Available online at www.elixirpublishers.com (Elixir International Journal)

**Management Arts** 

Elixir Mgmt. Arts 66 (2014) 20935-20940

# A study on implementation of knowledge management for career development in IT Industries

N.Shani<sup>\*</sup> and P.Divyapriya

Department of Management Studies, Karpagam University Coimbatore.

### ARTICLE INFO

Article history: Received: 7 June 2013; Received in revised form: 20 January 2014; Accepted: 23 January 2014;

Keywor ds

Career, IT industries, HRM.

# ABSTRACT

The field of HRM evolved both in India and elsewhere, over a number of years to its present level of sophistication and use of proactive methods. The effective use of people is the critical factor in the successful accomplishment of corporate goals. To this end HR managers need to understand the needs, aspiration of employees proactively, face the challenges head on and resolve issues amicably in the years ahead. As human beings are dynamic and complex, managing the human resources has become a challenging job for any type of organization. Ambitious attitude of people and organizations and the changing dimensions and dynamics of the human resource after the introduction of globalization has brought forth a paradigm shift in management business.

© 2014 Elixir All rights reserved.

#### Introduction

The knowledge base surrounding human resource development is increasing rapidly, within government and agencies. It is an area where there are many pressing demands. These demands have to be balanced. Resources have to be found, frontiers agreed upon and strategies formulated. These are issues with which policy makers, planners, decision makers, sectoral planners and government managers have to contend. This course attempts to provide insights into the strategic importance of investments in developing people, methods of doing the same, strategic choices that need to be made in developing people in terms of the categories of people to be targeted, processes that could be used for effective implementation of human resource development policies and programs, and the sectoral points of attention which are critical for development. The course focuses particularly on the developing countries and their human resource development goals, policies and implementation strategies. In doing so it gives particular attention to both the question of developing human competencies for economic and technological development and to the issue of equitable distribution of resources, opportunities and benefits to improve the quality of life.

#### HRD and Knowledge Management:

HRD should help the organization articulate the purpose of the knowledge management system. Investing in a knowledge management initiative without a clear sense of purpose is like investing in an expensive camera that has far more capabilities than you need to take good pictures of family and friends.

1. As a knowledge facilitator, HRD must ensure alignment among an organization's mission, statement of ethics, and policies.

2. HRD should also create the "ultimate employee experience." That is, by transforming tacit knowledge into explicit knowledge through education, organizations must build employee skills, competency, and careers, creating "bench strength."

3. HRD must integrate effective knowledge sharing and usage into daily life. That is, knowledge sharing must be expected, recognized, and rewarded.

4. HRM must relax controls and allow (even encourage) behaviors that, in the clockwork world of industrial efficiency, never would have been tolerated.

5. HRM must take a strategic approach to helping firms manage e-mail, instant messenger, internet surfing, and similar uses of technology. Clearly, the Internet has a role in generating and disseminating knowledge, and therefore is an integral part of knowledge management.

6. HRM must champion the low-tech solutions to knowledge management. Although it should not ignore the high-tech knowledge management tools, HRM contains the expertise to develop low-tech knowledge management strategies.

Objective of study:

1. To identify the methods to development knowledge Management for the employees in the IT companies.

2. To Study the Implementation of Knowledge Management for Career development.

#### Statement of problem:

Knowledge management is essentially helping the IT employees to plan and develop their career in terms of their capacities. Knowledge Management focuses on "doing the right thing" instead of "doing things right". Knowledge management is a structure within which the organization views all its processes as knowledge processes which involves business processes such as creation, distribution, renewal and application of knowledge towards organizational sustenance and survival. The knowledge management and flexible career mode makes the IT employee's career development process takes place a great variety. This study mainly focuses on role of knowledge management in career development practices among IT professionals to plan and develop the career in successful way. **Research design:** 

The research study is descriptive in nature and is concerned with describing the characteristics of respondents of Knowledge Management and Career Development. In this study, two stages of random sampling technique were used. In the first stage, Stratified random sampling technique was used for drawing companies out of total number of IT companies in Coimbatore city. In the second stage, Simple random sampling technique

© 2014 Elixir All rights reserved

was used to select the employees of selected companies, which have sufficient scope for the topic of study were included. The primary data was collected from the respondents by using structured questionnaire in selected IT Companies. Secondary data was collected from the Websites, Text Books, Journals and Magazines. SPSS has been used for the analysis of data. Frequency analysis, ANOVA, Chi-square, Correlation, Garret Rank analysis, Friedman test and Factor analysis are used for study.

# Source: Primary data

# Interpretation:

The above table was prepared for the purpose of finding suitable method for the knowledge management, and from the employees response, Training is in first rank with the mean score of 58, Second rank is for Mentoring with the mean score of 51.04, With the mean score of 50.15, Coaching is in third rank, Retiree programmes and Documentation are in fourth and fifth ranks with the mean scores of 49.62 and 47.89 respectively. Exit interviews got sixth rank with the mean score of 46.55 and the last rank of seventh was obtained by rotational assignments with the mean score of 44.13.The above table shows that Training is the best suitable method to develop knowledge management.

#### Source: Primary data

This table lists the mean rank of each variable. High rank corresponds to the lower values of the variables.

Ho: There is insignificant difference between mean ranks in Methods for Knowledge Management.

Friedman 7	ſest
------------	------

rneaman rest	
Ν	500
Chi-Square	151.893
Df	6
P-value	.000
S/NS	S

# P<0.05, S- Significant **Interpretation:**

`This table lists the result of the Friedman test. For these rankings, the Chi-Square value is 151.893, Degree of freedom is equal to the number of values minus 1. As 7 options are ranked, there are 6 degrees of freedom. It is clear from the above table that significance level is 0.00 at 5 percent level of significance. Hence, the hypothesis is rejected. Atleast one of the variables differs from the others.

Kaiser-Meyer-Oklin (KMO) Measure of Sampling Adequacy (MSA) and Bartlett's test of Sphericity were applied to verify the adequacy or appropriateness of data for factor analysis. In this study, the value of KMO for overall matrix was found to be good (2207.218) and Bartlett's test of Sphericity was highly significant (p< 0.05). Bartlett's Sphericity test was effective, as the Chi- Square value draws significance at five percent level.

Eigen values and proportion of total variance of each underlying factor relating to methods for Knowledge Management:

The results of the factor analysis presented in the table, regarding factors relating to Method adapting for Knowledge Management have revealed that there are 3 factors that had Eigen value exceeding one. Among those 3 factors, the first factor accounted for 30.727 percent of the variance, the second 22.141 percent, the third factor 16.964 percent of the total variance in the scale items measuring the factors relating to Methods adapted for Knowledge Management. Hence, from the above results, it is certain that these are factors relating to Methods adapted for Knowledge Management.

# Communalities for factors relating to methods for KM

Extraction Method: Principal Component Analysis.

The above table (Communalities) represents the application of the Factor Extraction Process, it was performed by Principal Component Analysis to identify the number of factors to be extracted from the data and by specifying the most commonly used Varimax Rotation Method. In the Principal Component Analysis, total variance in the data is considered. The proportion of the variance is explained by the ten factors in each variable. The proportion of variance is explained by the common factors called communalities of the variance. Principal Component Analysis works on initial assumption that all the variance is common. Therefore, before extraction the communalities are all 1.000. Then, the most common approach for determining the number of factors to retain, i.e., examining Eigen values was done.

#### Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Table represents the Rotated Component Matrix, which is an important output of Principal Component Analysis. The coefficients are the factor loadings which represent the correlation between the factors and the nineteen variables. From the above factor matrix, it is found that coefficients for factor-I have high absolute correlations with variables Training, Exit Interviews and Mentoring, that is, 0.819, -0.697 and -0.602 respectively. Similarly factor-II has high absolute correlation with variable Retiree Programmes and Rotational assignments, that is, 0.807 and -0.752 respectively. Factor-II has high absolute correlation with variables, Coaching and Documentation that is, -0.913 and 0.667 respectively. In such a complex matrix it is difficult to interpret the factor. So the rotated factor matrix is computed.

#### **Component Transformation Matrix**

Component	1	2	3
1.	.640	.407	.652
2.	494	.867	056
3.	.588	.286	756

#### **Extraction Method: Principal Component Analysis.** Rotation Method: Varimax with Kaiser Normalization. **Conclusion**

Thus the six variables in the data were reduced to three Component factors and each factor may be identified with the corresponding variables as follows:

### Interpretation:

The f value is 0.631, and the significance value is 0.641, It is more than 0.05 and so the Null hypothesis is accepted, hence it is concluded that Satisfaction with implementation of Knowledge Management for career development has insignificant variance while comparing with age.

#### Interpretation:

The f value is 0.168, and the significance value is 0.682 it is more than 0.05, So the Null hypothesis is accepted, hence it is concluded that the Satisfaction with implementation of Knowledge Management for career development has insignificant variance while comparing with Gender. Interpretation:

The f value is 4.831, and the significance value is 0.028, It is less than 0.05, So the null hypothesis is rejected, Hence it is concluded that the Satisfaction with implementation of Knowledge Management for career development has a significant variance while comparing with Marital Status.

#### Interpretation:

The f value is 4.831, and the significance value is 0.028, It is less than 0.05, So the null hypothesis is rejected, Hence it is concluded that the Satisfaction with implementation of Knowledge Management for career development has a significant variance while comparing with Marital Status. Interpretation:

# The f value is 0.71, and the significance value is 0.546, It is more than 0.05, So the null hypothesis is accepted, hence it is concluded that Satisfaction with implementation of Knowledge Management for career has insignificant variance while comparing with Educational Qualification.

#### Interpretation:

The f value is 2.057, and the significance value is 0.085, It is more than 0.05, So the null hypothesis is accepted, Hence it is concluded that Satisfaction with implementation of Knowledge Management for career development has insignificant variance while comparing with Monthly Income.

# Interpretation:

#### Age:

The Pearson correlation value is -0.047, which means the Age and Satisfaction with implementation of Knowledge Management for career has negative correlation. The significant value (0.294) is more than 0.05 which shows that the Age and Satisfaction with implementation of Knowledge the Management for career are not statistically correlated. It means, change in Age has low impact on Satisfaction with implementation of Knowledge Management for career.

#### Gender:

The Pearson correlation value is -0.013, that means the Gender and Satisfaction with implementation of Knowledge Management for career has negative correlation and the significant value (0.774) is more than 0.05 which shows that the Gender and the Satisfaction with implementation of Knowledge Management for career are not statistically correlated. It means, change in Gender have low Impact on Satisfaction with implementation of Knowledge Management for career.

#### Marital Status:

The Pearson correlation value is 0.039, which means the Marital Status and Satisfaction with implementation of Knowledge Management for career has positive correlation. The significant value (0.39) is more than 0.05 which shows that the Marital Status and the Satisfaction with implementation of Knowledge Management for career are not statistically correlated. It means, change in Marital Status has low impact on Satisfaction with implementation of Knowledge Management for career.

#### Years of service:

The Pearson correlation value is 0.007, which means the Service and Satisfaction with implementation of Knowledge Management for career has positive correlation and the significant value (0.868) is more than 0.05 which shows that the Service and the Satisfaction with implementation of Knowledge Management for career are not statistically correlated. It means, change in Service has low impact on Satisfaction with implementation of Knowledge Management for career.

#### **Qualification: Educational**

The Pearson correlation value is -0.045, that means the Educational Qualification and Satisfaction with implementation of Knowledge Management for career has negative correlation and the significant value (0.315) is more than 0.05 which shows that the Educational Qualification and the Satisfaction with implementation of Knowledge Management for career are not statistically correlated. It means, change in Educational

Qualification has low impact on Satisfaction with implementation of Knowledge Management for career. Monthly Income:

The Pearson correlation value is -0.028, that means the Monthly earnings and Satisfaction with implementation of Knowledge Management for career has negative correlation and the significant value (0.528) is more than 0.05 which shows that the Monthly earnings and the Satisfaction with implementation of Knowledge Management for career are not statistically correlated. It means, change in Monthly earnings has low impact on Satisfaction with implementation of Knowledge Management for career.

#### Interpretation:

#### Age:

The Pearson correlation value is -0.047, which means the Age and Satisfaction with implementation of Knowledge Management for career has negative correlation and the significant value (0.294) is more than 0.05 which shows that the Age and the Satisfaction with implementation of Knowledge Management for career are not statistically correlated. It means, change in Age has low impact on Satisfaction with implementation of Knowledge Management for career.

# Gender:

The Pearson correlation value is -0.013, which means the Gender and Satisfaction with implementation of Knowledge Management for career has negative correlation and the significant value (0.774) is more than 0.05 which shows that the Gender and the Satisfaction with implementation of Knowledge Management for career are not statistically correlated. It means, change in Gender has low impact on Satisfaction with implementation of Knowledge Management for career.

## Marital Status:

The Pearson correlation value is 0.039. It means the Marital Status and Satisfaction with implementation of Knowledge Management for career has positive correlation and the significant value (0.39) is more than 0.05 It shows that the Marital Status and the Satisfaction with implementation of Knowledge Management for career are not statistically correlated. It means, change in Marital Status has low impact on Satisfaction with implementation of Knowledge Management for career.

#### Years of service:

The Pearson correlation value is 0.007, it means the Service and Satisfaction with implementation of Knowledge Management for career has positive correlation and the significant value (0.868) is more than 0.05, It shows that the Service and the Satisfaction with implementation of Knowledge Management for career are not statistically correlated. It mean, change in Service has low impact on Satisfaction with implementation of Knowledge Management for career.

## Educational Oualification:

The Pearson correlation value is -0.045, it means the Educational Qualification and Satisfaction with implementation of Knowledge Management for career has negative correlation and the significant value (0.315) is more than 0.05, It shows that the Educational Qualification and the Satisfaction with implementation of Knowledge Management for career are not statistically correlated. It means, change in Educational Qualification has low impact on Satisfaction with implementation of Knowledge Management for career.

#### Monthly Income:

The Pearson correlation value is -0.028, it means the Monthly earnings and Satisfaction with implementation of Knowledge Management for career has negative correlation and

the significant value (0.528) is more than 0.05, It shows that the Monthly earnings and the Satisfaction with implementation of Knowledge Management for career are not statistically correlated. It means, change in Monthly earnings has low impact on Satisfaction with implementation of Knowledge Management for career.

#### Findings:

#### Methods for km:

Among all the methods for the knowledge management, the training ranked first with the mean score of 58 and the last rank is obtained by rotational assignments with the mean score of 44.13. There is significant difference between mean ranks in Method for Knowledge Management. Hence the hypothesis is rejected. From the factor analysis it is found that coefficients for factor-I correlated with variable Training, Exit Interviews and Mentoring with is 0.819, -0.697 and -0.602 respectively. Similarly factor-II correlated with variable Retiree Programs and Rotational assignments that are 0.807 and -0.752 respectively.

Satisfaction of Knowledge Management Program to Develop Career

The Satisfaction with Knowledge Management Program to develop the career has insignificant variance while comparing with Age, Gender, Marital Status, Years of service, Educational Qualification and Monthly Income. There is a difference between Satisfaction with Knowledge Management Program with Age, Years of service and Monthly Income and no difference with Gender, Marital Status and Educational Qualification. The Satisfaction with Knowledge Management Program to develop the career has low impact with Age, Marital Status, Education Qualification and Monthly Income and Years of Service has high impact.

## Implementation of KMP for Career Development:

The Satisfaction with implementation of Knowledge Management for career development has insignificant variance while comparing with Age, Gender, Marital Status, Years of service, Educational Qualification and Monthly Income. There is no difference between satisfaction with implementation of Knowledge Management for career development with Age, Gender, Marital Status, Years of service, Educational Qualification and Monthly Income. The Satisfaction with implementation of Knowledge Management for career development has low impact with Age, Gender, Marital Status, Years of service, Educational Qualification and Monthly Income.

#### Suggestions:

1. Organization should appreciate and support individual developmental efforts.

2. Management should encourage to take up formal education as part of career development.

3. Allowance, insurance schemes and other rewards should be increased to motivate the employees.

4. Employees have to be encourage for participate in knowledge management programs.

5. For effective implementation of knowledge management, company can appoint a cko (chief knowledge officer) who will be in charge of knowledge function.

## Conclusion:

The most important internal motivating factor for the implementation of knowledge management program is the existence of undocumented knowledge irrespective of type of the organization. The success of an organization is directly dependent on the level of knowledge management practices in that organization. So, the organization must seriously think of implementing the kmp to develop employee's career in effective way. For implementing a good knowledge management program, extensive employee training, for its efficient use is a must.

S.No.	Method	Total Score	Mean S core	Rank
1.	Training	29001	58.00	Ι
2.	Exit Interviews	23277	46.55	VI
3.	Mentoring	25521	51.04	II
4.	Documentation	23943	47.89	V
5.	Retiree Programmes	24812	49.62	VI
6.	Coaching	25077	50.15	III
7.	Rotational assignments	22063	44.13	VII

 Table 1. Garret Ranking - Suitable Methods For Knowledge Management

Table 2. Friendman	test- sı	uitable	methods	for	km
--------------------	----------	---------	---------	-----	----

S.No	Methods for km	Mean rank	Rank
1	Training	3.63	1
2	Exit Interviews	4.94	6
3	Mentoring	3.82	2
4	Documentation	4.11	5
5	Retiree Programs	4.07	4
6	Coaching	4.03	3
7	Rotational assignments	3.4	7

# Table 3. Factor analysis - suitable method for knowledge management: KMO and bartlett's test for factors relating to methods for km

kaiser-meyer-olkin meas	ure of sampling adequacy.	.075
Bartlett's Test of Sphericity Approx. Chi-Square		2207.218
	Sig.	.000

# Eigen values and proportion of total variance of each underlying factor relating to methods for Knowledge Management:

	Initial Eigenvalues			Extractio	on Sums of S	quared Loadings	Rotatio	n Sums of Sc	uared Loadings
					% of			% of	
Comp	Total	% of Variance	Cumulative %	Total	Variance	Cumulative %	Total	Variance	Cumulative %
1.	2.151	30.727	30.727	2.151	30.727	30.727	1.671	23.870	23.870
2.	1.550	22.141	52.867	1.550	22.141	52.867	1.620	23.138	47.007
3.	1.187	16.964	69.831	1.187	16.964	69.831	1.598	22.823	69.831

Communalities for factors relating to methods for KM

S.No.	Particulars	Initial	Extraction
1.	Method for Knowledge Management – Training	1.000	.718
2.	Method for Knowledge Management -Exit Interviews	1.000	.697
3.	Method for Knowledge Management –Mentoring	1.000	.708
4.	Method for Knowledge Management –Documentation	1.000	.594
5.	Method for Knowledge Management -Retiree Programmes	1.000	.699
6.	Method for Knowledge Management –Coaching	1.000	.850
7.	Method for Knowledge Management -Rotational assignments	1.000	.622

Rotated Component Matrix for factors relating to methods for KM

S.No.	Dortionlorg	С	ompone	nt
	ratuculais	1	2	3
1.	Method for Knowledge Management – Training	.819	.184	.117
2.	Method for Knowledge Management -Exit Interviews	697	.438	.137
3.	Method for Knowledge Management –Mentoring	602	400	432
4.	Method for Knowledge Management -Retiree Programmes	.049	.807	.213
5.	Method for Knowledge Management -Rotational assignments	028	752	.237
6.	Method for Knowledge Management –Coaching	.108	073	913
7.	Method for Knowledge Management –Documentation	.370	114	.667

S.No.	Particulars	Results		
1.	Method for Knowledge Management –Training			
2.	Method for Knowledge Management -Exit Interviews	Factor I		
3.	Method for Knowledge Management -Mentoring			
4.	Method for Knowledge Management -Retiree Programmes	Factor II		
5.	Method for Knowledge Management -Rotational assignments			
5.	Method for Knowledge Management -Coaching	Factor III		
6.	Method for Knowledge Management –Documentation			

# Table 4. ANOVA - implementation of KMP for career development: Variance in implementation of KMP for career development with age:

S.no.	Statement		Sum of		Mean		
	Statement		squares	Df	square	F	Sig.
1.	Satisfaction with implementation of Knowledge Management	Between Groups	1.640	4	.410	.631	.641
	for career development	Within Groups	321.758	495	.650		
		Total	323.398	499			

S.No	Statement		Sum of Squares	Df	Mean S quare	F	Sig.
1.	Satisfaction with implementation of Knowledge	Between Groups	.109	1	.109	.168	.682
	Management for career development	Within Groups	323.289	498	.649		
		Total	323.398	499			

S.No	Statement		Sum of Squares	df	Mean S quare	F	Sig.
1.	Satisfaction with implementation of Knowledge Management for career	Between	3.107	1	3.107	4.831	.028
	development	Groups					
		Within Groups	320.291	498	.643		
		Total	323.398	499			

S.No.	Statement		Sum of Squares	df	Mean S quare	F	Sig.
1.	Satisfaction with implementation of Knowledge Management for	Between	3.939	3	1.313	2.039	.108
	career development	Groups					
		Within	319.459	496	.644		
		Groups					
		Total	323.398	499			

S.No.	Statement		Sum of		Mean		
Statement		<b>S</b> quares	Df	S quare	F	Sig.	
1.	Satisfaction with implementation of Knowledge	Between	1.384	3	.461	.710	.546
	Management for career development	Groups					
		Within Groups	322.014	496	.649		
		Total	323.398	499			

S.No.	Statement		Sum of Squares	Df	Mean S quare	F	Sig.
1.	Satisfaction with implementation of Knowledge	Between	5.287	4	1.322	2.057	.085
	Management for career development	Groups					
		Within Groups	318.111	495	.643		
		Total	323.398	499			

# Table 5. Chi- square - association between implementation of knowledge management for career and personal background

S.No.	Implementation of KM for Career	Value	Approx. Sig.
1.	Age	047	.294
2.	Gender	013	.774
3.	M arital Status	.039	.390
4.	Years of service	007	.868
5.	Educational Qualification	045	.315
6.	Monthly Income	028	.528

#### **Bibliography:**

• Betul Sonmez; Aytolan Yildirim, "What are the Career Planning and Development Practices for Nurses in Hospitals? IS there a Difference between Private and Public Hospitals?" American Naturalist Vol.157 (5), May 2001, P. 3461-3471.

• Dr.R.Krishnaveni and C.S.Senthil Raja, "Factors that enable knowledge Management in information Technology Organizations-a Statistical Study", Journal of Contemporary Research in Management, Vol.8 (3), Oct-Dec 2008, p.81-100.

• Eliza Antoniu, "Career Planning Process and its role in Human Resource, Annals of the University of Petrosani, Economics, Vol.10 (2), 2010, p.13-22. • Florent A. Meyer, "Collective Knowledge Bases, Essential levers for Business Performance", Quality world, Oct 2010, p.3-6.

• G.L.Narayanappa, "Knowledge Management: The Role of Administrative Doyens – A Study", Udyog Pragati, Vol.35 (1), Jan-Mar 2011, p.17-23.

• Elias m Awad and Hassan k Hasari, knowledge management / pesson publication, new Delhi / 2006 edition.

• Uma sekaran, R.M for business, John Wiley & Sonlnc, Newyork ,2006