

AN EMPIRICAL STUDY ON PERCEPTION OF EMPLOYEES ON KNOWLEDGE MANAGEMENT: A CASE STUDY CONDUCTED AT NALCO

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ABSTRACT

Knowledge management (KM) is the most important strategic support service to get a competitive benefit, particularly relating to the business processes of service firms. Knowledge Management analysis is also focused on Knowledge Management success which includes both the internal and external success dimensions, It gave rise to established a spot in the measurement of the impact of Knowledge Management services of business processes. The important function of Human Resource Management is to acquire, develop and retain knowledge worker in the business process. In the present study, the researchers have conducted an empirical study basing on the perceptions of both executives and non-executives on the Knowledge Management practices adopted by NALCO from HR prospects. The perceptions of employees have been categorized into three levels i.e. high acceptance, medium acceptance and low acceptance. The opinions of the executives and nonexecutives have also been distinguished by applying factor analysis, cross tabular analysis. The researchers have also analyzed the views of employees by grouping them from the department wise where the employees work at NALCO.

KEYWORDS: Knowledge Management, HRM Practices, Business Process, Product Innovation.

Introduction

Most of the young organizations commence their journey with an idea or a theme, that could be in the areas of business processes, product innovation and a passion to focus on a specific domain. Nevertheless, all of these offset with a knowledge nucleus conceptualized by an individual or a small group of individuals. In this knowledge society, capital comprised of tangible assets is no longer worthwhile and valuable to the highest degree. It is rather intellectual capital or the human capital which carries worth. In the new context, the profile of the new workers requires technical, cognitive and emotional abilities. Knowledge is the information that is contextual, pertinent and actionable. Knowledge has strong experiment and reflective components that differentiate it from information in a given context.

Knowledge management program are typically attached with organizational objectives and are intended to accomplish specific outcomes. One facet of knowledge management is that knowledge has survived by transfer from one form to another. Knowledge management programmers attempt to manage the process of creation, accumulation and application of knowledge in an organization. The scope of knowledge management is associated with learning the organization, intellectual capital. knowledge workers in the knowledge economy through various organizational practices and enable the technologies. It meditates a calculated and systematic means of creating, organizing and transferring knowledge. Knowledge management also supports decision making by capturing and analyzing the key performance indicators.

Review of Literature

Hansen (1999)¹ conveys that "Knowledge Management is not new and novel thing". This is simple but inclusive statement defines both the state and challenges of the management of knowledge within purposeful organizations. As organization are the people who work within them continue to evolve, and as the capacity to codify, store and easily share knowledge expands. Knowledge management is a

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discipline of identifying, capturing, retrieving, sharing, and evaluating an enterprise's information assets (**Bair 2001**)². Knowledge Management is the art of creating value from an organization's intangible assets (**Sveiby 2000**)³. KM is a conscious strategy of getting the right knowledge to right people and put in the right time; it is also help the people to share and put information into action in ways that strive to improve organizational performance (**O' Dell. 2000**)⁴. KM is a framework within which the organization views all its processes as knowledge processing, where all business processes involve creation, dissemination, renewal, and application of knowledge towards organization sustenance and survival (**Malhotra 2000**)⁵.

The transformation begins with viewing HRM through a "knowledge lens" and repositioning the functions of HRM in relation to the knowledge management capabilities. Managing knowledge workers, building value from knowledge, and assessing knowledge risk are also new requirements of HRM in the knowledge economy.

Whicker, L. M and Andrews (2004)⁶ in their research paper entitled, "HRM in the Knowledge Economy: Realizing the Potential," have attempted to explore the HRM perspective of knowledge capability in knowledge based economy. In the knowledge economy, knowledge-based capabilities are the key factors for competitive advantage. At the firm level, this places the enterprise's people, their knowledge and innovative capacity as the heart of strategic potential. Human Resource Management (HRM) in the recent years has demonstrated its position as a strategic partner to executive management. This promise has been only partially realized. Commanding a central position in realizing value from knowledge assets is proposed as a strategic role for HRM. Specifically, HRM must respond to the key challenges presented by knowledge economy. They have further stated four HRM priorities: becoming expert in identifying and defining strategic knowledge capabilities, developing and managing knowledge workers by leveraging the knowing-learning-doing nexus, building knowledge value as an organizational as well as an individual asset, and minimizing enterprise knowledge risks.

Mika Hannula, Marianne Kukko and Jussi Okkonen (2010)⁷ in their paper titled, "The Fourth Perspective - Knowledge Management in Human Resources Context" have discussed that companies have recognized the significance of personnel competencies as an asset in contemporary business. Still several central aspects of knowledge and competency has to be developed and evolved in order to become as common as performance measurement. The aim of this study is to enlighten the use of knowledge management in top 50 finish companies in the HR context. Contribution of this study is: to describe the history and the current state of knowledge management. The study also aims to examine what are the rationales of using knowledge management. As a conclusion, this study discusses the use of knowledge management as part of balanced performance measurement by setting a frame for the use of the "fourth perspective".

Fabrice Galia and Diego Legros (2003)⁸ presented a research paper titled "KM and HR Practices in an innovation perspective: Evidence from France" at the DRUID Summer Conference. The authors in their work have investigated the arrangements capable of enhancing, capturing and utilizing knowledge in the firm. Using French data set, they have examined the knowledge creation, sharing and transferring process in an innovation perspective. Their study also focused on the complementarities between KM and HRM practices and its impact on innovations. Based on detailed descriptive analysis and cluster analysis, they have identified three clusters or bundles of organizational practices as "KM and HRM Practices System". These clusters have been identified as: Few practices and rules dedicated to innovation; Half of the practices; and finally the polar case in which all the different KM and HRM practices are equally used together. Empirical evidences validate the complementarities between KM and HRM practices and these components policy reinforce each other. The authors further emphasize on the impact of these bundles on innovation performance. They have estimated various econometric specifications that permit to conclude that KM and HRM practices bundles have significant and positive impact on innovation performance.

Knowledge worker benefits the organization by augmenting the value of intellectual capital, which develops both the business and adding to the profit. The workforce employed by present day organizations is diversified and wide-ranging. In the aluminum industry, National Aluminum Company (NALCO) serves the national interest and enjoys trust and confidence of the stakeholders on account of its product excellence, productivity, profitability, good governance and industrial relations. The inherent confidence on customer service is another hallmark of the company. Energy and environment are subjects of prime importance to the company. Right from the design stage, the company has adopted anti-pollution and energy efficient technologies. There is constant monitoring to ensure that neither

pollution is caused nor any disturbance to the environment or ecological balance. Plans are made to expand basic capacities of the plant and to create downstream capabilities according to the demand of future. After analysis of the different research work conducted in the field of Knowledge Management an in-depth research work has been conducted at NALCO considering the views of the employees. The major objectives of the research work are discussed as follows.

Objectives of the study

The objectives of the study are:

- To find out the perception of Executives and Non-executives towards KM practices in relation to HRM activity applied by NALCO.
- To find out the level of KM practices applied by NALCO considering the views of employees working in different departments with HR prospects.

Scope of the Study

The KM facilitates the development and growth through fast and timely sharing of knowledge. The study highlights the level of KM practices in different departments at NALCO such as Finance, HR, Marketing, System and etc. The researchers have identified the employees' category in two parts, Executives and Non-executives. The sample collected from the employees working in the Bhubaneswar Corporate Office, Training Centre, Damanjodi Refinery and Anugul Smelter Plant.

Hypothesis

The hypothesis of the research work is

- H₀: There is no association between departments and level of KM practices and thereby accepts the alternative hypothesis.
- H₁: There is association between departments and level of KM practices.

Research Methodology and Data Analysis

Both primary and secondary sources are being adopted to collect data from NALCO. The secondary sources like websites, journals and other research work have been refereed. The primary data have been collected from both the Executives and Non executives by administering Self Administrated Questionnaires (SAQ). The SAQ has two part where one portion is identified as the independent variables ,i.e. demographic profiles (Category and Department). The other portion of the SAQ relates to multiple questions asked to the respondents.

In the research Knowledge Management (KM) Practices at NALCO from HR Prospective has been identified as the broad parameter to evaluate the perception of the executives and non-executives. The below table shows the distribution of sample collected for the purpose of research work from NALCO considering the category, i.e., executives and non-executives. The sample consists of 55.9 % executives and 44.1% non-executives.

Table 1: Distribution of Executives and Non Executives

Category	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Executive	198	55.9	55.9	55.9
Non-Executive	156	44.1	44.1	100.0
Total	354	100.0	100.0	

The following table distributes the employees working in different departments of NALCO. The table has not identified the employee's distributions from category point of view. From the total sample 13.0 % employee's views were taken from finance department,9.9 % employee's view from marketing department, 22.6 % from HR department,11.9 % from system department and 42.7 % from other department.

Table 2: Department Wise Distribution of Employees

Department	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Finance	46	13.0	13.0	13.0
Marketing	35	9.9	9.9	22.9
HR	80	22.6	22.6	45.5
Systems	42	11.9	11.9	57.3
Other	151	42.7	42.7	100.0
Total	354	100.0	100.0	

In the SAQ there are twenty five sub parameters have been included under Knowledge Management (KM) Practices at NALCO. In the analysis the average score towards Knowledge Management Practice has been calculated by taking account of the responses of NALCO employees in five-point Likert,s scale considering these twenty five parameters. On application of quartile method, the respondents have been classified into three Levels as Low, Medium and High basing on average scores as less than 3.6, 3.6 to 4.0 and more than 4.0 respectively. The distribution of the sample from categories (irrespective of executive and non executives) point of view has been presented in the following table.

Table 3: Sample Composition in Terms of Knowledge Management Practice Levels

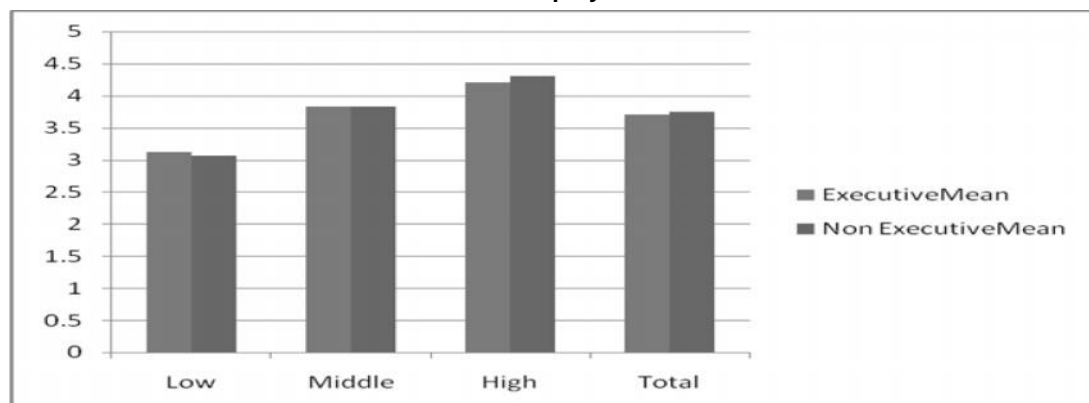
Level	Frequency(No of respondents)	Percentage
Low	122	34.5 %
Middle	110	31.1%
High	122	34.5%
Total	354	100.0%

The above table shows that out of the total sample 34.5 % of employees are having low perception on KM Practices where as 31.1% and 34.5% of employees have medium and high impact of response on KM Practices at NALCO. It is seen that the response of employees are mostly equal distributed so it is pertinent to distinct the views of employees from their categories point of view. The SAQ is distinguished the category of employees in to executives and non executives. The following table shows the average response of executives and non executives of NALCO towards KM Practices from HR Perspectives.

Table 4: Average Responses Towards Knowledge Management Practices by Executive and Non-Executive NALCO Employees of Different Levels.

	Level of KM	N	Mean	Std. Deviation
Executive	Low	70	3.12	0.43
	Middle	61	3.83	0.09
	High	67	4.21	0.19
	Total	198	3.71	0.55
Non-Executive	Low	52	3.06	0.48
	Middle	49	3.83	0.10
	High	55	4.30	0.24
	Total	156	3.74	0.61
Total	Low	122	3.09	0.45
	Middle	110	3.83	0.09
	High	122	4.25	0.22
	Total	354	3.72	0.57

Graph No. 4: Average Responses Towards Knowledge Management Practices by Executive and Non-Executive NALCO Employees of Different Levels



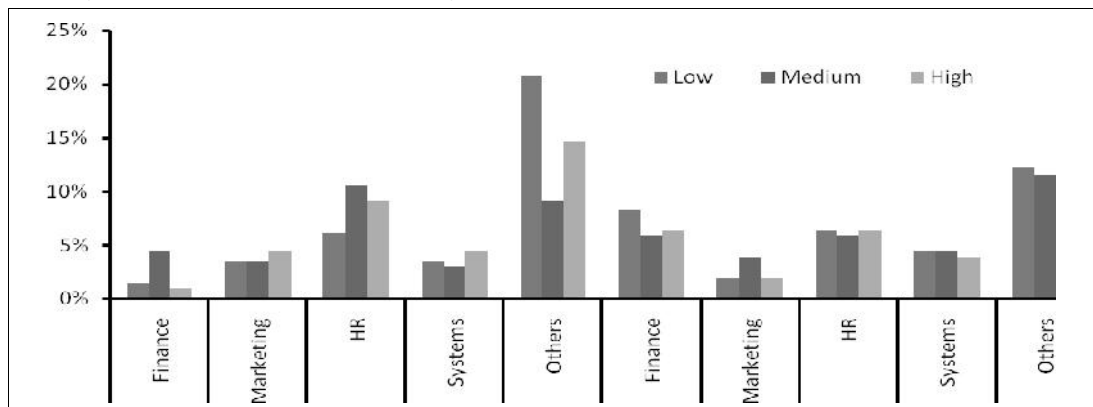
The above Table/ graph represents the average opinion of NALCO employees towards knowledge management practices. In consideration of the mean values, Executives having low opinion

(3.12) are of neutral opinion whereas medium (3.83) and high (4.21) executives have expressed satisfaction over it. With the same consideration of the mean value Non-Executives having low opinion (3.06), having neutral opinion(3.83)and having high opinion(4.25) expressed their perception level.

Table 5: Cross Tabulation of Department with Levels of KM Practices by NALCO Employees

Department	Number/ Percentage	Executives				Non-Executives			
		Level of KM Practices			Total	Level of KM Practices			Total
		Low	Medium	High		Low	Medium	High	
Finance	Number	3	9	2	14	13	9	10	32
	Percentage	1.5%	4.5%	1.0%	7.1%	8.3%	5.8%	6.4%	20.5%
Marketing	Number	7	7	9	23	3	6	3	12
	Percentage	3.5%	3.5%	4.5%	11.6%	1.9%	3.8%	1.9%	7.7%
Human Resource	Number	12	21	18	51	10	9	10	29
	Percentage	6.1%	10.6%	9.1%	25.8%	6.4%	5.8%	6.4%	18.6%
Systems	Number	7	6	9	22	7	7	6	20
	Percentage	3.5%	3.0%	4.5%	11.1%	4.5%	4.5%	3.8%	12.8%
Other	Number	41	18	29	88	19	18	26	63
	Percentage	20.7%	9.1%	14.6%	44.4%	12.2%	11.5%	16.7%	40.4%
Total	Number	70	61	67	198	52	49	55	156
	Percentage	35.4%	30.8%	33.8%	100.0%	33.3%	31.4%	35.3%	100.0%
Chi-Square		18.337*				3.966 NS			

N.B:- * - Significant at 5% level for DF = 8, NS – Not Significant at 5% level for DF = 8.



In case of executives, the calculated Chi-square value (18.337) has been found to be significant at 5% level ($P < 0.05$) for degree of freedom 8. This rejects the null hypothesis H^0 : So there is no association between departments and level of KM practices and thereby accepts the alternative hypothesis i.e., H^1 . Which shows that, there is an association between departments and level of KM practices considering the views of the executives working at NALCO.. Accordingly, maximum response is obtained in case of others department having low KM practices (20.7%) and minimum response is obtained in case of finance department having high KM practices (1.0%). Further, in case of non-executives, the calculated Chi-square value (3.996) has been found to be non-significant at 5% level ($P > 0.05$) for degree of freedom 8. This accepts the null hypothesis H^0 : So there is no association between departments and level of KM practices among the non-executives cadre. Accordingly, the difference in distribution shown in this case may not be acceptable and thereby it may be presumed that uniform trend in responses towards the KM practices from non-executives of NALCO is observed.

Conclusion and Suggestions

Considering the above analysis and the presented cross tabulation table between number of respondents from different departments with their level of KM practices the following observations are made:

- The sample explains 1.0 % of executive employees from finance department shows high level of KM practices, 1.5percentage responses low level and maximum 4.5% of employee’s views are neutral. From the same department of non executive 5.8% employees response shows neutral, 6.8 % employees high level and maximum 8.3 % views low level response in relation to KM practices.

- The sample explains 4.5 % of executive employees from marketing department shows high level of KM practices, where as 3.5percentage responses is from low level and middle level. From the same department of non executive 3.8% employees response shows neutral where as1.9 % employees responses is from low level and middle level.
- The sample explains that maximum 10.6 % of executive employees from HR department shows middle level of KM practices, 9.1% responses high level and 6.1% of employee's views are of low level. From the same department of non executive 5.8percentage employees response shows neutral, where as1.9 % employees responses is from low level and middle level.
- The sample explains 4.5% of executive employees from system department shows high level of KM practices, 3.5% responses low level and 3.0 % of employee's views are neutral. From the same department of non executive 3.8% employees response shows low response where as4.5 % employees responses is from high level and middle level.
- The sample explains 35.4 % of executive employees from other then above department shows low level of KM practices, 33.8 % responses low level and maximum 30.8 % of employee's views are neutral. From other then above department of non executive 35.3% employees response shows high level, 33.3% employees shows low level and 31.4 % views low level response in relation to KM practices.

Knowledge Management (KM) is newly emerging, interdisciplinary business model. It is rotated in many disciplines, including business, economics, psychology, and information management. It is the ultimate competitive advantage for today's firm. Particularly at NALCO Knowledge management involves people, technology, processes in overlapping part. NALCO adopts the learning mechanism, proper system, awareness of new technologies and change management provides information required to perform the job.

It is suggested that the NALCO should conduct variety of training programs for the employees to develop experience in KM practice, especially to improve the efficiency of KM concepts among the non executives. It is recommended for NALCO to provide the necessary facilities and amenities to their employees to update their knowledge regularly and also there should be the regular interaction between the employees in order to share the updated knowledge. While recruiting the employees, it is advised to include the basic knowledge of KM practices as one of the selection criteria and for new employees it is needed to give a detailed orientation about the KM practices. In modern days, information technology is considered as a very important tool to KM system and it is advised to implement in different function also. It is advised to provide knowledge repository for storing and distributing the information to the right person at right time. All these suggestion can again improve the KM and HRM practices.

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Appendix**Questionnaire****A. Personal Information**

Category	Executive			Non Executive	
Please mention the department in Which you are working	Finance	Marketing	HR	System	Others

B. Knowledge Management (Km) Practices at Nalco From Hr Prospective

(SDA- Strongly Disagree, DA- Disagree, NO- No Opinion A- Agree and SA- Strongly Agree)

1	Employees/ You are well aware of KM.	SDA	DA	NO	A	SA
2	Employee/ You have a proper understanding of KM.	SDA	DA	NO	A	SA
3	Organizations update the information & knowledge to a maximum applicability.	SDA	DA	NO	A	SA
4	KM practices develop the individual capacity, to perform the present & future job.	SDA	DA	NO	A	SA
5	KM practices are to develop & maximize the motivational level.	SDA	DA	NO	A	SA
6	KM practices support the decision making.	SDA	DA	NO	A	SA
7	KM practices develop the better relationship and promote team spirit.	SDA	DA	NO	A	SA
8	KM Practices promotes congenial organizational culture/ climate.	SDA	DA	NO	A	SA
9	KM practices are helpful for proactive & transparent HR policies.	SDA	DA	NO	A	SA
10	Knowledge base reduces repetition of work.	SDA	DA	NO	A	SA
11	Recruitment is done on the basis knowledge/merit not by favoritism.	SDA	DA	NO	A	SA
12	Professional interview panel are used during the recruitment & selection process.	SDA	DA	NO	A	SA
13	Induction program is well design in the organization.	SDA	DA	NO	A	SA
14	Training & Development programs are conducted at all levels.	SDA	DA	NO	A	SA
15	The resource persons of training & development are quite competitive.	SDA	DA	NO	A	SA
16	There is a well design and widely shared training policy which improves the knowledge of the employees.	SDA	DA	NO	A	SA
17	Objectives and scope of training programs are well defined to enhance knowledge.	SDA	DA	NO	A	SA
18	There is a visible link between training, performance and productivity through knowledge Management.	SDA	DA	NO	A	SA
19	The training programs are carefully chosen after collecting adequate training needs.	SDA	DA	NO	A	SA
20	Performance appraisal system provides a frame work to ensure that all the employees are working towards the objectives of organization.	SDA	DA	NO	A	SA
21	Performance appraisal system is taken in the right sprit by employees where knowledge of the employees is evaluated.	SDA	DA	NO	A	SA
22	Knowledge based Compensation is practiced at organization.	SDA	DA	NO	A	SA
23	Employees are well aware about reward and penalty system of the organization.	SDA	DA	NO	A	SA
24	Knowledge Management is helpful for better career Planning and growth.	SDA	DA	NO	A	SA
25	Employees are aware about the career opportunities.	SDA	DA	NO	A	SA