

2.1 WORK STUDY

Work study is a generic term for those techniques, particularly method study and work measurement, which are used in the examination of human work in all its contexts, and which lead systematically to the investigation of all the factors which affect the efficiency and economy of the situation being reviewed, in order to effect improvement.

2.2 TECHNIQUES OF WORK STUDY AND THEIR INTER-RELATIONSHIP

There are two major techniques of work study :

1. Method study,
2. Work measurement.

1. Method Study :

Method study is the systematic recording and critical examination of existing and proposed ways of doing work, as a means of developing and applying easier and most effective methods and reducing costs.

2. Work Measurement :

Work measurement is the application of techniques designed to establish the time for a qualified worker to carry out a specified job at a defined level of performance.

There is a close relationship between method study and work measurement. Method study is concerned with the reduction of the work content of a job, while work measurement is mostly concerned with the investigation and reduction of any ineffective time associated with the job and establishing time standards for the operation carried out in the improved fashion as determined by method study. The relationship between method study and work measurement is shown in fig. 2.1.

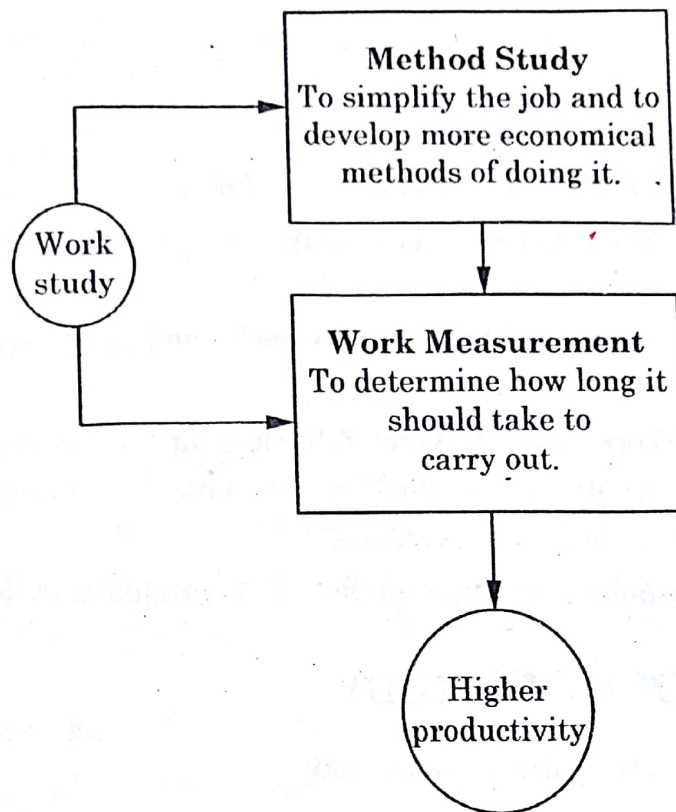


Fig. 2.1 : Techniques of Work Study and Their Inter-relationship

3 OBJECTIVES OF WORK STUDY

The major objective of work study is to obtain the optimum utilization of human and material resources available in an organisation for economical production. The various objectives of work study are as follow :

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|----------------------------------------------------|--------------------|
| 1. The most effective use of plant and equipments. | } Method study |
| 2. The most effective use of human efforts. | |
| 3. Evaluation of human work. | } Work measurement |
| 4. Selection and training of personnel. | |

4 SCOPE OF WORK STUDY

Work study has a wide scope in the following fields :

1. Industries (Production operations, research and development).
2. Marketing, sales and distribution.
3. Offices, stores and warehouses.
4. Material handling.
5. Design and development.
6. Building and other constructions.
7. Transport.

8. Hospital.
9. Agriculture.
10. Defence services.

Everyone concerned with the industry is benefitted by work study as follows :

1. **Management** : Management gets benefit through increased productivity and hence increased profits.
2. **Worker** : The work for worker becomes easier and protective. He is assured of better returns.
3. **Trade Union** : Work study provides reliable data for the measurement of day's work for the purpose of pay and incentives. This enables trade unions to do more objective negotiations with the management based upon factual evidence.
4. **Consumer** : Consumer gets better quality of the product and that too at lower cost.

2.5 ADVANTAGES OF WORK STUDY

The followings are the advantages of work study :

1. Higher productivity.
2. Reduced manufacturing costs.
3. Uniform and improved production flow.
4. Fast and accurate delivery dates.
5. Better employee-employer relations.
6. Better service to consumers.
7. Job satisfaction and job security to workers.
8. Higher wages to workers.
9. Better working conditions.

2.6 HUMAN ASPECT OF WORK STUDY

The human factor plays a very important role in the implementation of work study in organisations. The management defines the objectives and plans the work, the supervisors translate the plans into day-to-day operations and the workers carry out the operations. All the above three contribute positively for the successful work study.

1. **Role of Management** : The role of management for the successful application of work study is as follows :

- (i) The management should define the objectives of organisation clearly. This is important because if the objectives are not clearly defined by the management, then the supervisors and workers may set their own objectives which can cause conflict with the management. Work study aims at identifying a better method of doing work and the better method is defined with respect to organisational objectives.

- (ii) The management must plan in such a way so as to minimise the ineffective time. If the ineffective time is identified as a part of work study, then the management should be open for suggestion and criticism.
- (iii) The management should maintain good relationship with the workers and should provide good environment to them. This creates mutual trust which is essential for any study to be successful.

2. **Role of Supervisor :** The role of supervisor in the application of work study is as follows :

- (i) The supervisor should clearly explain the objectives of organisation to the workers. Also he should give clear picture of the practical problems at the shop floor to the management so as to enable the management to set realistic goals.
- (ii) The supervisor should be fully aware of different aspects of work including its limitations. He should identify the potential areas of improvement and select the proper work for study.

3. **Role of Worker :** The role of worker in the application of work study is as follows :

- (i) The worker should not neglect his work and waste time unnecessarily. He should be aware of the fact that the resulting low productivity will affect him in long run.
- (ii) The worker should take interest in the work and take initiatives with the work related factors. It is quite possible to select the job to be studied through the initiative taken by the worker.

2.7 ROLE OF WORK STUDY IN IMPROVING PRODUCTIVITY

Work study plays an important role in improving productivity which can be expressed as follows :

1. It improves existing methods of operations.
2. It provides better plant utilization, equipment utilization and working conditions.
3. It improves basic processes by research and development.
4. It simplifies the product.
5. It improves the planning of work as well as use of manpower.
6. It increases all round effectiveness of the employees.