AN ANALYTICAL STUDY OF TRAINING AND DEVELOPMENT IN ACHIEVING OPERATIONAL EXCELLENCE
(In Special Reference to Mawana Sugar Works Plant, Mawana)

SUMMARY
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Summary

Human Resource plays a chief role in the overall operational excellence of an organisation. Out of the five factors of production, popularly known as 5Ms, the Man is the most deciding factor. As without man, nothing can be managed. The quality of the product, the development of the policies, the innovation in the production and marketing and the balance of finance are considerably performed by the man alone. The world is changing rapidly in everyday life. In order to be able to catch up the paces, making the best use of personnel’s abilities has become of tremendous significance in the business organisations, therefore human resource management needs to be carefully considered and implemented, in order to continuously improve the skills and abilities of its employees. Since, the growing complexities in the socio-economic environment of the country, the changing customer priorities, need and life-style, the technological upgradation and the change in the political or legal climate affect adversely on the performance of the man, which results in a mismatch of the performance and the requirement. Thus, to correct this deficiency in performance, man needs to be upgraded and modernized.
The process, in this way, leads towards an effective training and development system in the organisation. The more effective the system is, the more operational excellence the organisation will achieve.

In the first chapter, the introductory part as well as the methodology of the research work has been taken up. This part states that Sugar Industry in India is the second largest agro-based industry after textile. Sugar industry plays a prominent role in the development of the Indian economy. It is believed that India is the original home of sugarcane. According to Indian Sugar Mills Association (ISMA), India is the largest consumer and second largest producer of sugar in the world. Sugar Industry in India is largely driven by domestic consumption.

Sugar industry is a labour-intensive industry because it employs masses of people covering both organised and unorganised human resources in India. Since sugar industry employs a bulk of people, there is always a greater need of well planned and systematic training and development programmes which could enhance the performance of its human resources and ultimately help in improving the productivity of sugar organisations. In sugar Industry, employee training is very essential in facilitating not only the level of productivity but also for the physical, social, intellectual and mental development of personnel in the organisation. It has further become necessary in view of innovation and technological
advancement in modern world to invest in training and development programmes especially in sugar industry. Since sugar industry plays a crucial role in economic growth of India, hence, there is a greater need of effective training and development programmes to be conducted regularly in sugar industry so as to improve the skills and competencies of employees which would result in improved production of sugar. The researcher has taken Mawana Sugar Works, Mawana (MSW), as the organisation to carry out the field survey for the research work because MSW is one of the largest and reputed private sector sugar mills in Uttar Pradesh.

This research work done by the researcher is based on assessing the role and impact of training and development in achieving operational excellence. The topic was selected by the researcher keeping this thing in mind that training and development programmes play a biggest role in improving the efficiencies and capabilities of human resources in organisations in developing economy like India where a large part of human resources come from rural areas. These people are mainly semi-skilled and unskilled, therefore training and development programmes prove to be extremely helpful in upgrading their knowledge and making them suitable according to the job requirements. Especially in the manufacturing sector and that too in the sugar industry which is a seasonal
industry, training and development programmes form the foundation of growth and success of the organisation and enable the organisation in achieving operational excellence. Keeping account of this, the present research work has been undertaken by the researcher to assess the importance of training & development programmes in special reference to Mawana Sugar Works, Mawana. Therefore, the role of training and development towards achieving operational excellence has been studied and analysed in this research work. The primary data has been collected and survey has been conducted at Mawana Sugar Works, Mawana.

During the course of present research work, it came to the notice of the researcher that Mawana Sugar Works, Mawana (MSW) pays due attention on conducting regular training and development programmes for its employees. There is an ATD centre i.e., Assessment Training and Development Centre where all types of facilities have been arranged to provide effective training and development programmes to employees. Moreover, there are also many operational excellence initiatives being taken up by the company HR Department like, SGIA (Small Group Improvement Activity), Kaizen (local name – Ankur at MSW), 5S(local name – Darpan at MSW), Six Sigma, DMAIC methodology etc. Due to all these actions taken up by MSW, the researcher has chosen MSW as the organisation to conduct field survey required for the present research work.
The research has been undertaken with the primary objective to measure and understand the role of training and development in achieving operational excellence at Mawana Sugar Works, Mawana. The researcher has examined it with the help of case study of Mawana Sugar Works, Mawana. A survey has been conducted by using a well structured questionnaire distributed to the employees of Mawana Sugar Works, Mawana. The survey was based on identifying the reaction of employees towards various training and development activities conducted for operational excellence at Mawana Sugar Works, Mawana. The other objectives of the research are - To have a research study of the training and development activities going on at Mawana Sugar Works, Mawana; To have a research study on the operational excellence activities launched and going on at Mawana Sugar Works, Mawana like – Ankur (Kaizen), Darpan (5S), SGIA (Small Group Improvement Activity); To study the various types of activities being implemented for operational excellence; To assess the effectiveness of training and development programmes at Mawana Sugar Works, Mawana.

Hypothesis is usually considered as the Principal instrument in research. Its main function is to suggest new experiments and observations. Quite often, a research hypothesis is a predictive statement, capable of being tested by scientific methods that relates an independent
variable to some dependent variable. Since the research work is based on assessing the importance of training and development for achieving operational excellence (in special reference to Mawana Sugar Works, Mawana), therefore Training and development has been taken as the Independent Variable while Operational Excellence activities like Ankur (Kaizen), Darpan (5S), SGIA etc have been taken up as the Dependent Variables in order to carry out the research work efficiently. The hypothesis assumed for the research work is– Training and Development does not play any role in achieving operational excellence which has been taken as Null Hypothesis \((H_0)\) and Training and Development plays a significant role in achieving operational excellence, taken up as the Alternate Hypothesis \((H_1)\).

Since, the present research work is a case study of Mawana Sugar Works, Mawana (MSW) and hence the research involves the exploratory research followed by the descriptive one. The exploratory research is used by the researcher for the depth and detailed study of the present system of training and developmental activities and to develop research questions. The questionnaire is formulated so as to evaluate the effectiveness of the training and development programmes being followed in the organisation (MSW). The research has been carried into four phases – Desk research
with data collection, Analysis and compiling of the useful data, Field Surveys and then Thesis writing.

The data has been collected both by using primary as well as secondary method. The primary data so collected during survey has been analysed by using SPSS Version 16.0. The Secondary data has been collected by the research from various reputed journals and research papers based on the research studies on training and development in Indian organisations. There are also printed and published annual reports, manuals, company brochures, records as well as monthly newsletters and magazines provided by the Mawana Sugar Works, Mawana to the researcher for the present research work. Also the researcher has made use of various published reports of government agencies, government ministries websites etc. (for example – reports on Indian sugar industry, Indian sugar annual year 2012, year 2011, year 2010 etc; reports on Uttar Pradesh – The state profile etc.)

Chapter two has described the company profile of Mawana Sugar Works which (in short, known as MSW) is originally a sugar unit of Mawana Sugars Limited (in short, known as MSL). Mawana Sugars Limited (MSL) is a company originated from the business restructuring of SIEL Limited (erstwhile Shriram Industrial Enterprises Limited), an industrial conglomerate belonging to the Siddharth Shriram Group. The
Mawana Sugars Limited is the sixth largest private sector sugar manufacturer in India. The Company was formed in December’ 2003, when it acquired the sugar business of the conglomerate SIEL Limited.

Mawana Sugars Limited (MSL) accounts for more than 5 percent of sugar production in the state of Uttar-Pradesh in India (As per the company records). The company sells packed branded sugar through FMCG distribution channel retail outlets in Northern India.

The company is primarily involved in the business of sugar manufacturing. The company sells packed branded sugar through FMCG distribution channel retail outlets in Northern India. The company has also appointed dealers to sell refined sugar to institutional buyers like Cadbury India Limited, PepsiCo India Holdings Private Limited, Glaxo Smithkline, Heinz India Private Limited and other confectionery as well as pharmaceutical companies.

Chapter three covers the theoretical concept of training and development including the basic nature, inputs, objectives, importance and principles of training and development. It states that training is an ongoing continuous process and not a one shot activity and organisations have no choice but to train the employees effectively in order to meet future business requirements. Especially, in manufacturing sector, training and
development activities should be given special attention because it is highly desirable to continuously improve the quality of products and operational efficiency of the organisation in the manufacturing sector especially in sugar industry so as to meet the emerging business challenges and gain competitive advantage in the market.

Training is an essential human resource development (HRD) activity. It is the most effective method of improving competencies amongst the employees of an organisation. Training is meant for action, accomplishment, improved performance as well as managing resources like men and material. It is a behaviour to be taught and learnt. It is a process where workers are trained to operate machines, scraps are reduced and accidents are avoided. Therefore, training and development constitutes an ongoing process in the organisation.

Chapter four describes how training and development programmes are conducted at Mawana Sugar Works, Mawana. Some important objectives of training and development policy at MSW, are - To have professionally qualified man-power, multiskilled persons who could utilise their skills and technical knowledge for performing various operational functions; To improve and upgrade the skills and competencies of the employees for taking up higher responsibilities at the appropriate time in future; To encourage multi-skilling among employees to meet the job requirements
and to improve productivity; To bring about the required changes in the knowledge, skills, attitude and behaviour of the employees, in consonance with the organisational value system; To utilise training as a motivational tool for enhancing the personal growth and development of the employees.

At Mawana Sugar Works (MSW), training and development is the most important function of HR department. Hence, in order to carry out the training activities uninterruptedly, a special committee is appointed by the HR department which is known as Training Advisory Committee (TAC). This committee is designed in an hierarchical manner, as its members belong to different levels in the organisation. The members of Training Advisory Committee (TAC) are the respective Heads of their Unit, Departments, Sections etc. This committee is responsible for carrying out certain functions which are - For allocation of training budget; For setting priorities for training of employees every year for both in house as well as external training programmes; To ensure proper infrastructural facilities for training programmes to be conducted; For finalising the training calendar for the year; For taking the review of the training activities on quarterly basis to ensure the right direction towards the expected results and learning; For evaluating the effectiveness of training and development activities in the company; For overseeing the transfer of learning after the completion of training programmes to ensure the learning outcomes in the
employees. Mawana sugar works also puts great efforts in designing and implementing training and development programmes for its employees and providing both in-house as well as external training programmes as per the requirements. Mawana Sugar Works believes on the philosophy of continuous learning and improvement process. It invest a huge amount of money, time and energy in providing efficient training programmes to its employees and simultaneously it also gives equal importance to management development programmes. As a result of continuous training and learning methods, the performance deficiencies of the employees are corrected and hence every employee contributes himself fully to the total quality management (TQM) activities of the organisation, namely, Ankur (Kaizen) and Darpan (5S), which ultimately help in achieving operational excellence in the organisation.

Chapter five presents the details of operational excellence activities at Mawana Sugar Works, Mawana. There are various operational excellence activities at Mawana Sugar Works, Mawana like SGIA (Small Group Improvement Activity), DMAIC Methodology, Ankur (Kaizen) and Housekeeping or Darpan (5S) etc. Operational Excellence (OpEx) may be defined as a company’s commitment to consistently deliver quality products or services to the customers at the right cost in the right quantities and at the right time. Operational Excellence is the pursuit of
conducting business in a manner that continuously improves the quality of goods and services, reduces the costs, increases the rate of production and enhances flexibility to achieve competitive advantage. The main purpose of SGIA at MSW is not only to rectify the problem and achieve the desired results but also to focus on the process which is adopted in order to achieve the desired results in terms of operational excellence.

The DMAIC approach of six-sigma is a systematic methodology utilising training, measurement and data analysis tools to identify the root causes of certain problems and also eliminate these causes for improving the current processes and thus achieving better results. Six-Sigma is a process improvement methodology that uses data and statistical analysis to identify and manage process variations to reduce or eliminate ‘defects’ in a company’s operational performance. Lean is a systematic approach to identifying and eliminating waste and non-value added activities through continuous improvement in pursuit of perfection. The word Kaizen has come from Japanese management system which means “continuous improvement” where Kai means “to change or modify” and Zen means “to improve or make better”. Kaizen means improvement i.e. continuous improvement involving everyone in the organisation from top management, to managers then to supervisors, and to workers. Kaizen was first introduced in the Toyota manufacturing plant in Japan in the early 1950’s.
The 5S programmes are one of the very important operational excellence activities at MSW. The local name of 5S at Mawana Sugar works is ‘Darpan’ or the ‘Housekeeping’. ‘5S’ is a tool with Japanese roots, focused on fostering and sustaining high quality housekeeping. ‘5S’ is the beginning of a productive life for everyone and is fundamental to productivity improvement. ‘5S’ is the methodology of creating and maintaining well organised, clean, high effective and high quality workplace. Its result is the effective organisation of the workplace, reduction or elimination of losses connected with failures and breaks, improvement of the quality and safety of work.

The chapter six discusses the data analysis part of the research work where the primary data has been collected during the survey through the survey instrument i.e., a well structured questionnaire. The questionnaire has been developed based on standard five-point Likert-type questions, where each question has options ranging from strongly agree (value=2), agree (value=1), neither agree nor disagree (value=0), disagree (value=-1), to strongly disagree (value=-2). The raw primary data collected by using a 5-point Likert Scale, has been analysed by using SPSS version 16.0. The analysis of each question has been done and the hypothesis has been tested by using Z-test and chi-square ($X^2$) test which shows that
training and development is really very important for achieving operational excellence in the organisation.

The chapter seven includes the conclusion part of the research work based on the findings of the analysis of primary data done in chapter six. The major findings of the study are - Employees are well aware of the training and development programmes at Mawana Sugar Works (MSW), Mawana; The employees believed that training programmes give skillfulness during working. It shows a positive perception of employees towards training programmes at MSW; the company provides such kind of training programmes to its employees which could enhance their potentials and talents; Training and development programmes and helpful in adopting new latest technological advancements and to cope up with the emerging job challenges. Training makes them more knowledgeable and thus they are better able to develop more useful ideas for their jobs; Employees believe that training programmes improves their job deficiencies and thus it helps them in meeting their job targets; Majority of the employees are in favour that training and development programmes are helpful and essential in bringing ongoing and continuous improvement at the workplace. It shows that the operational excellence initiatives being taken by MSW are quite functional. More Darpan initiatives are required to be taken by the company so as to increase the effectiveness of Darpan
Programmes at MSW. Some actions are required to be taken to sort out the conflicts or the Inter-personal problems among the employees while working together in a team. Some more knowledge is required to be given to employees on the concept and implementation of Darpan Programmes at MSW. Employees are having a positive attitude towards ‘Ankur’ programmes in making the workplace a better place to work with. SGIA (Small Group Improvement Activity) are helpful in solving chronic business problems. More efforts are required to be taken up by the company so as to sort out the inter-personal barriers among employees while working in a team. The study finds that 78 percent of the employees consider that the operational excellence activities like Ankur, Darpan and SGIA are really effective and essential in improving the operational performance of the organisation and thus having a greater impact on their work performance. It was found that 73 percent of the employees are in favour that training and development programmes play an important role in effectively implementing operational excellence activities at MSW. It shows a positive attitude of the employees towards the effectiveness of training programmes in achieving operational excellence in the organisation.

Overall the finding of the study state that the training and development programmes are very essential in improving the skills, talents, potentials and competencies of the employees. These training
Ankur, Darpan, SGIA etc. are various functional operational excellence activities at MSW. These activities have really been very significant in reducing strains, inconsistencies, and reducing wastes from the workplace. These programmes are of great importance in improving the operational efficiency of the organisation. A positive response of the employees shows that training and development programmes are really important for achieving operational excellence in the organisation. These programmes play a great role in creating and maintaining a quality workplace, in offering the best services to the customers and in increasing the profitability and growth of the organisation.

Thus the research concludes that the success of an organisation depends largely on a sound training and development strategy. There exists a strong positive relation between training development programmes and achievement of operational excellence in the organisation. Training and development programmes are very essential in making the employees more competent, skilled and knowledgeable. These programmes make the employees more competent so as to take up the challenging operational excellence activities and implement them efficiently in the organisation, which further leads to improved productivity and product quality and therefore reducing wastes, losses and inconsistencies. Therefore, training
and development helps in bringing continuous improvement in the organisation which ultimately helps in achieving operational excellence.

It would be worth saying that there exists a strong linkage between training development programmes and operational excellence activities in the organisation. Operational excellence can only be achieved through a well-defined, systematic and on-going training and development programmes. A sound training and development system makes the implementation of operational excellence activities more efficient and thus results in getting more success and profit to the organisation. Thus, it would be worth saying here that –

“Training and Development is an investment in HR with a promise of getting better returns in future.”

Certain challenges were faced by the researcher during the course of the research work, which are– It was assumed that whatever information’s are being provided by the officers are truthful and reliable; During the visits, the researcher had to depend upon the veracity of the data and the useful general information’s which were given by the higher officials of the company; The confidential information about the organisation and other classified information could not be obtained from the employees of the company; The research could be conducted only on a sample of 100 employees because many of the employees were not
interested in accepting the questionnaires and discussing the issues related to it. The researcher has not covered the contractual workers for the study; The employees gave only fragmented and selective information about the organisation and many of the employees showed least interest as an excuse of time constraint. Most of the employees gave only favourable information’s about the organisation due to fear of the management; Confidentiality, time and interest of the employees remained the main limiting factors of the study.

Some useful suggestions have also been discussed in chapter seven which, if implemented, could improve the functioning of training and development programmes in effectively implementing the operational excellence activities by the organisation. These suggestions are – Training methods which involve a combination of skills and involvement of trainees with support of superior or instructor should be preferred and conducted by the company. These training programmes should be designed in such a fashion so that two way communication between trainer and trainees can be better nurtured. The organisation should also focus on certain improvement areas like involving trainees in need assessment, providing consistent feedback to trainees, linking training with learning, improvement in selection of trainer, and audio-visual training aids should also be promoted. The organisation should first assess the actual needs of the
employees before investing a huge amount of money and other resources on training and development programmes. A more effective and measurable system to evaluate the effectiveness of training programmes should be created and regular and timely feedback should be given to the employees after the training programmes. It is suggested that the level of awareness of operational excellence activities among employees should be increased. This could be done by using picture boards, charts, posters, signals, and also by giving the knowledge of these concepts to employees.

The management of the company should make specific rules and regulations for the employees working together in a team during Ankur, Darpan and SGIA etc. These rules should be equally binding on every member of the team and the one who violates the rules should be penalized. In this way, every team member would get an equal opportunity to contribute fully towards the activities and every member would be free to share his valuable ideas to improve the situations. In this way, the interpersonal problems among the employees could be greatly solved. Various operational excellence activities like Ankur, Darpan, SGIA, etc. should be designed and implemented in a more innovative and interesting manner and giving more focus on the practical knowledge. It would involve greater involvement of the employees and in this way, the effectiveness of these activities would be increased. It is suggested that there should be time to
time changes in the implementation of Ankur, Darpan and SGIA, depending on the circumstances. It would be helpful in maintaining disciplined, clean and an orderly workplace.

The research so conducted by the researcher would prove to be really helpful in various ways. Since, very few research studies have been conducted previously which are based on training and development especially in sugar manufacturing organisations. In that case, this study undertaken by the researcher will set some new guidelines, concepts and provide some useful directions for academicians, students, organisations as well as future researchers who would be studying and pursuing their research in the similar areas. Since the study highlights the importance of training and development in Sugar manufacturing organisations (with special reference to Mawana Sugar Works, Mawana), it provides a detailed and in-depth outlook of the concept of training and development activities in manufacturing firms. The study would be helpful in the following ways –

The study would be helpful to the various manufacturing organisations in various ways. It would be helping in introducing new ideas to make training innovative, involvement of trainees in training need identification, providing regular feedback, setting need-based and relevant objectives, selecting the trainers objectively and choosing the training aids and
methods carefully. Since the study has highlighted about various Operational Excellence activities like Kaizen ( Ankur), 5S ( Darpan), DMAIC methodology and SGIA etc. as well as their implementation procedure. Therefore, it would be helping the manufacturing organisations in exploring various new concepts related to Operational Excellence and finding new ways and methods to design and implement these activities in more innovative and improved manner. In this way, it would be helping in making training and development programmes more effective which would result in improved work performance and trained workplace.

The study would really help the academicians or teachers as it explores various new concepts related to training and development programmes, their designing and implementation. In this way the academicians would be better able to enhance their knowledge in training-development system and operational excellence activities and its implementation in the organisations. Therefore, the study would help academicians in teaching more effectively to the students by giving practical examples from corporate sector.

The study will be equally important and significant to the future researchers also. As the researcher has conducted an in-depth study on the role of training and development in achieving operational excellence, so the research model developed by the researcher in this study would be
helping the future researchers in many ways. It would help them in exploring various new concepts of training and development and conducting research studies in these areas in the related functions of training and development. Future researchers may undertake the similar studies in other kind of organisations pertaining to the corresponding issues examined in the present study. Future researchers may also concentrate on various related areas like role of training and development in improving quality leadership and innovativeness of people, which are supposed to be core issues for successful training and development implementation. The study may also be undertaken in other organisations in order to verify the various issues examined in the present study.

The study would be very helpful to the students also. It would help in enhancing their knowledge and awareness in the field of training and development programmes and its significance in improving operational efficiency in the organisations. Hence, the study would be helping students in broadening the level of thinking, thought process and awareness in the field of training and development and hence they would be able to make better decisions about their career and job prospects.