Success of Knowledge Management Strategies in Manufacturing Companies- A Study with Reference to Chennai, Kanchipuram and Thiruvallur Districts

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Abstract: Knowledge management strategy deals with careful approach and implementation of knowledge to achieve the best results within the available limited condition of employees, organisational employment and capabilities of employer. This study is to analyse about the components of knowledge management strategies and to measure the influence of organisational variables in knowledge management strategies. The samples was collected from 7 top manufacturing companies distributed over 3 districts, Chennai, Kanchipuram Tiruvallur and especially in greater Chennai. With t-test the analysis is done and we can analyse that knowledge management strategies depend upon employee’s interest in implementing the knowledge with in the premises of the organisation.

Keywords: Knowledge management strategy, organisational employment and capabilities, manufacturing companies

I. INTRODUCTION

In all the information from different sources knowledge alone can differentiate whether appropriate or not. In this contest the information drives from various sources are thoroughly investigated by the knowledge, it is appropriately interpreted for the practical purpose and it will be reflected over the employees and any organization. In other words knowledge management is considered as one of the amenities among the employer as well as the employees to manage the knowledge they have for organizational developments. It is a collective effect involving many employees and the culture, the existing technology to implement in the work premises. It required both monitory and non monitory benefits among the employees for its successful implementation. Every employee an organization perceived that the knowledge management are useful for their career development, efficiency increase in the work premises and also gives the overall performance in the organization. The knowledge management derived the knowledge from various intensive and extensive resources and it is subsequently stored under conducive condition organization. Knowledge management is a tuff procedure to create influence over the employee is as well as the organization and it also required technological domain for its purpose (Cold well, David and Billsberry, Jon and Van Meurs, Nathalie and Marsh, Philip (2008). Knowledge management strategy its mean that careful approach and implementation of knowledge to achieve the best results within the available limited condition of employees, organizational employment and capabilities of employer. It required manpower of employees, money power crop employer or top level management to implement high class technology to get more productive advantages along with competition knowledge management strategy also includes the innovate ideas form employees, their job involvement and ethical self to acquire next new acquire jobs. Its mainly focus on quick decision making, quick implementation process and also it should be more appropriate for prevailing external environment especially from the Government side. The main of all the knowledge management strategies implemented by the management is having the aim of increasing the productivity through cost minimization, offering job stratification to the employees concentrating on new product developments. (Soyeon Kim, Fabian Jintae Froese, Anne Cox (2012)). The knowledge management strategies are useful for all the organizations during the crisis of low profitability as well as employee turnover. It helped organization to meet the challenges from outside work and also increase competitive advantage among the employees and also motivate them to have loyalty towards the organization. It also has main focus on both internal and external affairs the knowledge management in most drives fields of difficulties and also focuses on this service quality to the customers.

II. LITERATURE REVIEWS

Evans Sokro (2012), The main aim of the study is to identify the essential factors responsible for knowledge management strategies. This particular study investigates how the changing which is taken from the organizations is accepted by the employees amid many difficulties. The social, political and cultural changes prevailing in an around organizations are carefully control by the successful managements strategies. Anton Schlechter, Angel Hung, Mark Bussin (2014). This study found that knowledge management strategies are very important need for annor to achieve the best of production within the organization it compels all the organizations to motivate the strategies among the employees in the form of two domains namely monetary and non monetary motivations. Abdul Quddus Mohammed (2015), This study is aimed at identifying the relationship between demographic characteristic of employees and the various perceptions towards knowledge management strategies.
In particular, the employees which are having the different perceptions have the same type of approach to meet the challenges outside organizations. The knowledge management strategies are always product oriented they are not employee oriented. Debra L. Truitt (2011), The study identified that the primary aim of knowledge management strategy is to meet the productivity and the second aim to equip the employees. This study mainly identified three predominant factors namely identified the need for knowledge management strategies, operating knowledge management strategies and receiving the benefits of knowledge management strategies. Raja Abdul Ghafoor Khan, Furqan Ahmed Khan and Muhammed Aslam Khan (2011) The study mainly identified that employee collaboration and the accessibility the new knowledge is the primary factor influencing the employees to have very good knowledge in field to improve their efficiency. Appropriate training and development and flexibility with the work premises are the two important factors motivates for the successful management strategies. The operational efforts of knowledge management strategies can be identified through the powerful inter relationship among employer and employees and good Governments of the management to meet the challenges. Azmawani Abd Rahman, SiewLm Ng, Murali Sambasivian, Florence Wong (2013), According to this study knowledge management strategies are mainly consist of the several stakeholders’ employer, employee, customers and suppliers. It is four stakeholders are considered as components of knowledge management strategies. Improving the ability of the employees, improving the supply chain managers for the suppliers, offering best satisfaction to the customers and getting profitability for the employer are all totaling involve the flexible mechanical system knowledge management strategies. Neelam Tahir, Issar Khan Yousafzai, Shahid Jan, Muhammad Hashim (2014), This study mainly focus on infrastructure development and its coloration with knowledge management strategies in the form of getting maximum information. Promotion to the employees and attending the employees grievances are also the factors directly affecting the knowledge management strategies.

Chilka Ugoji, Chima Mordi and Hakeem Ajonbadi (2014). This particular study predominately found the four factors which are combine creating impact on knowledge management strategies in several industries namely quick decisions making, knowledge storage facilities, optimistic collaboration among the employees and attending the employees grievances. It is primarily enhancing the importance of infrastructural development for the successful framing knowledge management strategies. Falola, Osibanjo, Ojo (2014), The author perceived that the success knowledge management depends upon the implementation of the selected knowledge management strategies within the organization. This study also focus on quality of production is the main aim of knowledge management strategies. Job Ayodele E Kundayo (2015), The author identified that creating the organizational climate with user friendly environment, sharing of knowledge among the employees and smooth interpersonal relationship always create a conductive situation for knowledge management strategies. The strategic knowledge management approach is able to achieve all the objectives and also meet the overall needs of the employees. Selecting appropriate knowledge management strategies and the decision making the top level executives broad the best results in the knowledge management. Standard implementation process is very important to ensure the knowledge management strategies and their quality output.

III. GAPS IN THE LITERATURE

After a through a all literature reviews pertaining to knowledge management strategies the researcher is to identified areas which were not venture by the researcher in the field of knowledge management.

1. How the organization can select the knowledge management strategies.
2. Which is the organizational climate could ensure best knowledge management strategic programs.
3. What are all the outcomes of knowledge management strategies it is above mentioned three questions where not appropriately addressed by the national and international level researchers?

Therefore the present research mainly focusing on these three gaps and also trying to give the answers as perfect as possible.

IV. OBJECTIVES OF THE STUDY

1. To study the components of knowledge management strategies in manufacturing companies.
2. To measure the influence of organizational variables on knowledge management strategies in the study area.

V. HYPOTHESIS OF THE STUDY

1. There is no significance of demographic variables of employees on their perception towards knowledge management strategies.
2. There is no significance relationship between knowledge management strategies and their outcomes in the manufacturing companies.

VI. RESEARCH METHODOLOGY

This paper is completely based on both primary and secondary data. The primary data is obtained through a well structured questionnaire. The questionnaire is derived out of research gaps in the literature. The questionnaire consists of three parts, the first part consist of personal and organizational details of the employees. The second part completely deals with 20 variables pertaining to knowledge management strategies in the manufacturing companies. These variables are responded by the employees in the manufacturing companies in likert’s five point scale which ranges from strongly agree to strongly disagree. The third part is to measure the effectiveness of knowledge management strategies within the organization it is identified by the 10 variables in different circumstances and employees are able to respond them in Likert's five point scale.
VII. PILOT STUDY

After framing the questionnaire, the researcher intended to verify its reliability and validity through a pilot study. Therefore the researcher approached 7 top manufacturing companies distributed over 3 district Chennai, Kancheepuram and Thiruvallur especially in greater Chennai. These 7 companies are able to give 10 responses for the researcher, so the researcher able to collect 70 responses from these seven companies. The employees are able to give the transparent opinion regarding the knowledge management strategies in the organization. After getting the 70 respondents, the researcher applied cronbach alpha method on the variables of the knowledge management strategies and overall effectiveness of knowledge management strategies. Cronbach alpha value indicates 0.812, this implies that the questionnaire which consist of variables are understood by employees in the manufacturing companies at 81.2% level. The required bench mark of Cronbach alpha value is 0.75 and the present value is 0.812, which implies that the questionnaire is highly reliable. Similarly a validity is done through the interaction of researcher with subjects experts and field experts as well as the employees to identify whether the statement given in the questionnaire is meaningful. It is very much related to the knowledge management process. In this way the researcher validated the present research work.

VIII. MAIN STUDY

After the pilot study the researcher is able to concentrate the above mentioned 7 companies and able to obtain 312 responses. These responses are obtained through convenience sampling method. The random sampling is not able to be implemented in this scenario because the researcher interact with human beings, they have their right to refuse the request of filling the questionnaire. Therefore according to advice of HR managers in those 7 companies the researcher approached the employees who are willing to express their perception transparently. The convenience sampling is applied and the normality of the data is tested to ensure normal distribution for the perfect representation of population. It is found from that normal distribution that the bell shaped curve and less than 5% error of skewness are obtained. Hence the researcher accepted the convenience sampling method to accomplish the present research work.

IX. STATISTICAL TOOLS

The researcher used the higher order statistical tools namely parametric t-test analysis, one way analysis of variance and mean comparison methods to test the hypothesis and to verify the objectives and also to give profound conclusion.

X. ANALYSIS AND INTERPRETATION

In the very first step the researcher intended to apply the t-test for knowledge management strategies which are obtained from the employees in Likert five point scales.

| Table 1 Employees perception on knowledge management strategies. |
|---|---|---|---|
| N | Mean | Std. Deviation | Std. Error Mean |
| Knowledge identification | 520 | 3.7952 | 0.82113 | 0.03601 |
| Training and development | 520 | 3.9183 | 0.87436 | 0.03834 |
| Recruitment and selection Performance appraisal system | 520 | 3.8308 | 0.85748 | 0.0376 |
| Employee development | 520 | 4.1192 | 0.7011 | 0.03075 |
| Innovations | 520 | 4.076 | 0.75997 | 0.03333 |

This test reflects actual perception of the employees towards various knowledge management strategies in this test the researcher considered 3 as the hypothesis mean value and the computed mean value is taken to find the difference between the hypothesis mean value and actual mean value. The t-test value is computed and its sign plays a very important role to reveal the perception of the employees.

Employees perceptual difference in knowledge management strategies

| Test Value = 3 |
|---|---|---|---|
| t | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |
|---|---|---|---|---|
| Knowledge identification | 22.083 | 519 | .000 | .79519 | .7245 | .8659 |
| Training and development | 23.949 | 519 | .000 | .91827 | .8429 | .9936 |
| Recruitment and selection | 22.093 | 519 | .000 | .83077 | .7569 | .9046 |

Employees perceptual difference in knowledge management strategies
Performance appraisal system | 36.404 | 519 | .000 | 1.11923 | 1.0588 | 1.1796
Employee development | 32.285 | 519 | .000 | 1.07596 | 1.0105 | 1.1414
Innovations | 30.906 | 519 | .000 | .98269 | .9202 | 1.0452

From the above table, it is found that all the t-values, mean values and standard deviation are statistically significant, mean values are always found to be greater than 3, this implies that the employees moderately agree for the knowledge management strategies. Some mean values are greater than 4, this implies that the employees strongly agree for the importance of knowledge management strategies. It is concluded that the main knowledge management strategies factors are knowledge identification, training and development, recruitment and selection, appropriate performance appraisal system, employee development and innovations are very important knowledge management strategies. The employees strongly agree that the manufacturing companies are giving appropriate training and development for updating the technological knowledge and innovations. The recruitment and development process is able to identify the knowledge able employees more suitable for effective knowledge management in the organizations. After the t-test the researcher is applied one way analysis of variance to find the influence of various demographic variables and the resulted are clearly presented below.

Table 3. Influence of age on Knowledge management strategies.

| Knowledge management strategies | Sum of Squares | Mean Square | F   | Sig. |
|--------------------------------|----------------|------------|-----|------|
| Knowledge identification       | 1.698          | .566       | 1.234 | .300 |
| Training and development       | 66.537         | .459       |     |     |
|                                | 68.235         | .966       | 1.344 | .262 |
| Recruitment and selection      | 104.215        | .719       |     |     |
|                                | 107.114        | .1371      | 1.965 | .122 |
| Performance appraisal system   | 101.146        | .698       |     |     |
|                                | 105.258        | .317       | .780 | .507 |
| Employee development           | .950           | .406       |     |     |
|                                | 58.859         | .726       | 1.701 | .169 |
| Innovations                    | 2.177          | .426       |     |     |
|                                | 64.007         | .5160      | 3.900 | .010 |

From the above table it is found that age of the employees found to influence the important knowledge management strategies process, training and development, recruitment and selection and performance appraisal system. The employees in the age group 40 to 50 strongly agree for the appropriate training process and their deep involvement knowledge management activities. The employees in the age group 20 to 30 moderately agree for grievance handling procedure in the organization and their interest towards innovation. Encouraging the innovation is also accepted by the employees in the age group 20 to 30. Similarly the designation of employees is also found to influence some of the knowledge management factors. These strategies are perceived by the employees in different designation.
Table 4. Influence of Designation on Knowledge management strategies

| Knowledge management strategies         | Sum of Squares | Mean Square | F   | Sig. |
|----------------------------------------|----------------|-------------|-----|------|
| Knowledge identification               | .000           | .000        | .000| .993 |
| Training and development               | 68.235         | .464        | 68.235| .904 |
| Recruitment and selection              |               | .011        | .011| .015 |
| Performance appraisal system           | 107.104        | .729        | 107.114| .819 |
| Employee development                   | 105.221        | .716        | 105.258| .691 |
| Innovations                            | 105.258        | .716        | 105.258| .691 |
|                                           | .053           | .053        | .122| .727 |
|                                           | 63.953         | .435        | 64.007| .921 |
|                                           | 69.109         | .470        | 69.114| .921 |

From the above table it is found that recruitment and selection, knowledge resource identification, knowledge transfers are found to be influence by the designation of the employees. The top level executives in the manufacturing companies strongly agreed for the appropriate recruitment and selection process and performance appraisal system. The middle level managers in those companies strongly agree for the innovation and sharing knowledge process in the work premises. The operation level employees are found to involve deeply in training and development and learning skills to meet the challenges in knowledge management similarly the experience of the employees is also found to influence the factors of knowledge management strategies. The applications of analysis of variance brought the following results.

Table 5. Influence of experience on Knowledge management strategies

| Knowledge management strategies         | Sum of Squares | Mean Square | F   | Sig. |
|----------------------------------------|----------------|-------------|-----|------|
| Knowledge identification               | 2.174          | 1.087       | 2.403| .094 |
| Training and development               | 68.061         | .452        | 68.235| .564 |
|                                           | .838           | .419        | .575| .564 |
|                                           | 106.276        | .728        | 107.114| .013 |
|                                           | 99.162         | .679        | 105.258| .066 |
|                                           | 2.188          | 1.094       | 2.772| .066 |

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| System                        | 57.621 | .395 |
|-------------------------------|--------|------|
|                               | 59.809 |      |
| Employee development          | .530   | .265 |
|                               | .610   | .545 |
| Innovations                   | 63.476 | .435 |
|                               | 64.007 |      |
|                               | .647   | .323 |
|                               | .690   | .503 |
|                               | 68.467 | .469 |
|                               | 69.114 |      |

From the above table it can be ascertained that the employees with the rich experience of more than 20 years are able to identify the important of training and development and technological knowledge for the effective knowledge management strategies. They also perceived that the successful knowledge management strategies are depending upon the training and development and grievance handling procedure of employer which in turn they get the employees loyalty very easily. Hence it is further concluded that the hypotheses 1 and 2 are rejected at 5 percent level.

XI. FINDINGS AND CONCLUSION

Knowledge management strategies depend upon employee’s interest in implementing the knowledge with in the premises of the organizations. It required highly loyal employees who are not having any intension to turnover and always stick on to the retention strategies of the management. It is found from the empirical research that the competition is highly prevailing in the manufacturing industry. Knowledge management strategies have become inevitable to meet the challenges and also to give quality outputs from the employees. Infrastructure development, new product development, orchestrations are the important components of knowledge management strategies. These strategies are employees oriented and also ensure them job security to meet all the challenges. The new technologies and new facilities for the employees are able to motivate them to have the loyalty towards the organization. The responsible employees are successfully identified by the knowledge management strategies and motivate them to remove all the impediments of the organizations. The employees and the decision making skills become dynamic due to the knowledge management strategies. It enhances quality and satisfaction to their customers and also ensure continuous chain of supply chain management from the suppliers,. The demographic variables of the employees are essential to determine the perception of the employees in knowledge management strategies.

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