FINAL YEAR PROJECT REPORT

Waste Investigation and Management in Weaving Industry by using Lean-manufacturing Tool (Muda)

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Project Supervisor

MR. Kanwar Ali Haider

Submitted By

Yasir Abbas ID: 111811054

School of Textile and Design University of Management and Technology Lahore

Waste Investigation and Management in Weaving Industry by using Lean Manufacturing Tool (Muda)

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Yasir Abbas ID: 111811054

School of Textile and Design University of Management and Technology Lahore

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(Signed)

_____ Yasir Abbas (111811054)

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Dedications:

This thesis is dedicated to all mighty ALLAH, my creator and my master. After that I dedicate this work to my country, teachers and my family. Feel gratitude for my parents who encouraged and pushed me to work hard and achieve my goal. Thanks to all my teachers who helped me in learning all this work and encouraged me to complete this work. I also feel great and hope that it will be helpful material for the work of my country in industrial sector.

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Abstract:

This project aims to elaborate a common procedure for waste management applicable for all the textile subsectors and to validate and demonstrate the efficiency of several applications for the textile wastes volume reduction. In this report, I applied the technique of lean manufacturing in Shahraj weaving industry because this industry is making many types of fabrics that use for useful purpose. The main purpose of this project is that how different types of waste that affect the efficiency of fabrics and decreases the cost of the fabric, can be reduced. That differentiates non-value added activities from the value added activities. It creates an image about the material flow and information flow in products and service. Many other organizations are also using this method because by using this method they come to know about their problems and improve the processes by several techniques. It includes information flow from top management to worker‟s and from the suppliers to customer. For this purpose, firstly the six key performance factors are identify and their performance is identified. These key seven muda (waste) factors are transportation, waiting time, inventory, motion, defects, over-production and over processes. The current state of wastage is being down and non-value added activities are also being identified and eliminated for the purpose of improvement to satisfy the customer‟s requirement.

Key words: Lean manufacturing, Shahraj weaving, Muda, Transportation, Waiting time, Inventory, Motion, Defects, over production, over processes, eliminated, improvement

Chapter No 1

Introduction

1.1Brief History of Textile:

The report of man use of resources does a U-turn unlimited before the instigation of Christ. Our comprehension into the early change in materials is to an awesome degree little as they are not apparent through fitting records. Materials were at initially grown as a method for going on substance and as mats in safe house. Just in later stages, it is utilized as apparel. At the when early people recalled that they obliged more than their own particular hair and skin to shield them from the earth, they looked around to see what was open. When they started to look for after they used the skin of animals as bits of clothing. Later the bones of animals were used as needle and nerves were used as string to join the stows away. Flax and fleece were the first of the fiber to be utilized as a part of light of the way that they were less asking for to contort into the yarn than cotton. Taking after incalculable of meandering, individuals observed that they could live in one spot with unmistakable people and make what they required. Individuals comprehend how to raise certain creatures for the meat and the skins. Individuals understand how to turn bits of plants, reeds, horsehair, and bark into one unending strand or yarn. Materials are depicted as the yarns that are woven or weaved to make fabrics. The use of materials affiliations the swarm social solicitations of the world and depicts the way they dress themselves, upgrade their surroundings and go about their lives. Materials have been a key bit of human ordinary life for an enormous number of years, with the first usage of materials, in reality felt, silk and material are to appear around 5,000 BC in India, Egypt, China. The old structures for social event materials, to be particular plain weave, silk weave and twill, have changed no all through the a long time. Trade of materials in the old world happened dominatingly on the Silk Street, a turning course transversely over lower Asia that joined the Mediterranean lands with the Far East. Spreading over more than 5,000 miles and made in the midst of the Han line in China around 114 BC, the Silk Street was a key bit of the surrendering of made things, social demands and rationalities, and helped add to the huge human improvements of the world. Bits of pieces of clothing and draperies affected the opportunity to be perseveringly related through the running as an inseparable unit with a few all that much a broadened time of time, paying immaterial warning to the way that creation systems stayed, as is commonly said, unaltered until the change of steam-filed robotized workplaces in the midst of the Modern Transformation. Materials can be gotten from a few sources: animals, plants and minerals are the standard wellsprings of materials, while petroleum-picked conveyed strands were demonstrated in the mid-twentieth century. The late

presentation of made materials has hugely developed the show of decisions open for fabric innovators, both with respect to bit of clothing adaptability and convenience. For a broad number of years the four fundamental strands utilized by men are flax, wool, silk and cotton. From Old times, tints have been utilized as a bit of fabrics. Dyestuff from plants and bugs were utilized until the planned shades were found.