

**LITERATURE REVIEW ON TRAINING EFFECTIVENESS IN
MANUFACTURING INDUSTRIES**

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ABSTRACT

Indian economy consists of three important sectors namely agricultural, industrial and service sectors. Industrial sector again classified into manufacturing and processing industry. Indian manufacturing industry pays about 15 percent of the Gross Domestic Products. National Manufacturing Policy 2015, determined programmes are under way to take this into 25 percent and the total output from this sector to one trillion US Dollar by 2022. These sectors need more training to handle machinery and resources. Therefore, there is a need of effective training is required to improve the performance of employees.

KEY WORDS: manufacturing industry, service sector , vocational training , training effectiveness, quality improvement , research and development

INTRODUCTION

Manufacturing sector in India must concentrate on areas such as improving the urban infrastructure, ensuring reasonable competition and entree to markets, reduction of import burdens, eminence improvements in vocational and higher education, increased investment in Research and Development and support of small and medium enterprises. Government leaders, experts, and researchers focusing towards making Indian manufacturing globally competitive and to have a sustained growth, which contributes significantly to Gross Domestic Products growth, employment generation and inclusive economic development. It also aims to identify factors hampering industrial growth and seeks to redress these factors. Manufacturing industries in India

is a widespread sector. Which provide more employment opportunities to unskilled and semi-skilled youth.

Training effectiveness describes to the quality of the training provided and measuring whether the training met its goals and objectives. When a new employee is appointed, it's common for them to comprehensive some generous of hand on training. Most of companies also have employee training programs for present employees to help them improve and broaden their skill sets. Training in manufacturing sector also needs an inevitable part in the human resource management. Appropriate training helps to increase productivity and job satisfaction to the employees in an organization. This part highlights various reviews relating to training effectiveness in various sectors and its impact on work performance and job satisfaction.

REVIEWS OF LITERATURE

Alfred P. Sloan (2015) has noted that the company has struggled recently to find new workers for its maintenance teams that take care of its equipment and facilities. In response, Mexichem began a new training initiative that brings in properly skilled workers from the outside whenever possible, but the company also enhances the skills of Mexichem's existing employees.

Amal Mohammed and Divya Rana (2017) have explored that the manufacturing industry labor productivity with job performance factors such as: the number of workers, skill, scientific and cultural level, abilities of workers interests and motivations. Management efficiency is a main attenuation in industrial sector management in order to employ the best method of on-the job method increase training and development has focused on the manufacturing industry and attitudes in improving employee efficiency.

Atsumbe, B.N, et al., (2013) has observed that the high production output, effective manufacturing operations and profit maximization can only be accomplished when the industrial activities continues training in efficiently and safely without disruption or excess interruption resulting from loss or accident to human, machines, tools, equipment and materials.

Bharthvajan. R and Fabiyola Kavitha. S (2019) has determined that training and growth programs in each organisation play a crucial role. These programs

enhance workplace employee performance, update worker knowledge and enhance personal skills, and help avoid organizational obsolescence.

Curia Pinol. T, et al., (2017) has pointed out that the manufacturing Industry program training plans at the moment that they are necessary. That means, companies need to find some difficulties at the beginning of new projects to develop training plans for employees. Although the manufacturing Industry Heads are aware of the importance of training for the company development and employee development, it supposes a great effort to invest on this cause due to difficulties to plan with guarantees.

Curia Pinol.T, et al., (2017) has reveals that education is the main mechanism to overcome company's difficulties. The rapid and massive growth of the industry 4.0, do not allow carrying out training plans in advance for companies. This fact explains an increase of 41% of training demanded by employees. Manufacturing industries program training plans at the moment that they are necessary.

Deepti Agarwal (2018) has examined all training activities must be related to the manufacturing industries and the individual employees. The effectiveness of training programme can be judged only with the help of training needs identified in advance. In order to identify training needs the gap between the existing and required levels of knowledge, skills, performance and aptitude should be specified.

Dineshkumar. U and Vijayakumar.S. (2019) have believed that the manufacturing industry will provide training program for employees and trainees. The training and development programmes can be provided to the employees based on their knowledge and experience to gain efficiency. Employees are the backbone of the manufacturing industry so that industry should satisfy them in order to improve their quality and provide appropriate training program for their future growth.

Engelmann Andreas and Schwabe Gerhard (2018) have observed that the manufacturing companies have to meet a lot of challenges in continuing training for employees. Especially on the way towards industry 4.0 the workforce needs to be able to handle fast changing environments and ever-changing working contexts.

Ginni Rometty (2018) have explained that the technology-based training, including informal or search learning, supports delivery as closely as possible

to the time when the employees will use the new system or new procedure, ensuring the most value of the training and the most value of the system.

Harpreet Kaur Channi (2014) has said that the several types of training programmes are offered to the employees in manufacturing industries. It should be noted that these programmes are not mutually exclusive. It creates a feeling of involvement in the minds of newly appointed employees. Job training is the most common of formal in-plant training programmes.

Haslinda Abdullah (2011) have studied that human resource development practitioners in manufacturing companies in Malaysia demonstrated that classroom-based, outdoor-based and on-job instruction training was highly preferred. In this case, preference for classroom-based and outdoor experiential learning is understandable, as the objective for training is motivational and on-job instruction training is for skills training, particularly for new or existing employees on a specific job.

Ho Jee Ying and Norani binti Nordin (2015) have concluded that manufacturing company should have a good housekeeping and workplace concept among their top management and employees. So, one of the lean tools which is 5S is suitable for it. It also can help for cleaning and organizing the areas of machinery and equipment in a manufacturing company. Thus, 5S training is important for employees.

Ipseeta Satpathy et al., (2018) has assessed that it improves efficiency and productivity of between the employees. A fully inclusive workplace needs to be fashionable, up to date, and universal in design. Technology based communication devices produce more inclusive workplaces towards the specially challenged employees.

Jennifer McNelly (2011) has determined that the every manufacturing industry conducts training. A structured training program typically mixes coursework and training on the floor, with a tightly controlled sequence, content, and trainers. One form of structured on-the-job training is apprenticeship. The skills gap is real and affects virtually every advanced manufacturing company.

Kumar A. et al., (2017) have suggested that the evaluation and effectiveness of In-house training is the measurement of improvement in the employee's knowledge, skill and behavioral pattern within the organization as a result of the

training program. This measurement helps to design training program for future associated benefits of industrial employees.

Leelasarada. V, et al., (2017) has observed that the training is one of the crucial strategies for organizations to assist employees to gain those necessary knowledge and skills needed to meet the challenges. The effect of technical training in Indian automotive manufacturing companies because training has become one of the major activities and enormous investment is made to train the personnel.

Michael R. Muller (2016) has stated that the employees in different aspects of the manufacturing process so there is always somebody available with the skills necessary to keep the production running. We propose that the company provides this training of employees on a regular basis to keep all the operators up to date all the time. Rotation of the operators should be established as a practice.

Mohammed Raja Abulraheem Salah (2016) has analysed that the training and Development basically deals with the acquisition of understanding, know-how, techniques and practices. In fact, training and development is one of the imperatives of human resource management as it can improve performance at individual, collegial and organizational levels.

Mohanraj.D and Panchanatham. N. (2017) has explored that training is the process of teaching the new and/or present employees the basic skills they need to effectively perform their jobs. The training is provided in various industries to the employees working in different levels of management to cater the variety of needs such as enhancing skills and knowledge, technology up gradation, through various methods such as on-the-job training, off-the-job training, etc.

Nisha Jayasuriya et al., (2017) have believed that the Sri Lankan tile manufacturers are getting technology know-how and training mainly from Italy and Spain. However, compared to those countries, Sri Lankan performance was not up to satisfactory level. The labor productivity in Sri Lanka increased as a result of maintaining production level unchanged in a sizeable reduction in employment. It does not increase the output coupled with stable employment level. This fact proves that the industry employment have severe impairment.

Nwosu M. C, et al., (2013) has suggested that implementing new technology to save the working cost in order to use the new technology to give on the job

training. Employees are very important assets. One of the reasons of recognition of industry is employees. Many employees spend most of the time on generating activities in the workshop. Thus the workshop training plays a very important role if the industry would like to maintain better productivity.

Parveen Prasad (2014) have showed to determine the factors influencing industrial training of employees among manufacturing and service organizations in and around the industrial town of Imprint and Chinchwad. Specifically the factors that determine industrial training, the extent to which the employees are satisfied through their willingness to accept change, take on new tasks when needed, take initiative to help their colleagues, proactively identify future challenges and opportunities, to keep going when the going is tough, adapt to situations, focus on job duties, give their best effort at work each day.

Pooja Sharma and Richa Sharma (2014) have found that the manufacturing industry training is the act of increasing the knowledge and skills of an employee for performing the job assigned to him in an organization. Basically it is the practice of providing, workshops, coaching, mentoring, or other learning opportunities to employees to inspire, challenge, and motivate them to perform the functions of their position to the best of their ability.

Rachel Hunter (2018) has stated that the traditional trade training in manufacturing continues to be relevant. However, change is needed to accommodate the new and higher demand skills industry needs to respond to Industry 4.0 and transition to advanced manufacturing. The programs need to blend the skills needed in the physical and virtual manufacturing worlds.

Rosemary Malonza and Phyllis Walaba (2016) have measured that employee training plays a key role in the performance of the Industry. With training the employees productivity is increased, employees are motivated and better customer productivity. Though an employee once recruited into a specific position is expected to best suit the job description, it is unlikely that he/she possesses all the skills and knowledge required and immediately becomes fully functioning.

Sew Bee Yee, et al., (2010) has reported that the major factors inhibiting industrial training response manufacturing industry implementation in firms were insufficient resources such as lack of technical resources, training programs, and

documentation to evaluate the system and maintain continual improvement. Besides, cost is another constraint because training importance of manufacturing system required high implementation cost and external costs.

Shweta Gaikwad (2017) have supported that the training and development is one of the crucial differentiator for business especially manufacturing industries. The training and development system in manufacturing industries in Ahmednagar as needs a systematic overhaul. The present training and development programs lack a systematic approach especially in regards to design and planning approach.

Sidheswar Patra and Chaubey.D.S (2014) have suggested that the manufacturing industry is particularly hard hit in key areas of skills and training. Therefore, much more needs to be done in the area of skill development to adequately complement the potential expansion in the level of economic activity. The expansion underway in educational and training institutions needs to be accelerated and more attention needs to be paid to the quality and appropriateness of skills being imparted.

Suresh Kumar. C (2014) have investigated that the improvement and changes of an employee is essential in the manufacturing companies where change is constant in all its functions and hence training should be a continuous process that demands a range & variety of activities to support the overall training objectives. The training program conducted in an automotive component manufacturing company was found to be satisfactory.

Thomas H. Davenport (2013) have found that it is not the role of government to “pick winners” in terms of manufacturing technologies, industries, or educational approaches. However, it seems likely that there is already consensus on most if not all of the winning technologies and approaches. For example, when institutions do offer training on manufacturing technologies, it almost always involves CNC devices, complex machining, and welding.

Una Halligan (2013) have cleared that the skills needs of the manufacturing sector are wide and, in some instances, complex. Addressing skills needs, therefore, has a number of facets: Some shortages can be addressed through increasing supply, providing specific modules, accredited work placements or amending the curriculum within the mainstream education and training system. This is about ensuring both the right numbers are being produced and that graduates have relevant industry skills.

Uwe Becker (2017) have stated that the Indian component manufacturing companies have introduced internal benchmarks for inventory turnover, delivery time, response to customer query, training to employees, etc. which varies across companies. Yet issues exist where companies are struggling to understand benchmarking concepts, identification of suitable benchmarking partner, lack of resources, lack of staff support, lack of internal expertise, etc.

Vijayasamundeeswari (2013) have concluded that for training and development to be effective, the organisation should become a learning organisation, whereby learning is encouraged by all stakeholders from individual employees to management. It is therefore imperative, for management to implement and proper learning processes in the organisation. The effectiveness of the training programs lies in the company's training process.

Wouter Jan van Muiswinkel (2013) has analysed that the training and skills development comprises a broad range of activities and arrangements, including formal and informal training, job-rotation, traditional class-room courses, internal vs external training, cooperation with e.g. universities, competence mapping, training plans, special training for newly recruited people, mentoring and the use of new organisations or technologies in training, such as E-learning.

Zahid Hussain Bhat (2013) has examined the influence of training on performance. It further industrial performance is significantly determined by training imparted to the employees or in other words training is an important antecedent of performance. Performance of a manufacturing industry relies on the employee commitment which in turn depends on the HR policy of training and development.

Conclusion

Research is based in existing issues which are needed to justify or fulfill. Growth in the industrial sector is one of the vital figures that affect the Gross Domestic Product (GDP) in India. This section provides information about the initiatives taken by the Union and state Governments to facilitate the industrial growth in the country. Details of industries like insurance, Micro, Small and Medium Enterprises, chemical, fertilizer, defence products, cottage, retail textile, pharmaceutical, manufacturing, etc. are provided for the users. The section also highlights schemes, documents, forms, acts, rules, policies, reports related to various

industries and corporate governance. These schemes are very much needed to strengthen industrial growth in the country. This part is discussed various issues evolved and discussed in the earlier study and how this study will be different from others. Training effectiveness in manufacturing industries is one of the innovative studies in the present-day environment.

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