

# The Effective Feasibility of Knowledge Management Establishment

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## Abstract

Leading organizations realize that knowledge is an important asset of the organization and it should be managed but in traditional organizations more controls and attentions are focused on tangible assets like liquidity, buildings, machinery and the main objective of this study was to investigate the main areas of knowledge management in Iranshahr's power plant. This study was a descriptive survey and fieldwork. Morgan's table for limited population has been used for determining the minimum required sample volume and 125 persons were considered as the basis of analysis with the use of simple random sampling method. The research data have been collected with the use of questionnaire which consists of 60 questions with three sections of 20 questions with high validity (with the approval of elites and experts) and significant reliability 0/89 using alpha. Knowledge management in Iranshahr's power plant in the dimensions of culture, structure and technology examined and in all three cases, the desired result was achieved and it is possible to establish knowledge management in Iranshahr's power plant.

**Keywords:** Implementation of Knowledge Management, Culture, Structure, Technology

## Introduction

Benefits of utilization the KM have led most organizations make efforts to implement this process. But, initial efforts in most organizations faced with challenge, despite of the investment on KM, the expansion of its applications occurs slowly. The main cause of this problem is low levels of organizational readiness for acceptance and usage of knowledge management (Glaser, 2003). Although many organizations have invested on the field of knowledge development in different levels and have been succeed, but many organizations have also failed, lack of appropriate mechanisms to evaluate and implement knowledge management, have made this type of investment an additional cost in the minds of managers. Hence, organizations should create an environment for sharing and transfer of knowledge among their members, teach people to make sense of their interactions and try to create context and identifying the underlying factors for establishment of knowledge management in organizations (Balgun et al., 2004)

## **Knowledge Management**

### **The Definition based on Knowledge Management Processes**

In this way, knowledge management is broken down into sub-tasks, sub-processes and sub-processes. Pearlson and Saunders considered it necessary process to create, recognized, documentation and distribution of knowledge in the organization to achieve competitive advantage. Celemmons considered it a systematic process that identifies the required knowledge for organizational success, produces it and shares.

### **The Definition based on Management and Strategy**

This definition has been developed based on management dimension of KM and its strategic relationship with the basic concepts and applications of KM. Danrom Had defined KM as systematic and purposeful application of criterias for the guidance and control of tangible and intangible KM assets of the organization aimed at creating new knowledge, create value, innovation and improvement.

### **The Definition based on Technology**

This definition is based on the concepts of knowledge management and information. Some authors implicitly introduce knowledge management systems or technologies that support knowledge management as knowledge management.

Jones and Guarge considered knowledge management as sharing and integration of knowledge and skills within and between organizational units through connected information technology and real-time.

### **The Definition based on Organizational and Collective Knowledge**

This strategy combines the following options:

- 1) Respect to race, education and learning capabilities of persons in the organization.
- 2) Considering the organization as a producer, consumer and the collective talent developer.
- 3) Due to the IT infrastructure to develop what is being used as an information and communication technology in organization.

Choo knows KM as a framework for applying structures and processes at individual, group and organizational levels toward the organization can learn from what he knows and gain new knowledge if it's needed for valorize to customers and stakeholders.

### **Benefits of Knowledge Management**

It allows staffs at the individual level promote theme experience and skills by working with others and to share their knowledge and learn from each other and at the organizational level, it has the following benefits:

- 1) Becoming an intelligent and learner organization
- 2) Make better and faster informed decisions
- 3) Granting the right knowledge at the right time and to the right person
- 4) The organization move to production of essential knowledge and avoid of exit the knowledge and experience of individuals after retirement.
- 5) Increase creativity and innovation through the circulation of ideas
- 6) Increase efficiency and effectiveness of performances
- 7) Better basis for decision-making, such as the construction or purchase of new knowledge and technology (Beijerse, 1999)

## **Knowledge Management Strategies**

### **a) Blodgood's Triples Strategy**

- Create a knowledge strategy that is focused on creating new knowledge which can be used to develop new products and services.
- Knowledge transfer strategy that is focused on the rapid dissemination of knowledge in order to full exploit (Clark & Rollo, 2000).
- Knowledge protection strategy focuses on knowledge encoded in such a way that protects it from redistribution and use of it by competitors (Ng-Jimmy and Li, 2003).

### **b) Wigg's Strategy**

- Knowledge production strategy
- Knowledge transfer strategy
- Knowledge strategy as a business strategy
- Investment management strategy
- Personal knowledge strategy

### **c) Greiner's Strategy**

#### **Coded or codified strategies:**

This strategy seeks to identify and store knowledge visibly and followed transfer and reused by technology and when it will be effective that knowledge to be independent from individuals fully and meaningful and used for others (Hansen, 2003).

#### **Personalize Strategies**

This strategy is a way by connecting people to publish and share knowledge pays to store it. This strategy does not focus on saving knowledge but it focuses on the use of tools for connecting people. This strategy is based on knowledge exchange and discussion between professionals and experts.

## **The Future of Knowledge Management**

What is gained from thousand experiences in organizations showed KM does not need more tools to gather more data but it requires a new vision to unite the separate data that promotes personal insight and accelerate action. Namely, for the creation and management of knowledge, not only is the need to exploit more of the corporate memory but is related to the skills and intellectual capital of the company too. Organizations need to have knowledge management not only to remain competitive, even for being innovative (Liebowits, 2003). They are just not enough to be agile but it requires that they be smart organizations. There is now an urgent need to establish knowledge management's criteria for executives to realize that is knowledge management for their organization effective?

Also a research has been done with the title 'The role of human and social factors in knowledge management' that it concluded these are factors that play a key role in all stages of the creation and use of knowledge management in organizations and should be considered at all stages of implementation (Tomas, 2001).

History and Evolution of Knowledge Management isn't clear and detailed due to have emerged from the various sectors. Some management theorists like Peter Drucker, Strassman, Peter Senge and ... had a role in making forming theoretical KM. Drucker and Strassman believe that knowledge is the most powerful production engine, thus, organizations need to emphasize increasingly on management it. Kuhn in 1970 emphasizes

that knowledge is intrinsically a group's capital. Barton in the mid-1970s with company case study published his documents with titles "Beautiful spring of Knowledge" and "Making innovation resources" in the journal of Harvard Business Review. During the 1990s were published first books about organizational learning and knowledge management. A number of management consulting firms designed programs in the field of knowledge-based management within the organization and several companies; most notably the American, European and Japanese have internalized their knowledge management programs. Knowledge management was first introduced to the media in an article titled "mental strength" by Tom Stewart in Fortune journal.

### Research Questions

Is it possible to establish knowledge management in Iranshahr's power plant?

Is it possible to establish knowledge management culturally in Iranshahr's power plant?

Is it possible to establish knowledge management structurally in Iranshahr's power plant?

Is it possible to establish knowledge management technologically in Iranshahr's power plant?

### Methodology

The research type is applied in terms of target. Morgan's table for limited population has been used for determining the minimum required sample volume and 125 persons were considered as the basis of analysis with the use of simple random sampling method. The research data have been collected with the use of questionnaire which consists of 60 questions with three sections of 20 questions with high validity (with the approval of elites and experts) and significant reliability 0/89 using alpha.

### Research Findings

Findings of the sample survey indicated that %9.6 of the employee had Master's Degree, %28 had Bachelor's degree and the rest had lower degrees. Also %2.4 of employees was manager, %12.8 was supervisor and others were specialists and technicians.

To answer the research questions was considered a major hypothesis and three sub-hypotheses and for each sub- hypothesis two other sub- hypotheses was considered.

**Sub- hypothesis1:** It is possible to establish knowledge management culturally in Iranshahr's power plant.

H<sub>0</sub>: Knowledge management establishment culturally isn't possible in Iranshahr's power plant.

H<sub>1</sub>: Knowledge management establishment culturally is possible in Iranshahr's power plant.

Chi-square test was used to test the hypotheses; the results can be seen in the below tables:

Table 1:

*Frequency of Chi-Square Test*

Options	Observed values	Expected values
Very little	4	25
little	41	25
Somewhat	19	25
High	41	25
Very much	20	25

Table 2:  
Results of Chi-Square Test

Number	125
$\chi^2$	40.56
df	4
sig	0.05 <

As regards the significance level is less than 0.05, the null hypothesis is rejected and be accepted  $H_1$  and KM establishment culturally is possible in Iranshahr's power plant.

**Sub- hypothesis2:** It is possible to establish knowledge management structurally in Iranshahr's power plant.

$H_0$ : Knowledge management establishment structurally isn't possible in Iranshahr's power plant.

$H_1$ : Knowledge management establishment structurally is possible in Iranshahr's power plant.

Chi-square test was used to test the hypotheses; the results can be seen in the below tables:

Table 3:  
*Frequency of Chi-Square Test*

Options	Observed values	Expected values
Very little	3	25
little	30	25
Somewhat	30	25
High	42	25
Very much	20	25

Table 4:  
*Results of Chi-Square Test*

Number	125
$\chi^2$	33.92
df	4
sig	0.05 <

As seen in above table the significance level is less than 0.05, the null hypothesis is rejected and be accepted  $H_1$  and KM establishment structurally is possible in Iranshahr's power plant.

**Sub- hypothesis3:** It is possible to establish knowledge management technologically in Iranshahr's power plant.

$H_0$ : Knowledge management establishment technologically isn't possible in Iranshahr's power plant.

$H_1$ : Knowledge management establishment technologically is possible in Iranshahr's power plant.

Chi-square test was used to test the hypotheses; the results can be seen in the below tables:

Table 5:

*Frequency of Chi-Square Test*

Options	Observed values	Expected values
Very little	3	25
little	21	25
Somewhat	30	25
High	46	25
Very much	25	25

Table 6:

*Results of Chi-Square Test*

Number	125
$\chi^2$	38.64
df	4
sig	0.05 <

As seen in above table the significance level is less than 0.05, the null hypothesis is rejected and be accepted  $H_1$  and KM establishment technologically is possible in Iranshahr's power plant.

**The Main Hypothesis:** It is possible to establish knowledge management in Iranshahr's power plant.

$H_0$ : Knowledge management establishment isn't possible in Iranshahr's power plant.

$H_1$ : Knowledge management establishment is possible in Iranshahr's power plant.

Chi-square test was used to test the hypotheses; the results can be seen in the below tables:

Table 7:

*Frequency of Chi-Square Test*

Options	Observed values	Expected values
Very little	3	25
little	30	25
Somewhat	26	25
High	43	25
Very much	23	25

Table 8:

*Results of Chi-Square Test*

Number	125
$\chi^2$	33.52
df	4
sig	0.05 <

As regards the significance level is less than 0.05, the null hypothesis is rejected and be accepted  $H_1$  and KM establishment is possible in Iranshahr's power plant.

**Conclusions**

The main objective of this study was to investigate the main areas of knowledge management in Iranshahr's power plant and the effective feasibility of knowledge management

establishment. To answer the research questions was considered a major hypothesis and three sub- hypotheses and for each sub- hypothesis two other sub- hypotheses was considered. Four hypotheses were tested using chi-square test and all hypotheses were verified, this means that KM establishment is possible in Iranshahr's power plant culturally, structurally and technologically.

The following suggestions are offered for the promotion and development of the company's knowledge management:

Employees should understand the others valorize for their knowledge, they also need to be nurtured in the sense that after sharing knowledge with others are more valuable.

Should be promoted awareness about the benefits of knowledge management and they understand that sharing knowledge is power.

Organization needs fostering an innovative culture where employees are encouraged to constantly generate new ideas.

Provide research and development center and give sufficient funds.

In order to prevent out of knowledge from organization after retiring members should hired them as consultants in organization.

Development of helpful workgroups; these groups are an organization's knowledge centers; a group of people with similar job responsibilities concerning the creation and sharing of knowledge.

In order to encourage employees should be chosen continuously outstanding knowledge manager and employee in each section.

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