

Empirical Study on Automobiles Industry's Knowledge Management

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Abstract – Knowledge management (KM) is becoming a fad in an increasing way so many organizations are trying to apply it in order to enhance their organizational performance. In this paper, literatures were investigating critically in order to show the real influence of knowledge management and some of its practices on organizational performance. It founded that KM including knowledge process and infrastructure capabilities affect positively in a huge manner on all aspects of organizational performance directly or indirectly. In the same vein, there is a huge need to continuously train and educate the learning organizations' CEOs about the importance of KM through group works and training programs. Knowledge management (KM) is becoming an important management responsibility as organizations increasingly invest significant information technology resources to support acquisition, storage, sharing, and retrieval of knowledge. Furthermore, KM plays a critical role in organizations that rely primarily on intellectual capital, such as software development companies. In this paper, we report the findings of an exploratory study where we investigate the KM practices of eight leading software consultancy companies in India and we suggest a technical and social infrastructure to help enhance KM capability of software development companies in India.

Keywords – Knowledge, Management, Business, Organizations, Automobiles, Company

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1. INTRODUCTION

In this unique focused world and with the unmistakable influence of information technology (IT) on the business environment, the need emerges to get an upper hand in the midst of the tremendous measure of contenders. It has been noticed that a solid inclination inside organizations to think about knowledge and its management as a center resource and valuable idea, where their upper hand - which they all seek to lies in. Knowledge is not simply facts and numbers that organizations have on spreadsheets or in maps but instead it concerns the very human experience gained through education and working aptitudes and experience. The present businesses portrayed by a high level of complexity and that demonstrates for a more accumulation in knowledge, and without a doubt, this prompts more trouble in overseeing and n Controlling it as far as storage, arranging and so forth. Hence, we can prompt that organizations are unequivocally beginning to have confidence in Knowledge Management (KM) as an opportunity to accomplish what most of them endeavor. Logically, when organizations talk about the majority of the above mentioned. It is for the most part prompt to improve their execution and the development of basic leadership processes and in this manner to increase profitability and sustainability in the present worldwide

markets, maybe to get the knowledge ability that upgrade the effective management and effective streaming for information and knowledge inside the business.

Authoritative management principle objective is to guarantee effective and proficient utilization of its assorted assets, for example, work, capital, materials, vitality and information in their journey to accomplish intensity just as to increase profitability. Iran's organizations goals are not a special case as they comparatively endeavor to keep up high efficiency through management developments and scattering of approaches. In the present fast technological change, organizations are in steady struggle to keep up upper hand through market differentiation by giving superior items and administrations. Among different strategies, the management in organizations is expanding their attention on representatives' ability, past experiences and mastery in their journey to exceed expectations in accomplishing their objective. Moreover, improving the correspondence among representatives just as changing the association's way of life to an offer what-you- know is basic in today's' organizations. No doubt, Knowledge has turned into an essential asset for generation, alongside work, land and capital. Despite the fact

that a few types of intellectual capital are transferable, inner/individual knowledge is not actually verbalize, caught, held, dispersed and reused. As needs be, the knowledge tied down in workers' brains can get lost in the event that they choose to leave the association. The premise of Knowledge management is to a fine strategy that the correct knowledge with the correct shape put in the perfect individuals. Ebb and flow look into exhibits authoritative accomplishment as a side effect of the basic achievement components of implementing Knowledge management (KM). Without a doubt, it noticed that the effect of immaterial (knowledge) assets is significant despite the fact that they are hard to be passed on as they are for the most part emerging from experiencing genuine situations and therefore through genuine experiences of workers. In the present focused world, efficiency as a philosophy, which dependent on improvement strategy, frames the most critical objective of any association; along these lines, knowledge management guarantees to make the best possible structure and the vital technological infrastructure in the association and human-driven placement. Developing new preparing techniques and strategies for instructing work to control costs, improve quality and customer satisfaction, is an essential management process.

1.1 Knowledge Management Capabilities

To contend effectively, firms must use their current knowledge and make new knowledge that favorably positions them in their picked markets. To achieve this, organizations must build up an 'absorptive limit'— the capacity to use earlier knowledge to perceive the estimation of new information, absorb it, and apply it to make new knowledge and capabilities. Gold et al. (2001) have built up a model of KM dependent on the capability's perspective. They allude to three key infrastructure capabilities—specialized, structural, and social—that empower the boost of social capital (elusive capital). To use infrastructure, KM processes should likewise be available to store, change, and transport knowledge all through the association. These processes empower the association to catch, reconcile, and move knowledge in a proficient way. Together, the perspectives of infrastructure and processes give a valuable hypothetical establishment to characterizing critical aspects of knowledge effectiveness in organizations.

1.2 Automobile Industry

The automobile industry is an establishment of the worldwide economy, the primary driver of macroeconomic development, technological advancement and soundness in both created and creating nations, traversing many connecting ventures. Subsequently, there is a need to acknowledge maximum capacity of this division. The automobile industry in India is anticipate being the world is third biggest by 2016, with the nation as of now the world's second biggest bike producer. The Two Wheelers segment is the pioneer of the Indian Automobile

market inferable from a developing white-collar class and a youthful population with 8.1 percent market share. Bike generation anticipated to ascend from 16.9 million in FY14 to 28.8 million by FY21. What's more, passenger vehicle creation anticipated to increase to 10 million in FY21 from 3.1 million in FY14. The market offer of Passenger Vehicle segment is 13 percent. The Indian car industry is the biggest on the planet with a yearly creation of 23.37 million vehicles in FY 2014-15, following a development of 8.68 percent in the course of the most recent year. The automobile industry contribution in nation's GDP is 7.1 percent and is in charge of 7 to 8 percent of India's complete working population.

Current Status of Automobile Industry

Indian Automobile Industry is that the fourth largest automotive market by volume, by 2015.

- ▶ India is the Seventh-largest producer in the world with an average annual production of 17.5 Million vehicles.
- ▶ India has fourth largest auto manufacturing hubs across the country.
- ▶ Contributes 7% of the country's GDP by volume.
- ▶ 6 Million-plus vehicles to be sold annually, by 2018

1.3 Km and Organizational Performance

Authoritative execution (OP) intends to what degree the hierarchical goals and destinations can be accomplished. Numerous observational and applied investigations were directing to test the connection between KM and OP, which are abridge in. Investigated the hierarchical effect of knowledge management rehearses. The investigation contended that it is expecting that knowledge management works on including (correspondence, the capacity to make new knowledge, acquisition, arrangements and strategies of KM, and preparing) influence hierarchical execution dimensions, which incorporate (money related execution, new item achievement, customer satisfaction, market share) emphatically among every one of the dimensions. In any case, it uncovered that the most elevated effect was on the accomplishment of another item, which is one of the OP dimensions, and the preparation was the most grounded influencing dimension on OP.

2. REVIEW LITERATURE

Amman, Jordan 2015 – Business, knowledge is thinking about as a center asset in any association, even it very well may be considered as vital as technological capital. It is a piece of human abilities and in this very human capital. Knowledge management (KM) is turning into a prevailing fashion in an expanding way such a large number of

organizations are endeavoring to apply it to improve their authoritative execution. In this paper, literatures were exploring fundamentally to demonstrate the genuine influence of knowledge management and a portion of its practices on hierarchical execution. It established that KM including knowledge process and infrastructure capabilities influence decidedly in a huge way on all aspects of authoritative execution specifically or by implication. In a similar vein, there is a huge need to ceaselessly prepare and instruct the learning organizations' CEOs about the importance of KM through group works and training programs.

Fatemeh Torabi (2017) - Knowledge is turning into a valuable asset for most organizations and the journey to deal with this asset is picking up prevalence among scientists and management. Hierarchical management's primary target is to guarantee effective and proficient utilization of its different assets, for example, work, capital, materials, vitality and information in their journey to accomplish aggressiveness just as to increase efficiency that must be oversee. In the present fast technological change, organizations are in steady struggle to keep up upper hand through market differentiation by giving superior items and administrations. The management in organizations is expanding their attention on workers' skill, past experiences and mastery in their mission to exceed expectations in accomplishing their objective. To put it plainly, Knowledge has turned into an essential asset for most authoritative functionalities. Knowledge management guarantees to make the best possible structure and the vital technological infrastructure in organizations and human driven placement. This examination investigates the role of "implied" knowledge sharing on hierarchical efficiency. Appropriately, a system was developed and theories were drawn and tried where results showed intriguing bits of knowledge into the role of sharing on authoritative efficiency. The study, which was lead at Koosa Bank of Iran, exhibited that the workers' intension to share and consequently the sharing of inferred knowledge has direct positive effects on efficiency. What's more, our examination showed that not just profitability would increase in view of knowledge sharing, yet additionally workers' innovative contributions increased due to exposure to others' knowledge, skill, and experiences.

Ayers, R. S. (2015) - Performance examination programs are touted as a management control apparatus for implementing hierarchical goals and driving authoritative performance however how these projects do that has not been evaluated. This inquire about analyzes the degree to which objective alignment in government office performance evaluation programs upgrades authoritative performance. Two aspects of objective alignment are investigating genuine installing of authoritative goals in performance plans (plan alignment) and representatives' knowledge of how their work identifies with the office's goals and needs (worker alignment).

Results demonstrate representative alignment increases authoritative performance though plan alignment does not. Vital 28 management defenders should observe this result. Besides, the general quality of a performance evaluation program directs the alignment and hierarchical performance relationship. Under states of high-and low-performance examination program desires, representative alignment can influence hierarchical performance, yet not of course.

Kitimaporn Choochote 2012 - In the course of recent decades there have been significant walks in the area of knowledge management, to such an extent that today it is view as a discipline without anyone else. Despite the fact that there has been much work done in the area, there is a significant predisposition towards expansive organizations. Due to this predisposition, there is a deficiency of studies, which have secured Small and Medium Enterprises (SMEs), and all the more explicitly SMEs in creating nations. It gives a structure to unbiasedly getting a gauge of the knowledge management process of organizations, by researching qualities, which are identifying with the knowledge management process. The aftereffects of the examination gives bits of knowledge into SME's comprehension of the knowledge management process and it depends on these experiences that recommendations are made on how SMEs in creating nations can send a hearty knowledge management framework utilizing principally free and open source programming and enhance their knowledge management process.

3. RESEARCH METHODOLOGY

The study is an expressive one. Essential information was collect by the specialist with the assistance of structured survey directed to level2 and level3 workers of R& D division. Since the study is tie in with rehearsing of KM, the study was restrict with R&D division and its effective practices. The complete number of workers at level2 and level3 is 124. This study was complete with all the 124 workers who are doing this knowledge management practices in that Automobile Industry. Because of various reasons, the organizations name was not revealing in this study.

Table 1 Reliability Statistics

Cronbach's Alpha	N of Items
.879	22

An examination produced using the reliability of the information to check whether random mistake causing inconsistency and thusly-lower reliability is at a sensible level or not, by running reliability test.

From table 1 plainly estimations of Coefficient alpha (Cronbach's Alpha) have been get, the base estimation of Coefficient alpha got was .879 .This shows information has palatable inside consistency reliability.

3.1 Statistical Tools Used

Using Statistical Package for Social Sciences (SPSS) the following tools were administered in this study 1) Factor Analysis 2) Correlation and 3) Reliability Test.

Factor Analysis

Dimension: Knowledge Management practices

KMO and Bartlett's Test

The individual statements on Knowledge management practices was inspected utilizing factor investigation dependent on 12 individual statements and the reliability of the examples collected was tried for internal consistency of the grouping of the things.

Table 2 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.607
Bartlett's Test of Sphericity Approx. Chi-Square	197.018
df	66
Sig.	.000

KMO measure of testing amplexness is a file to look at the appropriateness of factor investigation. High qualities somewhere in the range of 0.5 and 1.0 demonstrate factor investigation is appropriate. Qualities below 0.5 suggest that factor examination may not be appropriate. From the above table it seen that Kaiser – Meyer – Olkin measure of inspecting amplexness record is 0.607 and subsequently the factor investigation is appropriate for the given informational index. Bartlett's Test of Spheri city is use to inspect the speculation that the variables are uncorrelated. It dependent on chi-Square transformation of the determinant of relationship network. A substantial estimation of the test measurement will support the dismissal of the invalid speculation. Thus, this would demonstrate that factor examination is appropriate. Bartlett's trial of Sphericity Chi-square insights is 197.018, that demonstrates the 12 statements are relate and thus as inferred in KMO, factor investigation is appropriate for the given informational index.

4. RESULT AND DISCUSSION

The motivation behind the dialog is to translate and portray the criticalness of your discoveries in light of what was at point thought about the research issue being investigate and to clarify any new understanding or bits of knowledge that developed because of your

study of the issue. The talk will dependably associate with the presentation by method for the research questions or speculations you presented and the literature you looked into, yet the discourse does not just rehash or revamp the initial segments of your paper. The dialog unmistakably clarify how your study propelled the pursuer's comprehension of the research issue from where you left them toward the finish of your audit of earlier research.

Table 3 Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.765	31.375	31.375	3.765	31.375	31.375	2.403	20.021	20.021
2	1.485	12.374	43.749	1.485	12.374	43.749	2.135	17.788	37.809
3	1.306	10.885	54.634	1.306	10.885	54.634	1.749	14.576	52.385
4	1.072	8.937	63.571	1.072	8.937	63.571	1.342	11.186	63.571
5	0.92	7.671	71.241						
6	0.766	6.385	77.626						
7	0.621	5.177	82.803						
8	0.554	4.616	87.419						
9	0.546	4.549	91.968						
10	0.465	3.878	95.846						
11	0.336	2.803	98.649						
12	0.162	1.351	100						

Eigen Value speaks to the absolute variance clarified by each factor. Level of the all-out variance attributed to each factor. One of the famous strategies utilized in Exploratory Factor Analysis is Principal Component Analysis; where the all-out variance in the data is, consider deciding the base number of factors that will represent most extreme variance of data.

- Rotation Method: Varimax with Kaiser Normalization

Interpretation of factors is facilitating by distinguishing the statements that have substantial loadings in a similar factor. The factor can be a mediator in terms of the statement that heaps high on it. The factors of a study on knowledge management practices comprises of 12 individual statements. Out of 12 factors, 4 individual factors contribute more towards worker competencies

The factors are:

1. New highlights in the products are giving in the wake of studying the customer requirement.
2. Open discussion helps in showing signs of improvement image of the company strategy.
3. Training projects are schedule dependent on competency gap framework.
4. SAP is use for important exchanges.

Table 4 Rotated Component Matrix (a)

Component	1	2	3	4
Competency gap helps in identifying knowledge gaps	.391	-.099	.697	.094
Training programs are on the basis of competency gap matrix	-.124	.184	.783	.138
Expertise from leading consultants and Institutions	.211	.382	.586	-.109
Company portal & KM portals supplements lot of information	.298	.657	.265	.302
Vision & Values are conveyed effectively	.626	.096	-.278	.327
R& D aids in Sharing of information	.442	.515	-.079	.470
Open forum helps in getting bigger picture of company strategy	-.053	.743	.013	-.091
E-publication are useful	.773	.265	.192	-.084
Knowledge is shared during meetings	.226	.742	.163	-.062
Modern aids & mails are used for knowledge sharing	.480	-.102	.196	.316
New features about products are provided based on customer requirement	.795	.232	.198	-.080
SAP is used for important transactions	.003	-.047	.104	.870
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a Rotation converged in 6 iterations.				

Table 5 Correlations There Exist Relationship between Vision & Values and R&D

	Vision & Values are conveyed effectively	R&D aids in sharing information	Open forum helps in getting company strategy	E-publications are useful	Knowledge is shared in meetings	Modern aids & mails are used for knowledge sharing
Vision & Values are conveyed effectively	1	.469(**)	.032	.326(*)	.115	.113
	Pearson Correlation Sig. (2-tailed)	.000	.806	.011	.383	.388
	N	124	124	124	124	124
R&D aids in sharing information	Pearson Correlation Sig. (2-tailed)	1	.186	.401(**)	.381(**)	.249
	N	124	124	124	124	124
Open forum helps in getting company strategy	Pearson Correlation Sig. (2-tailed)	.032	1	.201	.382(**)	-.009
	N	124	124	124	124	124
E-publications are useful	Pearson Correlation Sig. (2-tailed)	.326(*)	.201	1	.336(**)	.221
	N	124	124	124	124	124
Knowledge is shared in meetings	Pearson Correlation Sig. (2-tailed)	.115	.382(**)	.336(**)	1	.155
	N	124	124	124	124	124
Modern aids & mails are used for knowledge sharing	Pearson Correlation Sig. (2-tailed)	.113	-.009	.221	.155	1
	N	124	124	124	124	124

** Correlation is significant at the 0.01 level (2-tailed), * Correlation is significant at the 0.05 level (2-tailed).

The correlation between the variables Vision and Values are conveyed effectively and R& D aids is sharing Information was corresponding. 469, which was highly significant, Correlation between Vision and Values are conveying effectively an open forum in getting company strategy was correlated. 032 not significant, the correlation between Vision & Values are conveyed effectively, E-publication are useful, 326 relate not significant, correlation between Vision and Values are conveyed effectively, knowledge is partaking in meetings. 115 which was not significant, the correlation between Vision & Values are conveying effectively and current aids were utilized for knowledge share, 113 that was not significant subsequently, there exists a relationship between Vision and R&D.

5. CONCLUSION

These days, knowledge is considered as an essential asset in any organization. Accordingly, numerous organizations are endeavoring to apply Knowledge management to improve their organizational performance. This article has inspected the positive effect of knowledge management and a portion of its practices on organizational performance. Numerous examinations have presumed that KM is the fundamental reason to business development. Therefore, it is a great idea to put resources into KM resources to achieve organizational performance improvement, since KM resources and practices are, relate straightforwardly and by implication to it when they are implemented effectively. To implement an effective knowledge management framework, the support of senior management in the union of structure knowledge management and in spreading the way of life of knowledge sharing should be contemplate. Besides, there is a huge need to ceaselessly prepare and teach the organizations' CEOs about the importance of KM through group works and training programs. The objective of this paper is to comprehend the KM practices in the automobile industry in India, which are experiencing a noteworthy progress in this area. This paper presents knowledge management as an organizing mechanism. Experimental proof supports the view that a firm with a knowledge management capacity will utilize resources all the more productively thus will be increasingly innovative and perform better. The importance of training dependent on the competency gap, SAP and R& D for upgrading the Knowledge of representatives plainly calls attention to in this research work.

6. REFERENCES

1. Ayers, R. S. (2015) – “The Impact of Knowledge Management on Organizational Performance”, International Journal of Advanced Computer Science and Applications, Vol. 9, No. 4, 2015.
2. Fatemeh Torabi (2017). “The impact of Knowledge Management on Organizational Productivity”, Information Systems International Conference, ISICO.
3. Cerchione, R.; Esposito, E.; Spadaro, M.R. (2016) – “A literature review on knowledge management in SMEs. Knowl”, Manag. Res. Pract. 2016, 14, pp. 169–177.
4. Akhavan, P.; Ebrahim, N.A.; Fetrafi, M.A.; Pezeshkan, A. (2016). “Major trends in knowledge management research”, a bibliometric study. Scientometrics 2016, 107, pp. 1–16.
5. Hari Vasudevan (2015) – “Demystifying Knowledge Management in Indian

- Manufacturing”, *Procedia Engineering* 97, pp. 1724 – 1734.
6. Serenko, A.; Dumay, J. (2015) – “Citation classics published in knowledge management journals. Part-i: Articles and their characteristics”, *J. Knowl. Manag.* 2015, 19, pp. 401–431.
 7. W. Bahatti, A. Zaheer, and K. Rehman (2011) – “The effect of knowledge management practices on organizational performance: A conceptual study”, *African Journal of Business Management*, Vol. 5(7), pp. 2847-2853.
 8. S. Lee, B. Kim, and H. Kim (2012) – “An Integrated View Of Knowledge Management For Performancell”, *Journal Of Knowledge Management*, Vol.16 (2), pp. 183-203.
 9. S. S. Chandrawat, Y. Joshi and Parmer, S. (2012) – “Knowledge Sharing in Organizations: Modeling the Barriers, an Interpretive Structural Modeling Approach”, *International Journal of Engineering and Innovative Technology (IJEIT)*. 2 (3) pp. 207-214
 10. Kwong-Chi Lo, Kwai-Sang Chin (2009) - “User-satisfactionbased Knowledge Management Performance Measurement”, *International Journal of Quality & Reliability Management*, 26, Issue: 5, Page: 449 - 468.

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