

A relationship between knowledge management and organizational performance – A study with reference to manufacturing companies in and around Chennai

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Abstract:

Knowledge management and organizational Performance have received much attention in recent times, owing to the increased recognition which has been accorded knowledge as a source of organizational success and sustainability. Researchers and practitioners have become increasingly interested in striving to understand how the two notions can be harnessed in order to attain that success The current study examines the nature of the relationship between knowledge management and organizational Performance in manufacturing companies in and around Chennai, with the aim of providing a unified framework for understanding how the above-mentioned knowledge-based concepts relate to each other. A mixed methodology approach was applied to achieve the set objective. Quantitative data were collected using questionnaires from 50 respondents from reputed manufacturing companies. The application of cronbach alpha coefficient has been applied to check the reliability for all the variables of knowledge management and organizational performance practices.

Keywords: Knowledge Management, Organisational Performance, Organisation Growth

Introduction:

Knowledge Management is the processes that influence the book of the law, creates, circulates, and uses of knowledge. Knowledge comes in various shapes and concepts, and differentiates among the different knowledge types. The difference between tacit knowledge and explicit knowledge is information related to practical knowledge. Tacit knowledge is difficult to transfer and it needs regular interaction among employees. Workers with tacit knowledge do not understand what they learnt (AWWA Workforce Strategies Committee Source, 2012). Expertise is important for organizations around the world, but organization fails to retain such workers due to their organizational policies (Hans K. Hvide and Eirik Gaard Kristiansen, 2012).

Organizations have a vital role in developing nations and its socioeconomic progress. Only 6 Nobel prizes awarded in 22 years time to the researchers who have focused on the analysis of organizations. Focus on Continuous performance is important for any organization to grow. So the organizational performance is one of the important parameters for the management and the organizational performance (Corina, Liviu and Roxana, 2011). Healthy competition in the growing global environment has increased the interest in the marketing function and its contribution leads to success. This is possible due to necessary matching available between marketing and other functional activities of any organization and aligning financial and marketing strategies leads to more profitable (Mehdi Mohammadzadeh, Said Mohammad Arabia and Jamshid Salamzadeh, 2013). Organizational culture and its impact on knowledge management processes within the organization lead to the success of an organization (Al-Murawwi. M, 2014).

Brief Literature Review:

Knowledge transfer depends upon the knowledge seeker and knowledge giver and the key to knowledge transfer are willingness and continuing the process. Implementing the continuing process, multinational corporations can create shared values and increase external and internal level continuing process has impacted on the willingness to transfer knowledge, provided the opportunity to introduce different aspects of the knowledge being transferred (Zhaleh Najafi-Tavani, Axèle Giroud and Rudolf R. Sinkovics, 2012).

Knowledge Transfer has no value if the transferor fails to utilize it. The usage of knowledge could promote familiarity of the knowledge, increase the benefits of learning and stimulate better performance (Kuo, Chi, Shi, Yue and Chen, 2012).

Knowledge Management is a very important instrument for the organization to achieve its full potential as the Knowledge firm, by mobilizing global knowledge from inside and outside the organization and applying it to solve development problems. The goal is not only to enhance the firm's capacity to reduce loss in an effective manner (Prodromos D. Chatzoglou and Eftichia Vraimaki, 2009).

Knowledge is not measured or recorded, so organizations must manage knowledge effectively in order to take full advantage of the skills and experience in their systems and structures as well as the tacit knowledge belonging to the employees of the organization (Abdel, Gawaher and Mohamed, 2012).

The knowledge management system allows classifying, organizing, administering and facilitating the application of knowledge generated by the staff. The knowledge management system encapsulates complex logic expressions and ontology management, obtaining successful outcomes that may organize in their own style, becoming a powerful knowledge management process to convert individual experiences in educational innovation into organizational knowledge in the higher education sector (Angel, Maria and Francisco, 2014)

Knowledge management effectiveness can be understood as the knowledge acquired, shared, and applied by its employees. Knowledge management effectiveness is a process to implement knowledge application to achieve organizational innovation for improving business performance. Organizations that effectively manage their knowledge an organization will have higher innovation in their organization to achieve a breakthrough competitive advantage (Tan, C, L and Nasurdin, A, M, 2011).

The effective management and leadership of result oriented organizations, understands and appreciates the employees' motivation. Increase the awareness to management about the fundamental knowledge and behaviour in organizations and also how much they are determined by perceptions and personalities (Ali Mohammed S.M. Al-Khoury, 2010).

Performance Management has had a major effect on the communication around the world. It is not easy to read about New Public Management without reference to Performance Management. Many public employees around the world are now learning about Vision, Mission, and Goals and quantified Objectives. The impact is now clearly differentiates Outcomes and Results and many demands related with services need to be identified, monitored and measured. Moreover, internal processes are being scrutinized and found in need of improvement. As a result, Process Mapping and Business Modelling are becoming part of the techniques that are utilized in a Performance Management system. (Hanine Salem, 2003 Manufacturers are implementing modern performance measurement system, World class performance measurement techniques are being used, and there are indications that financial as well as non-financial measures are being used. It also appears that the PMS are not being reviewed or modified Performance Management System should not be static and must change to reflect the organizational strategy and business environment in which it operates (Carr and Hasan, 2008). Very important factors in performance management system implementation are external environment, the status of market development and competition. The level of performance management system implementation is higher in the case of established competition and implementation of performance management system and other management techniques could contribute to the added value, higher income and higher competitiveness on the world market and this should be the important priority of developing countries. (Aleksandar and Vladimir, 2013)

Gaps in the Literature:

The international studies regarding knowledge management and organizational performance are independently presented the arguments related to their contents, But no study as addressed the importance of the relationship between knowledge management and organizational performance. The second lacuna regarding industry wise approach in the literature stated that the knowledge

management process flourished in information technology companies where as international researchers did not address the knowledge management issues in manufacturing companies.

Objectives of the study:

1. To identify the elements of knowledge management in manufacturing companies' practices.
2. To ascertain the measurement process of organizational performance in the study domain.
3. To find the nature of the relationship between knowledge management and organizational performance in the employees' perception.

Hypothesis:

There is no relationship between knowledge management and organizational performance.

Methodology:

The study is based on both primary and secondary data. The primary data is collected through a structured questionnaire. Secondary data is obtained from various sources like books, journals, magazines from library websites and other resources.

Sampling selection:

After constructing a well defined questionnaire the researcher conducted a pilot study to check the reliability and validity of the research instrument. The convenient sampling method is applied to collect 50 responses from reputed manufacturing companies. The application of cronbach alpha coefficient is applied to check the reliability for all the variables of knowledge management and organizational performance practices.

It is found that the reliability coefficient is found to be 0.818 which implied the questionnaire framed by the researcher is reliable at 81.8% level. This shows that the research instrument can further used for the main study data collection. The researcher used convenience sampling method to collect 300 responses distributed over top 5 manufacturing companies in Chennai city.

Data Analyses:

After obtaining the responses from 300 employees of top 5 manufacturing companies, the data are systematically coded in terms of numerical values to analyze them in depth. The researcher used both confirmatory factor analysis and exploratory factor analyses as well as linear multiple regression analyses to analyze the primary data regarding knowledge management and organizational performance practices.

Analysis and Discussion:

The factor analysis by the principal component method is applied to identify the factors responsible for knowledge management and organizational performance, the following research is obtained.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.657
Bartlett's Test of Approx. Chi-Square	1192.670
Sphericity	df
	36
	Sig.
	.000

KMO and Bartlett's test the application of factor analysis on 9 variables of knowledge management identified KMO value 0.657 with Bartlett's test of spearicity and approximate Chi Square value is equal to 1192.670 are statistically significant at the 5 % level. This leads to the factor extraction as stated in the following Total Variance Table.

Total Variance Explained

Component	Initial Eigen values			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.724	30.270	30.270	2.429	26.984	26.984
2	2.139	23.762	54.032	2.042	22.694	49.679
3	1.028	11.423	65.455	1.420	15.776	65.455
4	.883	9.813	75.267			
5	.662	7.353	82.620			
6	.527	5.856	88.476			
7	.391	4.346	92.823			
8	.371	4.122	96.944			
9	.275	3.056	100.000			

Extraction Method: Principal Component Analysis.

From the above table it is found that 9 variables are reduced into 3 predominant factors with cumulative variance 65.455%. The first factor has the variance 26.984% called knowledge sharing, the second factor with 22.694% variance is called knowledge regain. The third factor with 15.776% is called knowledge rejuvenating. The influence of these three factors over organizational performance is measured in this research work. In order to relate these three factors and organizational performance, the researcher used the linear multiple regression analysis as shown in the following table.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.362(a)	.131	.125	.93532660

a Predictors: (Constant), REGR factor score 3 for analysis 1, REGR factor score 2 for analysis 1, REGR factor score 1 for analysis 1

From the above table it is found that R square = 0.362, adjusted R square = 0.131, Adjusted R square = 0.125 and standard error of the estimate is 0.935 it implies the knowledge management factors influence the organizational performance by 13.1%, this leads to the regression fit as shown in the following Anova table.

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	60.325	3	20.108	22.985	.000(a)
	Residual	400.675	458	.875		
	Total	461.000	461			

a Predictors: (Constant), REGR factor score 3 for analysis 1, REGR factor score 2 for analysis 1, REGR factor score 1 for analysis 1

b Dependent Variable: REGR factor score 1for analysis2

From the above table it is found that F=22.985, P=0.000 are statistically significant at the 5% level. It implies that there is a deep relation between knowledge management practices and organizational performance. The individual influence is also measured through the following coefficient table.

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	5.05E-017	.044		.000	1.000
	REGR factor score 1 for analysis 1	.316	.044	.316	7.243	.000
	REGR factor score 2 for analysis 1	-.029	.044	-.329	-4.660	.009
	REGR factor score 3 for analysis 1	-.175	.044	-.175	-4.008	.000

a Dependent Variable: REGR factor score 1for analysis2

From the above table it is found that Beta values and t values are statistically significant at 5 % level. Therefore, it can be concluded that knowledge management practices are very much useful to develop organizational performance.

Findings and Conclusion:

Knowledge management in manufacturing companies can be identified through the knowledge showing among the employees and their knowledge regaining capabilities. The periodic training and developmental programs for knowledge rejuvenating help employees to gain their knowledge and performance. In manufacturing companies organizational performance depends upon the knowledge that is shared among the employees to produce best quality products. This would give the evidence for an increase in the individual performance, organizational performance and productivity.

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