HRD IN SME: A STUDY IN INCULCATION OF THE PRACTICE OF CONSCIOUS COMPETENCE LEARNING IN MOONLIGHT ENGINEERING COMPANY

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Abstract:

The Small and Medium Enterprises (SMEs) sector plays a pivotal role towards economic development regardless of the size of economy. It generates employment, increases production base and provides support to large scale enterprises. Despite the crucial role of SME plays in today's economy, unfortunately it has been found that in recent time development of human resource, which is the mainstay for making SME successful, is generally a neglected function in SMEs. India is no exception to this phenomenon. Interestingly in stark contrast to this trend Moonlight Engineering Company, a Kolkata based SME remarkably emphasises on training and development of its human resource. HRD in Moonlight has not only helped Moonlight to grow but at the same time with its skilful human resource it could successfully survive during the severity of economic down turn. This study makes an attempt to analyze how the work force of Moonlight could successfully absorb their training through conscious competence Learning.

Key Words: Conscious Competence Learning, HRD, Moonlight Engineering Company, Training and Development, The Small and Medium Enterprises (SMEs)

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INTRODUCTION

The global economy in the past two decades has experienced sea changes. The changes can be observed in the form of product and service quality, technology proliferation, deregulated economic structures, growing competition among countries and the recent economic downturn. This calls for a new paradigm for Small and Medium Enterprises (SMEs) in which they have to transform themselves to be more productive innovative and efficient. The SME sector generally engages labour-intensive production processes. Role of Labour or human resource is vital for the success of SMEs. Unless SMEs do not take the initiative to develop their human resource and the human resource employed in SMEs consciously learn to develop themselves, SMEs can not successfully meet the challenges of the new era. In the current era of globalisation SMEs in general are regrettably oblivious of this realisation. But some SMEs have rightly realised the importance of HRD. This research depicts how Moonlight Engineering Company, a Kolkata based SME could grow and meet the challenges of market by successfully developing its human resource through in-house training programme and how work force of Moonlight could successfully absorb their training through conscious competence Learning.

HRD IN SME –THE CONTEXT OF THE STUDY

INTERNATIONAL STATUS

Vivkserstaff and Parker (1995: 60) report: 'Case-study-based work has revealed a high degree of unplanned and informal training activity in small firms, where there is typically unlikely to be a dedicated personnel manager or training officer.'

Subsequent researches by Cosh, Duncan and Hughes (1998), DfEE (1997), Gibb (1997), Harrison (1997), Lane (1994), Metcalf, Walling and Fogarty (1994) and Westhead and Storey (1996) supports the findings of Vivkserstaff and Parker (1995) and a similar argument that in many small organizations training does not take place at all. It is worth mentioning in this context that where training does occur in SMEs, not only is it more likely to be reactive and informal but it tends to be short term and almost exclusively directed at the solution of immediate work-related problems rather than the development of people. Sadler Smith, Down and Field (1999: 375) cited

to the research that points to 'training interventions in smaller firms being less sophisticated than those in larger firms'.

HRM practices in small enterprises are not only informal; they also lack strategic integration in small enterprises (Duberley & Walley, 1995: Hill and Stewart, 1999: Kerr & McDougall, 1999),

According to Matlay (1999) Human Resource Management in small enterprises has not got the attention it deserves from both researchers and entrepreneurs.

NATIONAL STATUS

It is sad to note that that the HR activities are often neglected by many Indian SMEs. As per a survey conducted by the Confederation of Indian Industries (CII), around 80% from the small enterprises and about 20% of the medium enterprise respondents indicated that they do not have formal HR department. According to Sarita Nagpal, Deputy Director General, CII, the problem arises because "most of the SMEs are not aware of the strategic dimensions and associated benefits of HRD". (http://articles.economictimes.indiatimes.com/2007-09-18/news/27681613_1_indian-smes-hr-activities-job-satisfaction). As The HR practices in SMEs are not well developed, which cause a lot of frustration and employee attrition. (http://india.smetoolkit.org/india/en/file/content/43283/en/Copy1-section_III.pdf).

Srikumar (2006), explains that global environment has become more friendly and conducive to the international trade. The onus is now on the SMEs to capitalize on the free trade regime. SMEs now need to go in for a complete restructuring along the lines of the economy to meet the demands of global competitiveness.

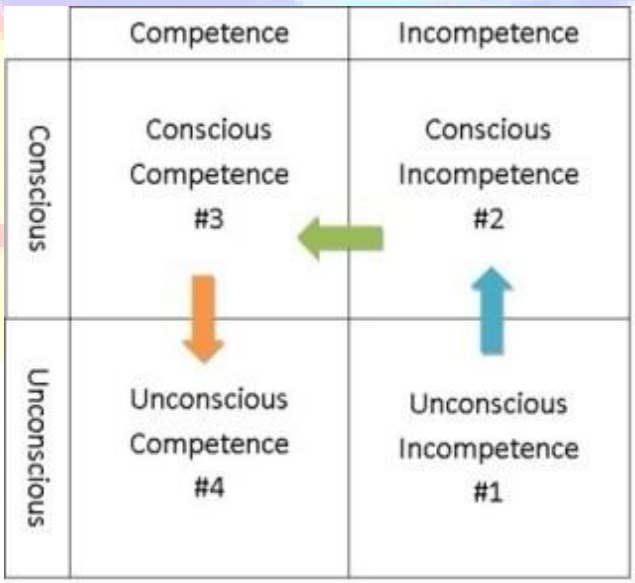
Saini & Budhwar (2008) argue that in the sphere of people management in Indian SMEs, the willingness to innovate and formalize the HR systems is constrained by a kind of bounded rationality, i.e., the owners of SMEs mostly believe that they are already doing what is humanly possible in this regard.

CONCEPTUAL FRAME WORK OF STUDY

The origin of the modern conscious competence theory is generally attributed to the Noel Burch and other employees of Gordon Training International organisation of USA. It was developed in the 1970s. However, there are other views as well on the origin and evolution of conscious competence model. Irrespective of its originator the conscious competence model explains the process and stages of learning a new skill (or behaviour, ability, technique, etc.) It is also known as 'conscious competence ladder' or 'conscious competence matrix'. The conscious competence matrix suggests four learning stages. The learning stages and implication of each consecutive stage for learner or trainee is mentioned hereunder:

1. Unconscious Incompetence – learner or trainee doesn't know what he does not know.
2. Conscious Incompetence –learner or trainee is aware of what he does not know.
3. Conscious Competence –learner or trainee knows a new skill, but to perform it he has to concentrate on it.
4. Unconscious Competence – learner or trainee can perform his new skill without actively thinking about it.

The diagram given below demonstrates of how the model works:



Source: http://www.creativeaffirmations.com/self-actualization.html

As shown in the aforesaid diagram the learner or trainee always begins at stage one- 'unconscious incompetence', and ends at stage four - 'unconscious competence', having passed through stage two- 'conscious incompetence' and stage three- 'conscious competence'.

The Characteristics of the learner or trainee in each stage is mentioned below (http://www.businessballs.com/consciouscompetencelearningmodel.htm):

1 - UNCONSCIOUS INCOMPETENCE

- the person is not aware of the existence or relevance of the skill area
- the person is not aware that they have a particular deficiency in the area concerned
- the person might deny the relevance or usefulness of the new skill
- the person must become conscious of their incompetence before development of the new skill or learning can begin

The aim of the trainee or learner and the trainer is to move the person into the 'conscious competence' stage, by demonstrating the skill or ability and the benefit that it will bring to the person's effectiveness

2 - CONSCIOUS INCOMPETENCE

- the person becomes aware of the existence and relevance of the skill
- the person is therefore also aware of their deficiency in this area, ideally by attempting or trying to use the skill
- the person realises that by improving their skill or ability in this area their effectiveness will improve
- ideally the person has a measure of the extent of their deficiency in the relevant skill, and a measure of what level of skill is required for their own competence

The person ideally makes a commitment to learn and practice the new skill, and to move to the 'conscious competence' stage.

3 - CONSCIOUS COMPETENCE

- the person achieves 'conscious competence' in a skill when they can perform it reliably at will
- the person will need to concentrate and think in order to perform the skill
- the person can perform the skill without assistance
- the person will not reliably perform the skill unless thinking about it - the skill is not yet 'second nature' or 'automatic'
- the person should be able to demonstrate the skill to another, but is unlikely to be able to teach it well to another person
- the person should ideally continue to practise the new skill, and if appropriate commit to becoming 'unconsciously competent' at the new skill

Practise is the single most effective way to move from stage 3 to 4

4- UNCONSCIOUS COMPETENCE

- the skill becomes so practised that it enters the unconscious parts of the brain - it becomes 'second nature', common examples are driving, typing, etc.. It becomes possible for certain skills to be performed while doing something else, for example, knitting while reading a book.
- the person might now be able to teach others in the skill concerned, although after some time of being unconsciously competent the person might actually have difficulty in explaining exactly how they do it - the skill has become largely instinctual

This arguably gives rise to the need for long-standing unconscious competence to be tested periodically against new standards.

RESEARCH METHODOLOGY

This study which is fundamentally qualitative in nature aims at understanding of the development of skill and knowledge of the human resource employed in Moonlight through their Conscious Competence Learning. The study was undertaken in four stages. In the first stage we had unstructured but detailed informal discussions with owner-managers of Moonlight. Based on the knowledge of discussions the entire work process of Moonlight was observed. Most of the personnel, around 90% of the workforce comprising of supervisors and workers both were again interviewed after the observation. Keeping in mind the intellectual level of majority of working population structured interview was deliberately avoided; instead unstructured interview was conducted in an informal manner. Finally at the fourth stage three focus group discussions were conducted to supplement and authenticate the data already collected as we know the hallmark of focus group discussion is the explicit use of the group interaction to produce data and insights that would not be possible without the interaction among the group participants. The entire process took about two weeks.

PROFILE OF ORGANISATION UNDER STUDY:

The Moonlight Engineering Company Limited is sister concern of The South Point Company Limited situated in the eastern part of Kolkata The South Point Company started in the year 1971 to provide after sales service for various equipments used by various oil companies. The company started by Neogi brothers with their own fund. It is a partnership company and they developed the 'Neogi' brand. Although the company was doing well, they faced some difficulties in providing after sales service to the oil companies. They were not getting the equipments on time and also the quality of available equipments was not good. So they felt the need to develop their own manufacturing unit. This would ensure good quality and availability of equipments on time. The Moonlight Engineering Company a Partnership Organization, was set up in 1986 to manufacture the spare parts of fuel dispensing pumps of all makes and models in India. The vision of the company is to delight customers with cost effective quality products and services of international standard. They provide indigenous technology for import substitution. Their clients include Indian Oil Corporation, Hindustan Petroleum Company Limited, and Bharat Petroleum Corporation Limited. Their products include equipment for volumetric measurement, Nozzle assembly, P.V.

Valve, Angular Check valve etc. The south Point Company is now the marketing company of Moonlight Engineering and provides after sales service to the clients. The marketing is mainly done through personal marketing and direct marketing. The south Point Company has a turnover of over Rs. 7 crores and a workforce of 65 employees. The moonlight Engineering Company has a turnover of Rs. 4.05 crores. 45 people are employed there. The company has shown phenomenal growth in last few years. The company started with a turnover of Rs. 2.5 lakh and has gone up to RS. 4.05 crores in the current financial year. The turnover of the company has more than doubled compared to last year. CRISIL has rated it as a company with very high potential of growth. This is a ISO 9001:2008 certified company. The company has got many awards including CII-EXIM Bank Business Excellence award. The growth of the company has been possible because they have met key business challenges through innovation. They already have got seven patents and four are under process. The company practices lean manufacturing process, 5S, 3M and kaizen. The supply chain of the company is that it receives raw materials and semi finished parts from the suppliers which is then assembled by the company and the finished good is delivered to the customers. To keep the inflow of raw materials smooth and to minimize rejection they have developed three tier cluster because the delivery and quality commitment to customers highly depends on suppliers capability. The development of the cluster has increased sales by 82%, customer complaints has gone down by 83%. In process rejection has also gone down by 83%.The company understands the importance of innovation. Recently they have developed a technology by which waste plastic is recycled to produce fuel. The product is known as Neogi Plastic Oil Equipment. The price is lower than Pyrolysis Plants. It saves fuel and energy while converting plastic to oil. This oil can be used in Boilers, ships, Gensets, furnaces etc. 1 kg plastic is converted to 1 litre oil and the price has been kept at Rs. 22 per litre.

SYSTEM OF TRAINING IN MOONLIGHT

For a SME like Moonlight In-house training is a very cost-effective method of developing its workers which allows them to be trained on-site. Moreover, the flexibility of In-House training allows the company to choose time, people in its own place according to its convenience.

Training Session at Moonlight

Source: Authors' Research

Most frequently used training method in Moonlight is on the job training (OJT). Through this method of training knowledgeable, experienced and skilled employees, such as mangers, supervisors impart training to unskilled and inexperienced employees. . If we look at Moonlight this type of training is most suitable as most of its the workers are hardly literate, incapable of receiving sophisticated technical training, which is quite a normal phenomenon for a small and medium scale enterprise (SME). Therefore, it is appropriate to impart OJT in an informal manner, so that workers can easily understand the training and be readily benefited out of it.

Moonlight also uses Total Productive Maintenance (TPM) for development of its workers and process. Total Productive Maintenance (TPM) originated in Japan in 1971 is a method for improved machine availability through better utilization of maintenance and production resources. TPM is a proactive approach that essentially aims to identify issues as soon as possible and plan to prevent any issues (anything uncalled for) before it occurs. To implement TPM properly Moonlight has taken care of seven different types of lean waste (http://www.sixsigmaonline.org/six-sigma-training-certification-information/articles/explaining-the-seven-types-of-lean-waste.html):

1. Overproduction - This type of waste does not only include product amounts made in excess, but also things produced too early, as well as excess transportation costs. It is important to know the exact demand of your product or service through research to reduce overproduction waste.

2. Unnecessary Transportation - This type of waste means having too many transports for a certain material or work in progress transportation. It also includes deterioration or damage in products which occurs during transportation and the prolonged transport times.

3. Waiting/Queuing – This type of waste could be described as the inactivity period generated by a processing machine, by a worker who stopped working, or by a function that needs time to be finished. This unused time adds no profit and actually costs the company money due to employee wages. The best example is a worker who is forced to leave the workplace because he/she needs more raw materials and at the same time, another worker needs a partially finished product from him/her in order to make a final product.

4. Extra Processing – This type of waste refers to procedures that are made after the product is completed because of fabrication defects or bad storage and handling. Making too many inspections and not focusing on making new designs that could remove problems is also included in this type.

5. Motion- Motion waste is the pointless movement of various employees, raw materials, or machines from one place to another. It also means the time spent in learning to work with imperfect designs, too much production etc. Motion is time consuming and just as in other categories, this time does not add value.

6. Inventory - Some of the inventory may be unhelpful in the current production order or it can provide only indirect help, which is usually not enough. The inventory range can be from raw state to work-in-progress and finished products. The main reason for inventory problems is the lack of space or handling. The inherent logic being "Only make what you know you are able to

sell. If you do not have room to make the products that people want because you have too many of the products that people do not want, your business will surely fail."

7. Defects - Products which do not respect the standards of quality imposed by the client are considered defective. This also includes rejections of raw materials by the manufacturer if it is of inferior quality and cannot be used to make their product to its specifications. These factors generate more production time and general dissatisfaction among both employees and customers.

These training procedures not only led Moonlight to gradual improvement, but most significantly it facilitated the process of product innovation.

The Pump developed by Moonlight

System of producing oil with better efficacy than diesel

Source: http://moonlighteng.co.in/

The new products like the pump, new way of producing oil (which has better efficacy than diesel) from a simple plastic from their own indigenously developed machine had saved Moonlight during the time of recent recession because the market demand of Moonlight continued. Interestingly this development of Moonlight is quite in line with Japanese management technique named **KAIZEN** literally meaning "improvement", or "change for the better" which refers to the

philosophy or practices that focus upon continuous improvement of processes in manufacturing, engineering, game development and business management.

ANALYSIS OF MOONLIGHT PRACTICE

Now in light of aforesaid theoretical deliberation we will analyse how Moonlight has inculcated the practice of the Conscious Competence Learning Model through its employee training programmes

1. Unconscious and incompetence- As we know that like most SMEs the workers of moonlight engineering company are unskilled and less qualified. Most of the workers are hardly literate, their ignorance level is quite high. Even they themselves don't know where they stand. It is not possible for them to understand high level technical training. Above all the vert concept of training and its importance for their development is a not very clear to them. For this reason proper cost effective in house training for the unskilled worker is very much necessary, which will at least to make them aware of their drawbacks and help them learn to understand the requirement of the organization.

2. Conscious incompetence – Here the worker are aware of their drawbacks and faults by way of informal interaction with their superiors. Therefore, they propose to undertake certain skill generating training to sustain their job. In Moonlight workers are highly encouraged to acquire new kind of training depending upon the requirement of the organization.

3. Conscious Competence- We found that almost all of the moonlight workers are capable of doing their own job. Once the design is provided to them by the mechanical engineer, they readily manufacture the spare parts and then assemble into a finished product, without any help from others.

Tasks are very systematically distributed in the following sequential manner:

Shaping and cutting of several spare parts -→ assembling several spare parts → prototyping→ testing→ Final development of the product→Retesting before being sold to their client.

They have separate group of people who are highly trained in providing post sales services in case of any defects or error after the installation of the products in their location.

4. Conscious competence – This is very difficult stage to reach even for the well educated person to attain. Most of the people get restricted till the third stage only. But uniquely the barely literate workers' of Moonlight has achieved this stage. Their experience and rigorous practice and continuous training in doing things better and new (supported by management's policy to promote free thinking and idea generation), not only helped them to develop, it also facilitated the process of organisational development and product innovation.

Finding & Conclusion

HRD in Moonlight focuses on training that is predominantly job-skill related, delivered simply on the job as part of the job (rather than training taking place away from the workplace in a more formal setting). It has been found in Moonlight training is considered not as a formal system but regarded as 'part of everyday life' (Joyce, McNulty and Woods 1995). In this sense 'the job' in Moonlight may be perceived as an HRD intervention in itself. These inferences indicate that the characteristics of HRD in Moonlight very much correspond to characteristics of Moonlight itself as a SME - essentially informal, uncomplicated and action-oriented, with a tendency to ground policies and activities in values of 'business as usual'. (McGoldrick Stewart and Watson 2002) They also imply that the dynamics of HRD in small organizations are very different from those in larger enterprises (Joyce, McNulty and Woods 1995).So far Conscious Competence Learning of the Moonlight workers from these training activities is concerned; it is very interesting to observe unknowingly their learning is in line with the ancient Arabic proverb

He who knows not, and knows not that he knows not, is a fool - shun him, (= Unconscious Incompetent)

He who knows not, and knows that he knows not is ignorant - teach him, (= Conscious Incompetent)

He who knows, and knows not that he knows, is asleep - wake him, (= Unconscious Competent)

But he who knows, and knows that he knows , is a wise man - follow him. (= Conscious Competent)

NEIGHBOUR R (1992) *The Inner Apprentice* London; Kluwer Academic Publishers. p.xvii

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NOTES:

1. Many people compare the Conscious Competence model with **Ingham and Luft's** Johari Window, which is a similarly elegant 2x2 matrix. Johari deals with self-awareness; whereas Conscious Competence with learning stages..Some believe that **W.C. Howell** was responsible for Conscious Competence in its modern form - apparently the model can be found in W.C. Howell and E.A. Fleishman (eds.), Human Performance and Productivity. Vol 2: Information Processing and Decision Making. Hillsdale, NJ: Erlbaum; 1982. Kenn Martin suggests the originator is identified by Michael A. Konopka, Professor of Leadership and Management Army Management Staff College Fort Belvoir, Virginia, some suggest **D.L. Kirkpatrick** (1971) mentioned about the model for the first time in his work "A practical guide for supervisory training and development. " Reading, MA: Addison-Wesley Publishing Co. Bob Williams attributes the origin to **Paul Denley,** with reference to **P. Dubin** (1962) from "Human Relations in Administration," Englewood Cliffs, NJ, Prentice-Hall.Development and conflict resolution expert Bill McLaughlin suggests **Bateman** is the Conscious Competence model originatorDavid Hurst, Ontario-based speaker, writer and consultant on management, has looked for origins of the conscious competence model, and suggests that the first mention he could find was in an interview with **W Lewis Robinson** in the Personnel Journal v 53, No. 7 July 1974 pages 538-539, in which Robinson cited the four categories (UC/IC, C/IC, C/C and UC/C) in the context of training, and

pointed out that UC/C practitioners often weren't effective as teachers. Hurst says the next mention was in an article by **Harvey Dodgson** "Management Learning in Markstrat: The ICL Experience", Journal of Business Research 15, 481-489 (1987), which used Kolb's learning styles and then showed the four conscious competence categories in a cycle but gave no references for it. Development and conflict resolution expert Bill McLaughlin suggests **Bateman** is the Conscious Competence model originator. Anita Leeds suggests (Mar 2005) points out the similarity and potential influence of **RH Dave's** 'Psychomotor Domain' learning stages model (1970), used in teaching manual skills and part of Bloom's Taxonomy, and which provides an interesting comparison alongside the conscious competence four-stage model. Jillian Duncan suggests (April 2005) the conscious competence model relates to the work of **Professor Albert Bandura**, a pioneer of social cognitive theory (http://www.businessballs.com/consciouscompetencelearningmodel.htm)

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