The Role of Productivity Improvement Tools and Techniques in the Textile Sector during Manufacturing

Hussain Bux Marri and Ghulam Yasin Shaikh Department of Industrial Engineering and Management Mehran University of Engineering and Technology Jamshoro -76062- Sindh, Pakistan

Abstract

Globally, the manufacturing industries have incredible contribution in the global economic growth and it has wide recognition in the area of poverty alleviation. The manufacturing sector is also considered as one of the significant economic contributor in the Asian sub-continent since last 1900 century. This study focuses on the leading industrial unit of metropolitan city of Karachi which is considered to be a HUB of manufacturing industries and the indigenous manufacturing of Hyderabad. The work study and work measurements tools generally provides the better output results and facilitates to the user to augment their performance during the manufacturing operations. The research work highlights the implementation of work study and motion study for productivity improvement methods during the manufacturing process. The designed framework was implemented in the manufacturing units for the achievement of study objectives. The report also shows that during the manufacturing operations where the applications of work study have been used, and it was found that proper implementation of work study applications can provide more productivity and quality production.

Keywords

Time and motion study, Productivity, Indigenous Manufacturing

1. Introduction

Over the last several years, manufacturing industries have been great source of employment to the society throughout the developing and development economics and the out put of these manufacturing industries have rendered quality products to end-users too. In every manufacturing organization, the application of various technologies developed and designed by the engineers also improved the integration of various components such as, people relation, facility design, work study and methods study tool to made dramatic changes in production. According to Azadivar,F and Wang,J (2000) in traditional manufacturing system the focused was reducing the transportation cost but currently these needs are changed from cost to the productivity. The modern manufacturing system also because primary tool for proper capacity utilization, Adequate location and appropriate layout.

2. Application of Motion and Time study

The application of motions and time study are widely used not only manufacturing but in health science too see Pizziferri,L et al (2004); and, are mainly concerned with the manpower involved in the manufacturing units and every aspect of life for the e the performance of machines/human performance during the production in terms of increasing productivity and reducing the cost of products.

3. History of Time and Motion Study

It is well known fact that in manufacturing business, the time and motion study started its journey in 1881 and kept on continue its innovation under by the Frederick. w. Taylor with the aim to minimize the time factor and enhance productivity. Benefits of motion and Time study:

- 1. It helps, increase, production & productivity
- 2. It can reduce indirect and direct costs
- 3. It offers improvements in working condition
- 4. It helps in reducing the fatigue or danger
- 5. Proper utilization of costs & controls