International Journal of Scientific Research and Engineering Development-– Volume 4 Issue 4, July- Aug 2021

Available at www.ijsred.com

RESEARCH ARTICLE OPEN ACCESS

A Study on the Knowledge Management Dimensions and Their Efficiency Over The Firms Sustainability – Case Study

Dr.Nagaraju Battu[1], Sudhakarareddy Lakku[2]

(1)Head, Department of Human Resource Management, Acharya Nagarjuna University, Guntur, Andhra Pradesh, India.

(2)Research Scholar, Department of Human Resource Management, Acharya Nagarjuna University, Guntur, Andhra Pradesh, India.

Abstract

Now a days, knowledge has been widely recognized the most crucial competitive asset in the organizations. Knowledge refers to a theoretical or practical understanding of a subject. Knowledge management (KM) has become a very common term in the twenty first century, as it has been applied to a wide spectrum of activities and areas with the purpose of managing, creating and enhancing intellectual assets. It has become enriched with a huge wealth of contributions from many scholars and an extensive accumulation of experiences. From a deeper point of view, KM should be a kind of working method and philosophy. KM is a part of the field of management studies, but it is also closely integrated with information and communication technologies. In fact, KM can be observed from several perspectives, as there are a number of fields that contribute to it. Prominent among them are the fields of philosophy, cognitive science, social science, management science, information science, knowledge engineering, artificial intelligence and economics.

Key Words: Acquisition of Information, Information Dissemination, Knowledge Storage, Knowledge Transfer, Application and Usage of Knowledge, Organizational Culture, Sustainability.

Introduction

Knowledge management is that the firms manage know-how their employees haveabout its products, services, organizational systems and intellectual property.Specifically, knowledge management embodies the strategies and processes that a firmemploys to identify, capture and leverage the knowledge contained within its corporatememory.Knowledge Management is appropriate towards the basic activity of planning andimplementing our tasks in a systematic and efficient manner (Tikhomirova et al., 2018).Knowledge management is well documented that organizations with efficientcommunication linkages have higher "information flow, knowledge sharing,cooperation, problem-solving, creating, efficiency and productivity.Companies built on such well develop networks to, "produce measurable businessresults, such as faster learning, quicker response to client needs, better problem-solving,less rework and duplication of effort, new ideas and more innovation. They enjoy highersales, more profits, and superior market value".

Reviews of Literature

Marjan Maali Taftiet al., **(2020)**[1]empirically examined the obstacles and challenges of KM as wellas its success factors in Iranian Automotive Industries. The Coding Method was adopted to collect the qualitative data from 15 Iranian Automobile Managers and found out there are 4-Categories of obstacles and challenges of KM viz., (i) Structural Challenges and Barriers; (ii) Environmental Challenges and Barriers;(iii) Behavioral Challenges and Barriers; and (iv) Managerial Challenges and Barriers. The observations inter alia include there are 3-Success Factors for the successful implementation of KM in organizations viz., (a)Structural Success Factors; (b) Environmental Success Factors; and(c) Managerial Success Factors. Finally, they observed prime movers and drivers of KM viz.,(i) Knowledge Acquisition by using Assessment and Development Centers; (ii) Knowledge Development by way of Training and Development of competencies; and (iii) Knowledge Retention through preservation of knowledge.

Hussin Jose Hejase et al., (2020)[2] explore on Strategies and Practices of Knowledge Management implemented by HR in Lebanese context. A Sample Survey method was adopted to assess attitudes of respondents and differentiated Organizations with and without Specific Knowledge Management Plans. They observed that Effective Knowledge Management Practices create a workplace culture that makes individuals want to join in the organization, aligns employees with the mission and vision of the organization, fosters an environment where employees' ideas are listened to and valued, provides current employees with adequate training to allow them to do their jobs well, and places the right people in the right jobs. Finally, they recommend a 'Sound Knowledge Strategy' that syncs to the Organization's Overall Business Strategies, improves the organization's flexibility and performance and forms a part of the Strategic Management Process.

Katarzyna Niedźwiecka (2019)[3] presents the 'Conceptual Framework, Models and the Essence of Knowledge Management' and explained its place and role in the Strategy of HRM in modern enterprises. HR Dynamics, HR Analytics, the resources, infrastructure and commitment plays a vital role in implementing Knowledge Management Strategy and suggested an HRM Strategy concerned with Human Capital Management, High Performance Management, Corporate Social Responsibility, Organizational Development, Knowledge Management combined with Knowledge Management Strategy should ultimately contribute to the success of the Overall Corporate Strategy.

Promila Agarwal (2017)[5] elucidates the role of Knowledge Management Strategy and critically evaluated the effectiveness of inclusive and exclusive Knowledge Management Strategy using the Hofstede's Cultural Dimensions Theory in creative sense of justice among employees in different cultural conditions. A framework was proposed based on that Employee's Sense of Justice will depend on the societal culture and KM strategy fit. The observations include that some strategies will not be effective in certain cultural setting irrespective of their egalitarian nature and suggested mere a design of right strategy is not enough, implement HR Strategies effectively to create a Sense of Justice among employees.

Nagesh C L et al., (2017)[6] has highlighted the importance of Knowledge Management in Education Sector in this paper. The goal of knowledge management is to create a high performance, sustainable workforce that meets organization's strategic and operational goals and objectives. In this study, the author considered the importance and insights of Knowledge Management principles and organizational context.Author concluded that the Proper development and proper implementation of Knowledge Management can make the organization more productive. The goal of Knowledge management is to help

the organization to achieve its overall objectives. Every employer needs to understand the importance of knowledge management and should develop a strategy to attract and retain the knowledge that the organization needs to succeed. It is imperative that Management of the institution must change their mindset with respect to knowledge acquisition, development and retention.

Research Gap

Now a day's knowledge management practices and their effectiveness has been considered as the vital issue globally in all the sectors. In fact, different sectors in various countries are striving to introduce the better knowledge management practices to sustain the existing work force and to attract the efficient new workforce in to their organizations (GTCI Report, 2017). The recent past surveys (Deloitte Report 2017; Sparrow, 2010) also reported that, majority of the multinational companies are facing with the shortage of knowledge workforce and depicted the wide spread of shill shortage. Adding to this scenario, managing the effective knowledge management practices has become a major challenge to the organisations (Bruno Lanvin, 2015). Along with the other industries even the Indian manufacturing sector is suffering in effective knowledge management (Savitha G.R, 2012). In order to mitigate these problems and to find the evolve the best knowledge management practices some researchers attempted on various aspects. In general, there are many studies on general knowledge management practices in both abroad and Indian contexts. The research findings of Hussin, 2016 divulged that the effective knowledge management practices will create good workplace culture which provokes the individual to join in the organisaiton. There are elaborated research works done on attracting the new workforce into the organisation and stated about the factors like, enable, attract, growth and to retain the work force (Bruno Lanvin, 2015).

Analysis between the Level of employees and Knowledge creation:

The researcher applied one-way ANOVA test to find the significant differences between the level of employees and the research question of knowledge creation. The statistic results are presented below.

Table – 1:Analysis between the Level of employees and Knowledge creation

Descriptives								
Knowledge creation								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Strategic Level	205	1.4732	.50050	.03496	1.4042	1.5421	1.00	2.00
Tactical Level	378	2.7910	1.55917	.08019	2.6333	2.9487	1.00	5.00
Operational Level	273	4.4799	.50051	.03029	4.4202	4.5395	4.00	5.00
Total	856	3.0140	1.57756	.05392	2.9082	3.1198	1.00	5.00

The above table elicited the mean scores of employee belongs to different levels namely, Strategic Level, tactical Level and operational Level. The mean scores of concerned employee levels are denoted as 1.4732; 2.7910 and 4.4799 respectively.

Table – 2: ANOVA Analysis between the Level of employees and Knowledge creation

ANOVA					
Knowledge creation					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1092.101	2	546.050	449.712	.000
Within Groups	1035.731	853	1.214		
Total	2127.832	855			

The ANOVA results are tabulated in the above table. The results revealed that there is a significant difference between level of employees and knowledge creation in knowledge management in the various levels of employees. The statistic results denoted that the F-value is 449.712 and p – value is 0.000. This phenomenon clearly indicates that the respondents have different opinions on the knowledge creation in knowledge management among the various levels of employees and can be conclude that the various levels of employees are differently responding over the research question of knowledge management practices.

The multiple comparisons are tabulated in the following table. The results disclosed the interesting results. When compared the Strategic Level with the tactical Level employees, the results revealed the mean difference -1.3178 and the p-value is 0.000. When compared the Strategic Level employees with the operational Level employees disclosed the mean difference as -3.006 and the p-value is 0.000. The tactical Level employees compared with Strategic Level and operational Level they recorded the mean differences as 1.317 and -1.688 respectively and the p-value for both of them is found to be 0.000. When the operational Level is compared with Strategic Level and tactical Level the statistic results revealed the mean differences 3.006; 1.688 and the p-value is observed as 0.000.

Table – 3: Multiple Comparisons of Level of employees and Knowledge creation

Multiple Comparisons						
Dependent Variable: Knowledge creation						
Games-Howell						
(I) Type of Manufacturing	(J) Type of Manufacturing	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Strategic Level	Tactical Level	-1.31783*	.08748	.000	-1.5235	-1.1122
	Operational Level	-3.00668*	.04626	.000	-3.1155	-2.8979
Tactical Level	Strategic Level	1.31783*	.08748	.000	1.1122	1.5235
	Operational Level	-1.68885*	.08573	.000	-1.8904	-1.4873
Operational Level	Strategic Level	3.00668*	.04626	.000	2.8979	3.1155
	Tactical Level	1.68885*	.08573	.000	1.4873	1.8904
*. The mean difference is significant at the 0.05 level.						

Analysis between the Level of employees and Knowledge transfer and storage:

The researcher applied one-way ANOVA test to find the significant differences between the level of employees and the research question of Knowledge transfer and storage. The statistic results are presented below.

Table – 4: Analysis between the Level of employees and Knowledge transfer and storage

Descriptives								
Knowledge transfer and storage								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Strategic Level	205	2.5366	.49988	.03491	2.4677	2.6054	2.00	3.00
Tactical Level	378	2.9444	.69830	.03592	2.8738	3.0151	2.00	4.00
Operational Level	273	3.4945	.50089	.03032	3.4348	3.5542	3.00	4.00
Total	856	3.0222	.69634	.02380	2.9755	3.0689	2.00	4.00

The above table elicited the mean scores of employee belongs to different levels namely, Strategic Level, tactical Level and operational Level. The mean scores of concerned employee levels are denoted as 2.5366; 2.9444 and 3.4945 respectively.

Table – 5 ANOVA Analysis between the Level of employees and Knowledge transfer and storage

ANOVA					
Knowledge transfer and storage					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	111.528	2	55.764	156.959	.000
Within Groups	303.051	853	.355		
Total	414.578	855			

The ANOVA results are tabulated in the above table. The results revealed that there is a significant difference between level of employees and knowledge creation in knowledge management in the various levels of employees. The statistic results denoted that the F-value is 156.959 and p – value is 0.000. This phenomenon clearly indicates that the respondents have different opinions on the knowledge creation in knowledge management among the various levels of employees and can be conclude that the various levels of employees are differently responding over the research question of Knowledge management policies.

The multiple comparisons are tabulated in the following table. The results disclosed the interesting results. When compared the Strategic Level with the tactical Level employees, the results revealed the mean difference -0.4078 and the p-value is 0.000. When compared the Strategic Level employees with the operational Level employees disclosed the mean difference as -0.9579 and the p-value is 0.000. The tactical Level employees compared with Strategic Level and operational Level they recorded the mean

differences as 0.4078 and -0.550 respectively and the p-value for both of them is found to be 0.000. When the operational Level is compared with Strategic Level and tactical Level the statistic results revealed the mean differences 0.9579; 0.5500 and the p-value is observed as 0.000.

Table – 6 Multiple Comparisons between the Level of employees and Knowledge transfer and storage

Multiple Comparisons						
Dependent Variable: Knowledge transfer and storage						
Games-Howell						
(I) Type of Manufacturing	(J) Type of Manufacturing	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Strategic Level	Tactical Level	-.40786*	.05009	.000	-.5256	-.2901
	Operational Level	-.95792*	.04624	.000	-1.0667	-.8492
Tactical Level	Strategic Level	.40786*	.05009	.000	.2901	.5256
	Operational Level	-.55006*	.04700	.000	-.6605	-.4397
Operational Level	Strategic Level	.95792*	.04624	.000	.8492	1.0667
	Tactical Level	.55006*	.04700	.000	.4397	.6605
*. The mean difference is significant at the 0.05 level.						

Conclusion:

Based on the descriptive ANOVA statistics we conclude that the operational Level employees are highly feeling comfortable in terms of knowledge creation. The tactical Level employees have moderate opinion and Strategic Level companies' employees follow next. The descriptive ANOVA statistics we conclude that the operational Level employees are highly feeling comfortable in terms of Knowledge transfer and storage. The tactical Level employees have moderate opinion and Strategic Level companies' employees follow next.

REFERENCES

1. MarjanMaaliTafti, Mahdi Mahmoudsalehi and MojtabaAmiri (2020)., Critical Success Factors, Challenges and Obstacles in Knowledge Management, Industrial and Commercial Training, Vol. 49, Issue.1, p.p.15-21.
2. Hussin Jose Hejase, Ale J. Hejase, GhinwaMikdashi and ZakaaFarhatBazeih (2020)., Knowledge Management Challenges: An Exploratory Assessment from Lebanon, International Journal of Business Management and Economic Research(IJBMER), Vol 7, No.1, p.p. 504-520.
3. KatarzynaNiedźwiecka (2019)., Knowledge Management as a Key Aspect of Human Resources Management Strategy in Contemporary Enterprise, International Conference Paper, 25th -27th May, Timisoara, Romania.
4. Ming-Chang Wu, DidikNurhadi, SitiZahro (2018) Integrating the knowledge management program as a new concept to develop a sustainable human resource at manufacturing firms, International Journal of Organizational innovation Vol 8 Num 4 Apr 2016.

5. PromilaAgarwal (2017)., Fitting Knowledge Management Strategy into National Culture, IIM Ahmedabad, Working Paper No. 2016-02-04, February.
6. Nagesh C L (2017) Knowledge management in education sector, international journal of research in commerce, it & management, Volume. 6 (7).
7. B.Padmaja&N.VenkateswaraRao (2015)., Knowledge Management Practices in APSPDCL, The Journal of Institute of Public Enterprise, Vol. 38, No. 1&2, p.p.165-172.
8. Bruno Lanvin and Paul Evans (2015)., INSEAD, ADECCO and HCLI Report on Knowledge Attraction and International Mobility, France.
9. KodagodaGamage Ganga SajeewaniKarunathilaka, Prof. Dr. MohdShukriAbYajid and Prof. Dr. Ali Khatib (2015)., A Study of Knowledge Management as a Strategic Tools For Private Sector Organizations in Sri Lanka, European Journal of Business, Economics and Accountancy, Vol.3, No. 6, p.p. 63-75.

