

**MINIMIZATION OF WASTE BY IMPLEMENTING LEAN TOOLS IN
FOLDING CARTON DEPARTMENT, PACKAGES LIMITED,
LAHORE**

As partial fulfillment of the requirements for the

Bachelor's Degree

In

"Industrial Engineering"

This report is submitted to

Department of Informatics and Systems,

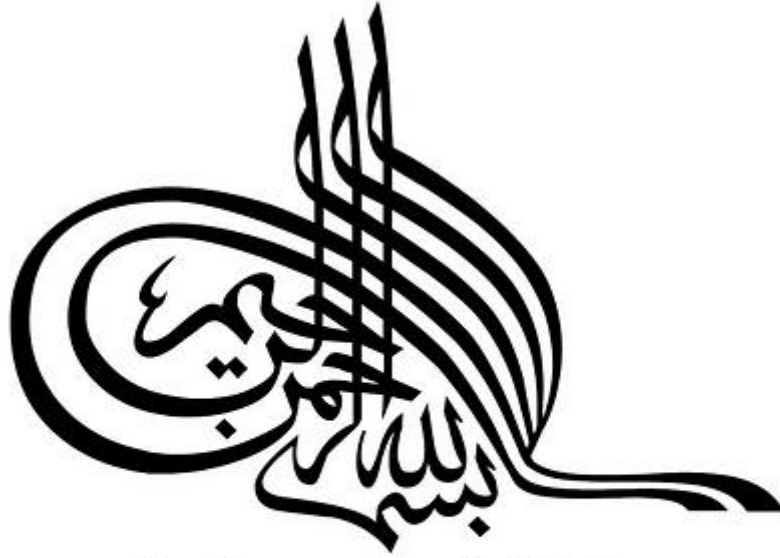
University of Management & Technology, Lahore.



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*In the name of Allah,
the Most Beneficent,
the Most Merciful*

رَبِّ زِدْنِي عِلْمًا

MY LORD, INCREASE ME IN KNOWLEDGE.

[20:114]

DEDICATION

*** To our parents, teachers and our mentor ***

Who have been a constant source of inspiration, dedication and commitment for us throughout our life and gave us so much courage and knowledge so that we are able to complete this Project.

Endless Love for all of you.

University of Management and Technology, Lahore

Final Year Project Report
Masters
PhD

DECLARATION OF ORIGINAL WORK

Student's Declaration:

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Hereby, declare that the work entitled "**Minimization of waste by implementing Lean tools**" is our original work. We have not copied from any other students' work or from any other sources except where due references or acknowledgements are made explicitly in the text, nor has any part been written for us by another person/s.

Date submitted

Supervisor's Declaration:

I **Mr. Mohsin Raza** hereby, certifies that the work entitled "**Minimization of waste by implementing Lean tools**" was prepared by the above named students, and was submitted to the "FACULTY" as a partial/full fulfillment for the conferment of **Bachelor of Science in Industrial Engineering** and the aforementioned work, to the best of my knowledge, is the said students work.

Received for examination by: _____

Date: _____

Acknowledgements

All the praise for ALLAH Almighty, who blessed us with the caliber and ability of hard work and whose grace led us to meet the ending touches of this project. We would like to bow our head before him. He has been our real supporter throughout.

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We are extremely thankful to Production Manager (BUFC) **Engr. Mr. Umer Mehmood** & Head of production line (BUFC) **Engr. Shahid Islam** allowing us to visit and also taking keen interest in this project and properly assisted and guided us in the implementation and completion of the project. Their gracious attitude and concern inspired us to devote our untiring efforts and energies into this venture.

In the end, we pay our ultimate regards to our parents for their unfailing encouragement and financial support they have given us over the years. We also pay tribute to all the teachers of Informatics and Systems Department from which we have learnt a lot throughout our 4-year course of study. It was not just the matter of final year, except the required competitive attitude, sense of responsibility and sincerity required for the successful completion of any project was developed in us by our graceful parents and teachers during our 4-year period in the university.

Abstract:

The title of our project was “**Minimization of waste by implementing lean tools**”. The purpose of our project was to eliminate or minimize the waste came in roto gravure printing line lemanic 82 in packages limited Lahore by implementation of various lean tools which include vsm, cause and effect analysis and total productive maintenance. We make a current state vsm of that line and then by collecting data and identify the problem, we made a future state vsm which illustrate all work flow of that line, then we done a cause and effect analysis and get all possible causes in front and implement the future plan, then we implemented few pillars of total productive maintenance which had enhanced the work flow of lemanic 82. By our critical conclusion, the sorting section was the main reason for wastage; we eliminate that section and wastage was greatly reduced. We gave some suggestion for further improvement of lemanic 82 printing line and smooth workflow. In conclusion, by implementing these, the 80% waste of that line is reduced.

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