15	25%
		50 years or more	5	8%
		Total	60	100%
3	Certificate	prep	10	17%
		Technical Diploma	15	25%
		Bachelor's	5	8%
		Higher Diploma	5	8%
		Master's	15	25%
		PhD	10	17%
4	Current job location	Total	60	100%
		Manager	10	17%
		Associate Manager	10	17%
		Engineer	5	8%
		Technical	15	25%

5	The number of years of service at the current position	Administrative Factor	15	25%
			5	8%
		Total	60	100%
		5-1	5	8%
		10-6	5	8%
		11-15	5	8%
		16-20	10	17%
		25-21	25	42%
		26 years and over	10	17%
		Total	60	100%

Source: prepared by the researcher based on the questionnaire form

3-2/ Description of the research variables

This paragraph included the statistical means, standard deviations, and percentages related to the managers' answers to the two research variables, and the (hypothetical) mean of (3) was chosen to measure the arithmetic averages of the answers of the sample members.

3-2-1/ Variable knowledge management processes

This variable included (3) paragraphs, and each paragraph (4) questions with (12) questions as shown in Table No. (2) And the paragraph (the company relies on knowledge exchange at all administrative levels) achieved the highest arithmetic average (4.58), which is higher than the hypothetical mean (3), with a standard deviation of (1.013), which reflects the interest of the sample members in this paragraph. The relative importance reached (88.5%), while the paragraph (the company management gives a clear vision of its strategies and methods of implementation) was less important, a proportion of (13.4%) with an arithmetic mean (2.83) and with a standard deviation of (0.960)

Table (2): the arithmetic mean, standard deviation, and percentages of research sample answers

sequence	Variants of Knowledge Management Processes	mean	Standard deviation	Relative importance (percentage of agreement)	Arrange the paragraphs and dimensions according to their degree of importance
1	The manager undertakes the systematic monitoring of renewable knowledge from its various sources.	3.65	0.799	80%	Eighth
2	The company's management adopts conducting research on an ongoing basis.	3.07	0.733	17%	Eleventh
3	The manager creates work teams with a diversity of knowledge.	4.57	0.998	86.7%	Fourth
First	Knowledge Generation	3.76	0.843	61%	
4	Multiple storage methods are available (electronic archiving, paper documents...).	3.35	0.988	33.4%	Ninth
5	The company has high turnover rates.	4.38	1.151	81.8%	Sixth
6	The company's management uses technical devices that characterized by safety and privacy.	3.83	0.960	83.4%	Fifth
Second	Store Knowledge	3.85	1.033	66%	
7	The company relies on the exchange of knowledge at all levels of management.	4.58	1.013	88.5%	First
8	The company's management is keen to have different ways of distributing knowledge such as (memos, reports, e-mail, meetings...).	3.87	0.853	88.4%	Second
9	The manager encourages employees to communicate with each other to exchange opinions and experiences.	3.15	0.899	30%	Tenth
Third	Distribution of knowledge	3.86	0.921	69%	
10	The company's management gives a clear vision towards its strategies and implementation approaches.	2.83	0.960	13.4%	Twelfth

11	The manager supports activities related to knowledge work.	3.75	0.773	81.7%	Seventh
12	The company seeks to overcome obstacles and remove difficulties.	4.58	0.979	88.3%	Third
Fourthly	the Application of Knowledge	3.72	0.904	61%	

Source: prepared by the researcher based on the questionnaire form

3-2-2/ Variants of Leadership Skills

This variable included (4) paragraphs, and for each paragraph (3) questions, and at the paragraph level of this variable, the paragraph (the manager has the ability to influence others) achieved the highest arithmetic average of (4.48) with the least dispersion and a standard deviation of (1.017) and relative importance (83.3%), and this percentage indicates an acceptable level of agreement among the members of the research sample, while (the manager praises the efficient employee in front of his colleagues) got the least relative importance (16.6%), with an arithmetic mean (3.13), and a standard deviation of (0.769), Table (3) shows a description of the answers of the surveyed managers about the paragraphs related to this variable.

Table (3): the arithmetic mean, standard deviation, and percentages of research sample answers

sequence	Variants of Leadership Skills	mean	Standard deviation	Relative importance (percentage of agreement)	Arrange the paragraphs and dimensions according to their degree of importance
1	Employees listen to the manager's point of view.	3.17	0.806	18.3%	Tenth
2	The manager resolves daily conflicts and disagreements without anger.	3.70	0.997	75%	Seventh
3	The manager bears the strenuous effort to complete the work.	4.43	1.015	75.1%	Sixth
First	Knowledge Generation	3.76	0.939	56%	
4	Multiple storage methods are available (electronic archiving, paper documents...).	4.27	1.177	76.7%	Fourth
5	The company has high turnover rates.	2.98	0.892	16.7%	Eleventh
6	The company's management uses technical devices that characterized by safety and privacy.	3.77	0.871	81.7%	Second
Second	Store Knowledge	3.67	0.980	58.3%	
7	The manager has the ability to influence others.	4.48	1.017	83.3%	First
8	He always works on distributing the workload among his subordinates with a fairness that satisfies them.	3.82	0.911	80%	Third
9	The manager praises the efficient employee in front of his colleagues.	3.13	0.769	16.6%	Twelfth
Third	Human leadership skills	3.81	0.899	60%	
10	The company's management gives a clear vision towards its strategies and implementation approaches.	4.17	1.317	76.6%	Fiftieth
11	The manager supports activities related to knowledge work.	3.28	0.976	35%	Ninth
12	The company seeks to overcome obstacles and remove difficulties.	3.35	1.117	63.3%	Eighth
Fourthly	the Application of Knowledge	3.60	1.136	58%	

Source: Prepared by the researcher based on the outputs of (SPSS)

3-3/ measuring the effect between the two research variables

This paragraph aims to test the hypothesis of the effect between the two variables of the research by adopting a simple linear regression analysis model in an attempt to show the effect between knowledge management processes and administrative leadership skills.

This indicates that (33%) of the total differences in managerial leadership skills is determined by the company's interest in the research sample through the development of knowledge management processes and the exploitation of new ideas in the development of production.

The remaining percentage (77%) represents the contribution of variables that are not included in the research model and that cannot be controlled.

The calculated value (F) was (63.12), which is a statistically significant value at a significant level (0.000), which is higher than the tabular value (F).

This also indicates that the regression curve is good in explaining the effect between knowledge management processes and managerial leadership skills. It is clear from the above that the result confirms the acceptance of the second hypothesis which states that "there is a significant impact of knowledge management processes on managerial leadership skills."

Table (4) results of measuring the impact between knowledge management processes and administrative leadership skills

the variable independent	The variable dependent	F Value	F Tabular Value	R ²	P. Value	Degree of freedom	R	R2Ad	Value	Value
Knowledge management processes	leadership skills	3.009		0.049	5.697	1 And 59	0.222 ^a	0.033	47.760	-0.222

Source: Prepared by the researcher based on the outputs of (SPSS)

3-4 / Correlation relationship between the research variables

This paragraph aims to verify the validity of the correlation hypothesis between the research variables, knowledge management processes (as an independent variable) and administrative leadership skills (as a dependent variable) to reach a decision on accepting or rejecting the hypothesis at the sample level (0.280 **). It is a negative value indicating the existence of a negative relationship with a moral significance at the level (0.000) and with a confidence degree of (0.01), which calls for acceptance of the second main hypothesis "there is a significant relationship between knowledge management processes and administrative leadership skills".

Table (5) values of the correlation coefficient (Spearman) between the research variables, knowledge management processes and administrative leadership skills

The Second	The content of the hypothesis	Correlation Coefficient	Moral Sig
Hypothesis	There is a significant correlation between knowledge management processes and classifications of leadership skills	- 0.280**	0.01

** Level of spirits 0.01, * Level of spirits 0.05 , N= 60

Source: Prepared by the researcher based on the outputs of (SPSS)

Fourth: Conclusions and Recommendations

First: the Conclusions

- 1) Knowledge management processes (knowledge generation, knowledge storage, knowledge distribution and knowledge application) is an important factor in the classifications of administrative leadership skills, which are (self-leadership skills, intellectual leadership skills, human leadership skills, and technical leadership skills) and this is what the research emphasized.
- 2) The results showed an effect between the two variables of the research, the more knowledge management processes are developed and used more effectively, the better it leads to the application of managerial leadership skills in the research sample company.
- 3) There is a correlation between the research variables, knowledge management processes and administrative leadership skills.
- 4) The company's lack of interest in the research community with its strategic vision and methods of implementation.
- 5) The company has a high turnover.

Second: Recommendations

- 1) It is necessary to pay attention to the strategic vision of the company and the methods of its implementation.
- 2) The company needs to reduce its turnover.
- 3) It is necessary to pay attention to the application of knowledge management processes and its continuous development, due to its effective contribution to managerial leadership skills.

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Appendices

Annex (1): Questionnaire Form

Respected Directors, Greetings....

You have a questionnaire form for a research titled

Knowledge management processes and their impact on leadership skills: An exploratory study of the opinions of a sample of managers in the Iraqi General Cement Company.

Your participation in choosing the appropriate answer has a positive impact on the output of the research in the required manner, knowing that the recorded data is strictly confidential and there is no need to mention the name....

We thank you for your response.

With many thanks and appreciation

- Personal data

1) Sex: Male () Female ()

2) Age 20-30 years () 31-40 years old () 51-60 years old ()

3) The number of years of service is less than 5 years () from 5 to 10 years () from 11 to 15 years () from 15 to 20 () from 20 to 25 () from 25 and over ()

4) Qualification () Diploma () Bachelor () Master () PhD

5) Job title () Director () Assistant Director () Section Head () Division Head () Unit Head

- Procedural terminology

First: Knowledge management processes: It is transforming the inputs obtained by the organization from its external and internal sources into knowledge and then generating, sharing, storing and distributing it. Knowledge processes are divided into:

1) Knowledge generation: identifying the best sources of knowledge inside and outside the organization that are necessary to achieve the planned goals.

2) Knowledge storage: It is the retention of knowledge, especially in organizations that suffer from high turnover rates and that rely on temporary contract employment because these people take with them their tacit, unreliable knowledge, but the reliable knowledge remains stored in their bases.

3) Knowledge distribution: We are through evaluating the validity of documents in the activities of the institution and constantly updating its information to ensure the continuity of competitiveness.

4) Knowledge application: it includes absorbing the cognitive ability and translating it into operations that implemented on the ground.

Second: Leadership skills: It is the success of the interrelationships between the leader and subordinates, and it requires the availability of a set of managerial skills that management scholars and researchers unanimously agreed upon and are as follows:

1) Self-leadership skills: It is a set of mental and behavioral tendencies during work and includes endurance, patience, sacrifice and self-denial.

2) Intellectual leadership skills: It is the ability to clarify the political vision of the leader and his knowledge of the social environment in which the leader works and to agree on public opinion and influential personalities and how to

convince and attract them to believe in the social environment as well as the goal for which they are working.
 3) Human leadership skills: It means the ability of the leader to deal with workers, and it is more difficult than technical skill because its field is more complex, changing and diverse than technical fields, and dealing with workers is more difficult than dealing with things.

4) Technical leadership skills: which relate to the manager's tasks and administrative and supervisory responsibilities to help him fulfill the requirements of his work, implement and practice them to reach the goal of management and education. This skill is obtained through study, experience and training.

The first Variable: knowledge management processes

sequence	The paragraphs knowledge management processes	I do not strongly agree (5)	I don't agree (4)	neutral (3)	Agreed (2)	I strongly agree (1)
first	Knowledge Generation					
1	The manager undertakes the systematic monitoring of renewable knowledge from its various sources.					
2	The company's management adopts conducting research on an ongoing basis.					
3	The manager creates work teams with a diversity of knowledge.					
second	Store Knowledge					
4	Multiple storage methods are available (electronic archiving, paper documents...).					
5	The company has high turnover rates					
6	The company's management uses technical devices that characterized by safety and privacy.					
third	Distribution of knowledge					
7	The company relies on the exchange of knowledge at all administrative levels.					
8	The company's management is keen to have different ways of distributing knowledge such as (memos, reports, e-mail, meetings...).					
9	The manager encourages employees to communicate with each other to exchange opinions and experiences.					
fourthly	the Application of Knowledge					
10	The company's management gives a clear vision towards its strategies and implementation approaches.					
11	The manager supports activities related to knowledge work.					
12	The company seeks to overcome obstacles and remove difficulties.					

The second Variable: leadership skills

sequence	The paragraphs leadership skills	I do not strongly agree (5)	I don't agree (4)	neutral (3)	Agreed (2)	I strongly agree (1)
first	Self-Leadership Skills					
1	Employees listen to the manager's point of view.					
2	The manager resolves daily conflicts and disagreements without anger.					
3	The manager bears the strenuous effort to complete the work.					
second	Intellectual leadership skills					
4	The manager has ideas to change the reality of the company and develop it.					
5	The manager adopts logical thinking to see the full					

	dimensions of any problem.					
6	The manager encourages employees to develop the spirit of research, modernization and innovation in the field of work.					
third	Human leadership skills					
7	The manager has the ability to influence others.					
8	He always works on distributing the workload among his subordinates with a fairness that satisfies them.					
9	The manager praises the efficient employee in front of his colleagues.					
fourthly	Technical leadership skills					
10	The manager is keen to develop technical work methods.					
11	The manager is proficient in working on the computer.					
12	The manager distributes responsibilities to the employees according to a clear organizational structure.					