RESEARCH ARTICLE                                                                OPEN ACCESS

# Dynamics of Motivation strategies for Knowledgeworker

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**Abstract**
The article is a study and analysis paper attempting to evaluate a strategy to motivate knowledge worker as a part of improving the performance of an organisation as well as Knowledge Management (KM) activities). To establish a good knowledge management system in a firm, human resources are vital tool. The productivity of the firm and to remain competitive in the field, human resources are fore most important. The challenge lies with the conversion of tacit knowledge residing in the human resources has to be brought out in code able form by means of training, documents, lecture etc.
As a human resource development activities, the knowledge worker has to be picked up based on the performance as desired by the firm. Subsequently to retain the knowledge level and further growth of the firm, proper training, sharing of the knowledge, motivating the knowledge workers by different techniques to felicitate knowledge management activities are essential. Different motivational methods applicable for different knowledge level workers are brought out. The dynamics of the motivational strategies for knowledge workers depending upon the organisational culture and human behavioral aspects are brought out.
***Key words***: explicit and tacit knowledge, extrinsic and intrinsic motivation, organisational culture, knowledge management, transactive memory

## I. Introduction

Knowledge workers are a special kind of asset of an organisation because they increase in value with time, especially when improvements and developments are made. Organisational policy and reward systems must, therefore, reinforce and support these learning behaviors together with professional enrichment programs. The future of an organization is dependent on establishing well defined Human Resource activities like good recruiting, career planning and placement policies. In particular, there is a need for improved management understanding of the concept of career planning in the field of professional enrichment and growth of engineers.

For improving the knowledge updating and motivation of knowledge workers, several strategies can be pursued. These include continuing education, retraining, sabbatical leaves, rotation programs, job transfers, and redesign. It is effective methods for the motivation and technical enrichment of senior knowledge workers, as their productivity and innovativeness tend towards slower due to the repeated nature of job over a period of time.

Management has to design an organization that ease and enhance knowledge creation. Muganda-Ochara et al, (2008) argue that it has to be a top-down approach, while Ray (2008) points out that, securing senior management commitment is basic requirement. The management needs to develop the KM strategy with focus on achieving the business strategy. A company needs to create a culture of knowledge sharing and continuous improvement. Changes in organizational culture are necessary for instituting knowledge management (Bhatt, 2001). Another factor in implementing KM is to develop the right incentives and rewards to encourage employees to share and contribute to the knowledge base. Reward and incentives should be available for individuals who contribute to and use a shared knowledge base (Lee and Yang, 2000). The reward system should clearly state expectations from each employee and the benefits of knowledge sharing.The firms have to react increasingly faster to keep their competitive edge. They are becoming aware of the fact that competencies often rely on individuals or on tacit knowledge special to the company. They are concerned about the loss of skills caused by

reengineering and the extreme mobility of their personnel within the company as well as getting out of the firm. For all these reasons, companies are striving to motivate their employees to stay with the firm. They are guaranteeing employees career growth with increased pay. The firms are rolling out training courses and developing professionalism

An organization cannot be viable in the long run unless its individuals are active in creating, sharing, and applying their task with relevant knowledge .Normally the growth of an organization reaches a peak in a short time because of the ability of knowledge resource acquisition, sharing, pooling and better management system, but they don't sustain their growth. Later due to lack of knowledge retention, depletion of knowledge workers and ineffective conversion of tacit knowledge into a documentable nature, the organization's growth start declining. The different methods of KM techniques keep the sustainability of the organization and prosper further.

An attempt is made in this article to study, analyze motivational strategies followed towards the growth of an organisation.Different methods to motivate a category of knowledge workers like engineer, technologist, scientific development based worker, service oriented workers are explained. The study will throw light in the area of human resource development of knowledge workers and help to enhance the knowledge management activitiesand growth of the organisation.

## II. Managerial & Super visorypolicies

Knowledge management facilitates developing competencies required in the innovation process (Du Plessis, 2007). Knowledge management practices influence innovation and Kianto (2011) established a correlation between knowledge management activities and continuous innovation. Knowledge, according to Lee and Yang (2000), is a foremost resource of innovation and creativeness in the organization. KM is a strategy that modern day companies need to embrace and adopt because it has great potential.Knowledge management efforts typically focus on organisational objectives such as improved performance, competitive advantage, innovation, the sharing of lessons learned, integration and continuous improvement of the organization .Knowledge management prevents staff from constantly reinventing the wheel, provides a baseline for progressive measurement, reduces the burden on expert attrition, makes visual thinking tangible, and manages effectively large volumes of information to help employees serve better and faster, increasing company benefits, increasing efficiency, productivity and work smarter, improving innovation, reducing loss of know-how by capturing explicit and tacit knowledge.

Preserving a company's skills and expertise, acquiring and disseminating knowledge, improving knowledge use to improve production – knowledge management (KM) is the management of the company's individual and collective knowledge. Companies are becoming aware of the fact that knowledge is a resource requiring explicit management method. If the knowledge is to be processed efficiently, storing knowledge, communicating, forging links and synergy between each individual's knowledge, and generating new collective knowledge are essential.While, Sandhawalia and Dalcher (2011), argues that organizations should develop KM capabilities into a state where its practices are institutionalized and rooted into its business processes. Institutionalization of knowledge management means having organizational practices and technological infrastructure that make possible continuous knowledge creation and use to create and sustain competitive advantage

A major antecedent of disillusionment and disappointment for engineers is that current management practices and policies do not incorporate an adequate understanding of their needs and expectations as professionals.Engineers are motivated by more challenging assignments, while scientists are motivated by greater freedom.Reward systems emphasizing such factors as status, advancement to managerial positions, and authority and influence within the company structure are those most appropriate for engineers.The employee's status, satisfaction, and productivity are in turn greatly influenced by opportunities for participation and involvement in managerial and technical decision making.

There is a significant need for management methods and practices to be designed with better understanding of the differences in work orientations and expectations between engineers, as knowledge workers, and other technical skilled workers.

### 2.1Knowledge sharing &worker retention

Traditionally, organizations retain only those people who add value to the organization through their experience, expertise and knowledge. But, in the present scenario, it does not suffice if people possess knowledge, but need to share them with the others in the organization. This shared knowledge is stored in a central repository accessible to all. Organization, only encourage and retain those people who are willing to share knowledge and work towards the holistic improvement of the organization and just not solve problems localized around his personal expertise. The exit of a key person without proper documentation and codification of his/her knowledge would result in a loss for the organization, since this would require re-inventing the wheel and going

through the process of knowledge creation all over again. Hence proper documentation in the form of code is very much essentialknowledge retention as embedding knowledge into some type of a long-term repository. Other views on knowledge retention consider codifying knowledge from organizational members, or from external sources, that can be retrieved when called upon (Alavi&Leidner, 2001).Knowledge sharing depends on the habit and willingness of the knowledge worker to seek out and/or be receptive to these knowledge sources

For explicit knowledge sharing, seven points have been identified that KM must consider, these are: articulation, awareness, access, guidance, completeness. IT has been identified as a key component of this type of knowledge sharing, facilitating and lowering the cost of the storage, access, retrieval, and variety of explicit knowledge Tacit knowledge sharing depends on socialization and practice. KM must offer the means for this to take place by providing the right forums supporting networks and communities, and accepting unstructured work environments. Embedded knowledge sharing is a process whereby embedded knowledge is passed on from one product, routine, or process to another.

One form of knowledge retention in a team setting is a transactive memory system. In a transactive memory system, individual knowledge is shared with other team members, which can be retained, shared and recalled collectively. Individual knowledge is embedded into the collective knowledge of the team through a transactive memory system, providing a repository of knowledge for team members. Transactive memory explains the phenomena where shared experiences lead groups of people to encode, store, and retrieve information collectively (Liang et al., 1995). Stasser, Vaughan, and Stewart (2000) described transactive memory system as a way to coordinate team members' information search, storage, and retrieval efforts, in which an individual team member's recall is supported by their experiences with other team members. By incorporating a transactive memory system to teams in the workplace, teams who were trained together recalled more information compared to being trained individually. By training the team together it was believed that teams had the time to develop transactive memory systems, thus improving their information storage and providing better knowledge sharing

### 2.2Human Behavioral factors:
Rousseau's psychological contract theory is based on the premise that beyond the formal contract between employer and employee, there are psychological contracts. These contracts represent the beliefs, perceptions and informal obligations that unite the two parties. They also include a mutual appreciation of their respective intrinsic motivation. Formal contracts only generally define the responsibilities of the firm and its' participants (Psychological contracts, Wikipedia). If somehow the psychological contract between the employer and employee is broken, the relationship will become more formal and based on extrinsic motivations (Osterloh& Frey, 2000).The perception that an employee is dishonest, inequitable or immoral may be one reason why psychological contracts are broken.Rousseau, intrinsic motivation is therefore closely linked to the psychological contracts existing in the organization

The following factors were the greatest de motivating factors in an organisation (1)Missing top management support,(2) Personal conflicts between team member3).Inequity in reward system,(4) Schedule conflict,(5)Inadequate understanding of workers expectation(6)failure to differentiate between technical &nontechnical staff and (7)lack of task intrinsic motivation(8) Inadequate managerial competence &knowledge in the field.

### III.    Motivation strategies
Motivation can be viewed as intrinsic or extrinsic. Work motivation has traditionally been classified as either intrinsic (or having its source within the individual) or extrinsic (the source is external, such as salary or bonuses)In sharp, the former is a desire to do something because one finds it interesting, whereas the latter is a desire to do something because of some anticipated rewards not related to the activity. Research indicates that an inclusive leadership or management style is conducive to intrinsic motivation whereas an exclusive approach (coercive or authoritarian) relies on extrinsic motivation.

In the context of KM, an employee may be motivated by the bonusthat comes with the successful completion of learning objectives, or by avoiding coercive measuresassociated with not participating. Or, on the other hand, an employee may be motivated by the idea ofhelping colleagues by sharing his or her experience.Intrinsic motivation at work has advantages and disadvantages: Curiosity, which often leads to creativity and learning, is clearly linked to it. Intrinsically motivated employees are often the ones which will actively search for information, approach situations in a novel way, and be able to solve more complex problems. For the employer, there is also less effort requiredto discipline or reinforce these employees (Frey, 1997).

A reward system is the deliberate use of financial resources in a process designed to encourage people to put effort in line with organizational objectives. A recognition system, on the other hand, generally is intended to emphasize the organization's appreciation

for employees that have achieved a high level of accomplishment or competence according to criteria that may diverge frompredefined objectives. Nonfinancial prizes, mentioning good actions, thanking employees, are examples of organizational recognition. Recognition systems therefore can be independent of results and celebrate individual accomplishments, efforts, learning or commitment (Milne, 2007).

As explained earlier,rewards can either be extrinsic or intrinsic, material (financial and nonfinancial) or moral. Extrinsic rewards that are financial can be directly included into the pay system. They have the advantage of being variable, easy to control, and universal (Semar, 2004). However, they have the downside of being easily forgotten, as they can be viewed as being part of regular wages and not necessarily related to certain behaviors. Extrinsic rewards may also be nonfinancial, such as gift certificates, a variety of desired objects or trips. For an equal investment, these rewards have the advantage of maintaining their motivating effect for much longer than their financial counterparts.

Extrinsic rewards may also be nonmaterial. Semar proposes six characteristics for this type of rewards:They may be related to a career plan, the organizational culture, personal environment, leadership, work environment and qualifications (Semar, 2004). They generally take the form of opportunities provided by the organization such as promotions, training, flexible work schedule, etc. These rewards are often contingent on a particular situation, the perception of individuals, and are more difficult to control.

Intrinsic rewards do not systematically induce intrinsic motivation. Employees may not be motivated bythe task itself, but be morally satisfied that the task is done. For instance, if an individual's actions areconsidered morally good, then he or she can expect recognition and admiration from colleagues. In the context of a KM, an employee that is about to leave the organization for retirement could actively share expertise and knowledge with coworkers, and consequently feel moral satisfaction that he or she contributed to the firm's well-being.

Employee participation in the formulation of project objectives will create the feelings of involvement and autonomy. Responsibility, achievement, and contribution are very important elements of motivational mechanisms for engineers Team work is a suggested another type of motivational tool. Based in Rousseau's psychological contract theory, personal relationships developed by team members will stimulate their intrinsic motivation to achieve common objectives. Team work helps in sharing the tacit knowledge which cannot be formally defined and totally shared among the KM workers. Good communication between management and employee will stimulate motivation.

Open communications, integrity, and positive reinforcement of company and professional values are certainly key elements in effective motivation

The different types of knowledge and the type of motivation desired cannot be generalized. The characteristic of different types of motivation for different knowledge related activities are tabulated and given in Table 1.

**Table 1 Characteristics Of Intrinsic And Extrinsic Motivation.**

| Sl No | Type of Organization &Function | Perspectives | Motivation category |
|---|---|---|---|
| 1 | Research & Development | Exploration, Invention & Innovation to meet the vision | Intrinsic type-self-satisfaction, Recognition. |
| 2 | Technology Development & Project linked | Establish Technology to meet the goal, Task &Skill based, milestone achievement | Both Intrinsic & Extrinsic type- Reward & Recognition. |
| 3 | Production linked | Target achievement with profit in committed schedule | Extrinsic type- Reward, Incentives |
| 4 | Service support nature | Fulfill customer's satisfaction & meet demand | Extrinsic type-Reward Incentives |

## IV. Impact on the dynamics of Motivation

The link between knowledge sharing and motivation has already been well established. It will be important that the KM project manager practice methods to motivate workers to achieve project goals. However, this can be a challenge, rewards and recognition have to be carefully planned out in order to take into account the dynamics of intrinsic and extrinsic motivation.Engineering managers should, therefore, put more emphasis on these elements, driving their attention toward maximizing the engineer's contribution. This fact obviously has great implications for evaluation criteria that should be more based on judgingengineers strictly on the basis of compliance, competence and quality of work. These criteria should include not only performance goals (cost, product features, and efficiency), but also personal and subordinates' development efforts. This would encourage to help subordinates develop their skills and potential, and eventually satisfaction and motivation

Morello and Caldwell (2001) offer a model that may guide managers in defining categories of workers, the knowledge they need and their motivation. The model suggested depicts the variation in the motivation level and the knowledge level follow a linear growing pattern. Accordingly, the worker having more innovation and creativity of new ideas with high tacit knowledge are getting motivated by intrinsic motivational means like task fulfillment and accomplishment, job satisfaction and involvement, whereas, the knowledge worker involved in service oriented and production type organisation are motivated by incentives, rewards and recognisation.To some extent, it can be presumed that intrinsic motivation has a positive effect on tacit knowledge creation and sharing of management in an organization.In practical sense,each type of knowledge activities are not having defined boundary, the model adapted by Morello et all may be considered seamless overlapping with different category as given in Fig 1.
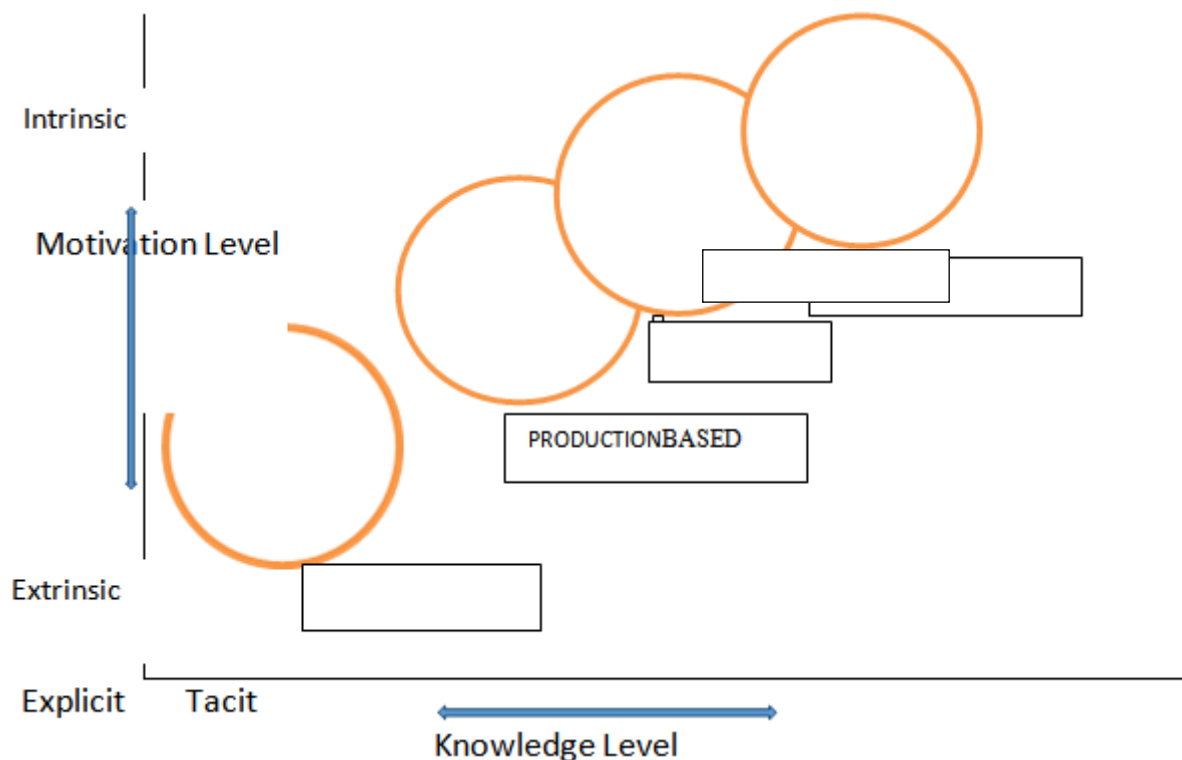


**Figure 1: Adaptation OfMorello and Caldwell's Model To Motivation Theory**

The detailed analysis and study has already been carried out, explaining their perspectives and category. A dual ladder system for scientific organization may be less advantageous. The job shifting or rotation of knowledge workers in some cases help motivation, but the expertise gained in certain area by knowledge worker has to be shared with incumbents. According to some motivation theories and career growth of individual knowledge worker, the progress and sharing of knowledge has to be dynamic nature.

While many aspects of standard incentives and reward systems used to motivate technical professionals in general are also motivating for technical visionaries, these results indicate that they are motivated by additional factors (Alberto Petroni, Pierluigi Colacino-2008, ).The additional factors mostly based on psychological factors and institutional culture and environment. By proper modelling KM and research the preferred goal can be achieved.

## V. Discussions & Scope for further Research

The major deficiency of economic theories is that they consider intrinsic motivation as being constant, and that all other motivational strategies will increase it or leave it unchanged. However, as suggested by Deci and Rousseau's cognitive theories, intrinsic motivation is influenced, sometimes negatively, by the external environment. Whereas, intrinsic motivation is a key success factor in tasks requiring the use or sharing of tacit knowledge. Therefore in these situations, using economic values may hinder non-economic factors such as intrinsic motivation and psychological contracts (Frey & Jegen, 2000). Frey states that the eviction of intrinsic motivation by extrinsic motivation is often observed

in situations where external interventions are not well perceived by employees (Frey, 1997). The situation like the rewards are as fixed by the employer and based on the work performance. It may be considered as routine incentives like bonus which shall lower the intrinsic motivation.Intrinsic motivation may be stimulated by well perceived external interventions: When the rewards are determined jointly by employers and employees and the value of the reward which cannot be monetarily compared like award, citation, higher recognition.On the other hand, if a motivated employee positively perceives external interventions, they will be over motivated. In this case, if one source of motivation is sufficient to perform, then internal motivation may be put aside. Motivation eviction almost always costs more to the company.

As the growth or career of an engineer or technologist in atypical organisation follow dual ladder system. This type of system to develop engineers' managerial skills require training and coaching activities to bridge the gap from engineering to management. One important principle engineering managers is that the design of the work environment has a huge impact on learning, growth and motivation. Employees can find creative solutions onlywhen they truly enjoy their work. Managers can also fit the jobto the employee's motivational needs by modifying the worksituation or organization or by changing leadership styles and job rotation.. A powerful motivational mechanism is, through job redesign. Work satisfaction is gradually changing its meaning. The significance of meaningful work forengineers is changing due to modifications in cultural and social values Meaningful work is not only a question of working out a technical challenge, jobs need to be redesigned in order to include ingredients of challenge and achievement, and need to be seen to represent a positive contribution to the overall company mission.

The type of work performed by KM project participants will dictate the type of knowledge to manage and the motivation sources required to share it. The four possible classification are (a) Tacit knowledge management with intrinsic motivation (b) Tacit knowledge management, extrinsic motivation(c) Explicit knowledge management with intrinsic motivation (d) Explicit knowledge management with extrinsic motivation. A detailed study by (Allen Whittom, MarieChristine Roy, 2009) suggests that intrinsic rewards are beneficial in most cases involving a knowledge creating process.

Further detailed study and research is required to devise a model for motivation for the transient condition in an organisationon .Further study may be required on the issues like how to keep the key men in an organisation motivated and retain such

knowledge worker excelling in their performance more efficiently.

## VI.     To Sum up

It has been clearly established that in an organisation human resource development activities should consider enriching the knowledge and creativity and innovation of the employees as the prime factor. The knowledge sharing must be considered as one of the KM function of the organisation. Continuous updating of the knowledge, periodical skill sharpening and retraining is essential to retain in the field of competition in the field.

Knowledge worker need to be enthusiastic and flexible to accept the newer ideas and concepts avoiding the reinvention of wheel. The strategy to be adapted for motivating knowledge worker is very much essential and sensitive. It has to be dealt very carefully. The human psychological factors like inertness, personal satisfaction, competition and comparison among the colleagues shall lower the motivation thereby the productivity and growth of the organisation.

In organisation wherein multidiscipline activities are performed by different category of knowledge worker, dynamic motivational strategies are suggested. In some cases, different yard stick for performance evaluation technique for career planning. Dual ladder or multiple ladder methods are recommended for HR development activities of an organisation. Motivating techniques like career orientation by job shifting, shuffling of the team, training in refresher courses shall give positive impact in KM activities.

## VII.     Acknowledgements:

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