

RE-SKILLING OF THE EMPLOYEES: A CASE STUDY OF UPPER ASSAM DRILLING DIVISION OF IRRIGATION DEPARTMENT, JORHAT, ASSAM

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ABSTRACT

Re-skilling is concerned with training programmes either for the employees of the organisations or members of a family. It deals with development of new set of conceptual, human, and technical skills of the employees of an organisation. Re-skilling of the existing employees of an organisation or the upcoming youth is essential for making employable in a better organisation than earlier.

In the context of re-skilling of the employees towards the growth and development of the organisation, the present study is based on the analysis of only five (5) factors: need of re-skilling training programme, adoption of re-skilling training method, soft skill training, value addition and upgradation of knowledge in a form of a case study in the Upper Assam Drilling Division (UADD).

The objective of the study are (i) to study the select factors influencing the re-skilling training programme; (ii) to investigate the attitude of the employees towards re-skilling training programme; and (iii) to suggest some new re-skilling training programme for updating the workforce of the division.

KEYWORDS: Re-Skilling, Attitude, Knowledge, Upgradation, Value-Addition, Soft-Skill

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INTRODUCTION

Re-skilling is the process of learning new skills so that one can do a job in a better and effective way. In general, re-skilling is undertaken by organisations in which long term employees are either made reluctant or laid off. Subsequently, the employee can be re-skilled and utilized into a completely different career. According to a recent McKinsey Global Institute Report, more than 375 million workers may need to completely change their skill sets by the year 2030. This would happen because of newer technologies such as digitization, artificial intelligence and automation disrupting the world of work.¹ In today's workforce, technology seems to be changing the way we work more and more each year. We perform more and more of our work online and we utilize digital and mobile technologies in new and exciting ways. The implication of all the change is that employees and applicants may have skill set that is no longer in alignment with business needs. In this context, the researcher have felt that the Upper Assam Drilling Division (UADD) has been facing a skill shortage and so unable to cope up with the new set of skill as demanded by upgradation of modern technology. Therefore, this study has

been undertaken to study the select factors of the re-skilling training programme, and then assess the attitude of the employees of the division towards re-skilling training programmes, and finally to suggest some new re-skilling training programme for updating the workforce of the division.

About the Upper Assam Drilling Division, Jorhat District

The state government of Assam created the Irrigation department in the year 1974 realizing the importance of the development of irrigation facilities for the agri-based state. The department is playing a vital role in the development of the potentialities of irrigation by harnessing the rich surface water and ground water resources of the state. The main service of the department is to supply water to the crop field as per the demand of the cultivators and as per the requirements with the view to deliver the service to the citizen and cultivators. The department executes the works, operates the schemes and also maintains them providing the basic infrastructure for the growth and development of the country. The department is headed by two (2) Chairmen cum Managing Directors for both the Lower Assam and Upper Assam. The operation of the department is divided into six (6) zones headed by Additional Chief Engineer. The twenty-one (21) circles of the department are headed by Superintending Engineer. The study will be carried in the Upper Assam Drilling Division (UADD) situated at Jorhat with respect to Jorhat Irrigation Division. The Upper Assam Drilling Division (UADD) is headed by an Executive Engineer (Mechanical). The division has jurisdiction over a few deep tube well irrigation schemes in the District. It is under the supervisory control of the Superintending Engineer, Jorhat Mechanical Circle (Irrigation), Jorhat. The overall number of employees in this division is eighty four (84) employees.²

IMPORTANCE OF THE STUDY

Re-skilling is the process of teaching unemployed new skills. It has become important to re-skill the employees to make them adaptable to the changing environment. It helps the organisation to create a competitive advantage in the long run. The re-skilling of the employees is the investment in the employees already recruited in the organisation. The process helps the organisation to build an open mind to change and adopt new roles and opportunities. The organisations have to constantly update the skilling programs for their employees to remain relevant. The culture of re-skilling promotes increased motivation, enhances the employee experience and higher levels of employee loyalty. It drives retention and increase engagement. It helps to address the skill gaps within the organisation. It helps to plan the succession. It is more cost effective and quicker to train the existing talents of the organisation rather than bringing in new recruitment.

REVIEW OF LITERATURE

- **Singh & Kaur (2018)**³ conducted a study entitled “A Study on Skill Development of Paint and Coating Industry” identifying the skill gap of the employees and the reasons for shortage of required skills in paint industry. The industry lack in the required knowledge and skills as they are informally trained by their family and friends. As a result, they couldn't use the new equipments and techniques in painting works. Finally, the researchers have suggested providing formal training for the workforce in the industry.
- **Gupta and Agarwal (2018)**⁴ on their research paper “Training Prospects in Power Sector in India” studies the training activities in the power sector and the organization that imparts these programmes. According to the researcher, there are various types of training programme which are used by the Power Sector Skill Council to re-skill and update their workforce. But still a gap between the requirement and the availability of the manpower is found out. Thus, the Power Sector Skill Council along with National Skill Development Corporation has come up

with some updated training programmes which will help to impart skills to the youth.

- **Prasad and Purohit (2017)⁵** in their study on “Skill Development, Employability and Entrepreneurship through Make in India: A Study” made an attempt to understand the effect of ‘Make in India’ initiative on employability and the present status of skill development in India. The study advocated that the youths are to be empowered with some formal training, technical and vocational capacity. The skill capacity available, skill requirement, skill gap and initiatives are the programmes of Government of India for Skill Development. They suggested that the youth of India should be empowered with formal education, technical and vocational training so as to make ‘Make in India’ successful.
- **Singh et al. (2016)⁶** in their study on “Need for Re-Skill training towards Make in India Initiative” had identified the factors affecting the employee’s attitude in the organization towards skill training programme. A study was conducted in the IT Companies located in Delhi and National Capital Region (NCR). The researcher had found that the employees agree that re-skilling training programmes are important for the job growth of an employee. Thus, the employees are eager to learn new technologies and skills for their development. They are of the opinion that re-skilling provides better growth opportunities enhancing the overall performance of the organization. The study concluded that it provides the right kind of skills to employees for better employment opportunities.
- **Kaptan (2014)⁷** conducted a study on “Skill Development and Capacity Building-Role of education Institution” the study discussed about the importance, role, and need of skill development and capacity building programme as the principal purpose of education. Paper discussed about the suitability of education to meet the requirement of industry and labour market, improving the quality and competency of labour through skill development programme as conventional education system lack synergy between industries and institutions. Paper finally concluded that there is a strong need of capacity building & skill development programmes and there should be strong active participation of educational institution to accomplish the mission.
- **Punia (2002)⁸** has conducted a survey on “Training needs identification in Indian organizations”. The questionnaire contains various groups of statements as job satisfaction. Organizational climate, Empowerment, work planning, leadership Team building, communicating and effectiveness of existing Training programmes. The objectives of this study are to determine the Training needs for individuals, staff, supervisors, executives, group and organizations. As per the results of the study through the nature of Training needs of employees is almost similar yet the content required and the way of disseminating may vary as per the cadres of the employees. Moreover the Training needs of staff are more of technical nature and those of supervisors and executives are Behavioural ones.

RESEARCH QUESTIONS

The government of India so far has launched many training programmes in almost all the private and public sector enterprises for economic and social upliftment of the people of India. But, it has been realized that many of the organisations could not achieve the objectives as stated by the government. The study has been undertaken to know the main cause of sickness of the Industrial sector and particularly Upper Assam Drilling Division, Jorhat. Therefore, the research questions of the study are:

- What are the factors influencing the re-skilling training programme of the Upper Assam Drilling Division?
- What is the attitude of the employees of the division towards re-skilling training programmes?
- What are the new re-skilling training programmes needed to update the workforce of the division?

OBJECTIVES OF THE STUDY

The objectives of the study are:

- To study the select factors influencing the re-skilling training programme,
- To investigate the attitude of the employees of the division towards re-skilling training programmes, and
- To suggest some new re-skilling training programme for updating the workforce of the division.

METHODOLOGY OF THE STUDY

The universe of the study is the total number of employees serving in the Upper Assam Drilling Division (UADD). The total number of employees is eighty four (84) as shown in the Establishment Register maintained by the division. The sampling unit is the total number of the employees serving in the Upper Assam Drilling Division. The sample size has been taken according to the table for determining sample size from a given population determined by Robert V. Krejcie and Daryle W. Morgan which is found at seventy (70) from the total number of employees i.e. eight-four (84).⁹ The study has been conducted with the help of both primary and secondary data. The primary data have been collected through a self-designed questionnaire based on 5 point Likert Scale. The questionnaire has been designed taking twenty (20) attributes ranging from A₁ to A₂₀ under five (5) factors. The secondary data have been collected from websites and reports of the organisation. To arrive at the stated objectives, five (5) set of variable (factors) have been selected to study the attitude of the employees towards the re-skilling training programme as shown in the Annexure-I. The responses about these attributes of the respondents have been collected, tabulated and analyzed. The collected data have been tabulated and then analysed with the help of vital statistic using tables, percentage method to find out the attitude of the employees towards re-skilling training programme of the Upper Assam Drilling Division, Jorhat.

ANALYSIS AND INTERPRETATION

The analysis and interpretation have been carried out on twenty (20) selected attributes under five (5) specific factors of re-skilling training programme for the employees. The five (5) specific factors are need of re-skilling training programme, adoption of re-skilling method, soft-skill, value addition and upgradation of knowledge.

NEED OF RE-SKILLING TRAINING PROGRAMME

The need of re-skilling training programme can be viewed from individual and organisational perspective. From the review of previous literature, it has established that re-skilling is essential if the employees desire to perform their work in some other ways or they want to change themselves with the changing environment of the world.

The employees' perception of the need of re-skilling training programme is influenced by many factors. Some of them are doing a job effectively, promotion, job commitment and to cope up with changing technology. On the other hand, the organisation may think of changing the line of business. Therefore, in this stage, the study has been carried out to enquire about the attitudes and opinions of the employees influencing on the need of re-skilling training programme. The

issues in this respective has been studied on four (4) attributes codified as A₁, A₂, A₃ and A₄ indicating ‘requirement of re-training for performing the job’, ‘promotion’, ‘increases job commitment’ and ‘changing technology’. The responses received from the employees in this regard have been shown in table 1.

Table 1: Attribute Wise Opinions on Need of Re-Skilling Training Programme [N=70]

Attributes	Responses of Employees				
	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1	2	3	4	5	6
A ₁	0 -	0 -	0 -	56 [80]	14 [20]
A ₂	14 [20]	21 [30]	0 -	35 [50]	7 [10]
A ₃	14 [20]	7 [10]	7 [10]	35 [50]	7 [10]
A ₄	7 [10]	0 -	0 -	28 [40]	35 [50]

The figures within parentheses indicate the percentages of total respondents.

Source: Compiled from Questionnaire and Interview Schedule

From the Table-1, it has been seen that A₁ in respect to feeling about re-training for performing the job is about 80% of the employee who support the need of re-skilling. The attribute A₂ representing that the re-skilling training promotes promotion is agreed by 50% of the employee. Likewise the attribute A₃ which indicates the job commitment is agreed by 50% of employees. About 10% of the employees have strongly agreed disagreed and have no opinion regarding this. But, this attribute is strongly disagreed by 20% of the employees. 50% of the employees strongly agreed the attribute A₄ representing changing technology and is strongly disagreed by 10% of the employees.

ADOPTION OF RE-SKILLING TRAINING PROGRAMME

Re-skilling training method may be adopted by an individual employee of his own or in groups for the purpose of meeting the skill set needed for upgradation of Plant and Machinery of their own. There are different methods by which the human resources can be re-skilled and make them employable in the changing situation. Re-skilling training methods can be applied at all levels of employees for smooth functioning of the organisation. To study about the adoption of re-skilling training method in an organisation, four (4) attributes have been selected. These are A₅, A₆, A₇ and A₈ relating to the issues towards training for upgradation of Plant and Machinery, On-the-job Training programme for re-skilling, Off-the-job Training programme for re-skilling and Importance of training methods for all levels of management respectively. The responses of the respondents are shown in Table 2.

Table 2: Attribute-Wise Opinion on Adoption of Re-Skilling Training Method [N=70]

Attributes	Responses of Employees				
	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1	2	3	4	5	6
A ₅	7 [10]	0 -	14 [20]	28 [40]	21 [30]
A ₆	0 -	14 [20]	0 -	35 [50]	21 [30]
A ₇	42 [60]	14 [20]	7 [10]	14 [20]	0 -
A ₈	7 [10]	14 [20]	14 [20]	28 [40]	7 [10]

The Figures within Parentheses Indicate the Percentages of Total Respondents.

Source: Compiled from Questionnaire and Interview Schedule

The Table-2 shows that the attribute A₅ indicating upgradation of Plant and Machinery is agreed by 40% of employees and strongly disagreed by 10% of the employees. The attribute A₆ representing the on-the-job training programme is agreed by 50% and disagreed by 20% of the employees. The attribute A₇ represents off-the-job training programme is strongly disagreed by 60% and 10% of the employees have no specific opinion for the statement. But, 40% of the employees have no specific opinion for the attribute A₈ representing the statement that training programme is essential at all levels of the employees.

SOFT SKILL TRAINING PROGRAMME

Soft skill means the human skills. It specially includes operational skill, managerial skill, communicating skill and computer skill in the modern business world. This skill is more important to face the competition of the business world. Therefore, soft skill training programme has been launched by the government of India in most of the public and private sectors. To understand employees perception in these regards, the employees were asked to put their comments about four (4) attributes relating to soft skill training programme. The attributes are A₉, A₁₀, A₁₁ and A₁₂ representing learning operational skill, learning managerial skill, effective communication and team work and importance of computer knowledge respectively. The responses are shown in Table 3.

Table 3: Attribute Wise Opinion on Soft Skill Training Programme [N=70]

Codes of Attributes	Responses of Employees				
	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1	2	3	4	5	6
A ₉	0 -	7 [10]	7 [10]	35 [50]	21 [30]
A ₁₀	14 [20]	0 -	7 [10]	28 [40]	21 [30]
A ₁₁	14 [20]	7 [10]	7 [10]	28 [40]	14 [20]
A ₁₂	0 -	0 -	14 [20]	21 [30]	35 [50]

The figures within parentheses indicate the percentages of total respondents.

Source: Compiled from Questionnaire and Interview Schedule

In the Table-3, it is found that the attribute A₉ is agreed by 50% of the employees and is strongly agreed by 30% of the employees. The attribute A₉ represents the need of operational skill. The attribute A₁₀ representing the need of managerial skill is strongly agreed by 30% of the employees and strongly disagreed by 20% of the employees. Likewise, the attribute A₁₁ indicates effective communication and team-work. 20% of the employees strongly agree and strongly disagree. The attribute A₁₂ representing the training of computer knowledge is strongly agreed 50% of the employees and 20% of the employees have no specific opinion regarding the statement.

ASSESSMENT OF VALUE ADDITION

The value addition of re-skilling training programme indicates the adding value for the growth and development of the employees' and organisation. It also influences individual achievement during their service period and also contributes towards the national economy. To investigate about these in the process of value addition, four (4) distinct attributes have been considered. These are A₁₃, A₁₄, A₁₅ and A₁₆ representing individual growth of the employees, development of the organisational growth, individual achievement and contribution towards national economy respectively. The responses received from the respondents are shown in table 4

Table 4: Attribute Wise Opinion on Value Addition [N=70]

Attributes	Responses of Employees				
	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1	2	3	4	5	6
A ₁₃	0 -	0 -	14 [20]	35 [50]	21 [30]
A ₁₄	7 [10]	7 [10]	14 [20]	21 [30]	21 [30]
A ₁₅	14 [20]	14 [20]	14 [20]	21 [30]	7 [10]
A ₁₆	0 -	0 -	21 [30]	21 [30]	28 [40]

The figures within parentheses indicate the percentages of total respondents.

Source: Compiled from Questionnaire and Interview Schedule

The Table-4 shows that the attribute A₁₃ indicating individual growth is agreed by 50% of employees and strongly agreed by 30% of the employees. The attribute A₁₄ representing the development of organisational growth is agreed and strongly agreed by 30% of the employees. The attribute A₁₅ represents the influences individual achievement is strongly disagreed by 20% and strongly agreed by 10% of the employees. 40% of the employees strongly agree the attribute A₁₆ and 30% of the employees agree the statement.

UPGRADATION OF KNOWLEDGE

The existing knowledge set of the employees may not be suitable to manage the different factors of production in an organisation. It may require upgrading the knowledge set of the workforce to cope up with the new technological changes and side by side to innovate some new ideas and concepts. The process of upgradation of knowledge is an important element for potential advancement of the workforce in an organisation. To enquire about the perception of the employees’ about these factors, four (4) attributes codified as A₁₇, A₁₈, A₁₉ and A₂₀ have been selected to represent copying up with the new technology, invention of new ideas, potential advancement, and importance of upgradation of knowledge for the workforce respectively. The responses about these attributes are shown in Table 5.

Table 5: Attribute-Wise Opinion Upgradation of Knowledge [N=70]

Attributes	Responses of Employees				
	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1	2	3	4	5	6
A ₁₇	0 -	0 -	7 [10]	35 [50]	28 [40]
A ₁₈	7 [10]	7 [10]	14 [20]	21 [30]	21 [30]
A ₁₉	7 [10]	7 [10]	14 [20]	28 [40]	14 [20]
A ₂₀	7 [10]	7 [10]	7 [10]	21 [30]	28 [40]

The figures within parentheses indicate the percentages of total respondents.

Source: Compiled from Questionnaire and Interview Schedule

The Table-5 shows that the attribute A₁₇ indicating the fact that training helps to cope up with new technology is agreed by 50% of employees and strongly agreed by 40% of the employees. The attribute A₁₈ representing the innovation of new ideas is agreed and strongly agreed by 30% of the employees. The attribute A₁₉ representing the fact that the re-

skilling training programme is important for potential advancement is strongly disagreed by 20% of the employees and 40% of the employees agree the statement. The attribute A₂₀ representing the upgradation of knowledge is agreed by 30% and strongly disagreed by 40% of the employees.

MAJOR FINDINGS

- Re-skilling Training is itself an important element for an organisation in this ever changing environment. The study could reveal that the attitude and the opinions of the employees about the need of re-skilling training programme is found encouraging because that most of them are strongly agreed by the employees. About 80 percent of the respondents have strongly agreed to initiate re-skilling training programme in their organisation. About 10 to 20 percent of the respondents have strongly disagreed about the need of re-skilling training programme. [Table-1]
- About 60 percent of the employees have strongly disagreed about the attributes concerning to Off-the-Job training method for re-skilling. It means that the employees of the organisation favours On-the-Job training programme for re-skilling their existing skill set. On the other hand, 50 percent respondent agreed that On-the-Job training programme is appropriate for re-skilling the existing work-force. [Table-2]
- Asking about soft skill behaviour of the employees of the organisation is itself a delicate nature of the information sought. Moreover, the human behaviour at work is subjected to the overall organisational work culture and environments. The study could reveal that the attitude and opinions of the respondents are found positive towards all the attributes of installing soft skill training programme in their organisation. Because, about 20 to 50 percent respondent have agreed upon all the four (4) attributes essential for soft skill development of the workforce. Only about 10 to 20 percent of the respondents have disagreed to develop the soft skill set of the workforce. [Table-3]
- The responses about value addition indicate that when faced with value addition, the employees considered it most important to develop individual as well as the organisation as a whole. Only 10 to 20 percent employees are found to be disagreed that re-skilling training programme can add value towards individual employees and organisation. But, about 50 percent employees perceived the value addition through re-skilling techniques positive. Of course, 20 to 30 percent of employees are found to be neutral. [Table-4]
- The upgradation of knowledge through a process of re-skilling training programme is found to be effective because of the positive opinions of the employees towards it. About 20 to 50 percent of the employees are found agreed in almost all the selected attributes under this factor. [Table-5]

SUGGESTIONS

- Re-skilling training programme should be initiated based on Public Private Partnership (PPP) model for changing the mindset of the workforce of the organisation.
- The stake-holders of the Upper Assam Drilling Divisions should be consulted for modifying their Plant and Machinery especially with the cultivators for upgrading the drilling equipments.
- The training programme may be initiated by themselves in their organisation to impart training for preparing different schemes which may help to all the stakeholders of the organisation.
- The top level managerial staff may suggest formulating different Irrigation policies by the government of Assam.

CONCLUSIONS

In the study about re-skilling training programme of the employees of Upper Assam Drilling Division (UADD) of the department of Jorhat, it is found that the re-skilling training programme is very much essential for the existing employees of the organisation so as to cope up with the new technological, economical and social environment.

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ANNEXURE

Annexure 1: List of Selected Factors and Attributes

Factors	Codes of Attributes	Attributes
1	2	3
Need of Re-skilling Training Programme	A ₁	Re-training is essential for performing the job.
	A ₂	Training is essential for promotion.
	A ₃	Training helps to increase job commitment.
	A ₄	Training is essential when there is a change in technology.
Adoption of Re-skilling Training Method	A ₅	Training is given for upgradation of Plant and Machinery.
	A ₆	On-the-job training method is appropriate for re-skilling.
	A ₇	Off-the-job training method is appropriate for re-skilling.
	A ₈	Training methods are essential at all levels of employees.
Soft Skill Training	A ₉	It helps to learn operational skill.
	A ₁₀	It helps to learn managerial skill.
	A ₁₁	It helps to enhance effective communication and team work.
	A ₁₂	Training of computer knowledge is essential.
Value Addition	A ₁₃	It benefits individual growth of the employees.
	A ₁₄	It helps to develop the organisational growth.
	A ₁₅	It influences individual achievement.
	A ₁₆	It contributes towards the national economy.
Upgradation of Knowledge	A ₁₇	It helps to cope up with new technology.
	A ₁₈	It helps to innovate new ideas.
	A ₁₉	It is important for potential advancement.
	A ₂₀	Training is important for upgradation of knowledge.