

**INCREASING PRODUCTIVITY BY BUSINESS PROCESS IMPROVEMENT  
USING LINE BALANCING IN MEAL TRAY SET UP IN AN AIRLINE  
CATERING COMPANY**

By

Theresia Renata Datu

11507023

BACHELOR'S DEGREE

in

INDUSTRIAL ENGINEERING

FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY



SWISS GERMAN UNIVERSITY

The Prominence Tower

Jalan Jalur Sutera Barat No. 15, Alam Sutera

Tangerang, Banten 15143 – Indonesia

July 2019

Revision after the Thesis Defense on July 10, 2019

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**STATEMENT BY AUTHOR**

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

Theresia Renata Datu

Student

Date

Approved by:

Ir. Setijo Awibowo, M.M.

Thesis Advisor

Date

Dr. Eng. Aditya T. Pratama, S.Si., M.T.

Thesis Co-Advisor

Date

Dr. Maulahikmah Galinium, S.Kom., M.Sc.

Dean

Date

---

Theresia Renata Datu

## ABSTRACT

### INCREASING PRODUCTIVITY BY BUSINESS PROCESS IMPROVEMENT USING LINE BALANCING IN MEAL TRAY SET UP IN AN AIRLINE CATERING COMPANY

By

Theresia Renata Datu  
Ir. Setijo Awibowo, M.M., Advisor  
Dr. Eng. Aditya T. Pratama, S.Si., M.T., Co-Advisor

SWISS GERMAN UNIVERSITY

This research was conducted in PT.XYZ at the equipment set up and meal tray set up section. The equipment set up is where equipment is assembled then later send to meal tray set up section where the pre-assembled equipment from equipment set up will be fully assembled. There are wastes found in the sections, especially in meal tray set up area. Through observation, the cause that cause the low productivity is motion waste in their assembly line. It focuses on improving productivity by implementing business process improvement. To improve the productivity, line balancing and Kanban system is proposed as improvement methods. The line balancing methods are Kilbridge and Wester Method and Ranked Positional Weight Method. To ensure the assembly line run smoothly, a material supply system is needed in this case using Kanban system. Lastly, the current and proposed methods will be compared through simulation modeling by using Tecnomatix Plant Simulation software to see improvement from this research.

*Keywords: Assembly Line, Productivity, Line Balancing, Kanban System.*



## DEDICATION

*I dedicate this thesis*

*To God for his love and endless blessing,*

*To my family for their continuous support and prayers,*

*To my lecturers for their guidance and advice,*

*And to all my friends for the motivation.*



## ACKNOWLEDGEMENTS

First and foremost, I would like to thank Almighty God and Blessed mother Mary for giving me the love, knowledge, time, and strength to finish this thesis. I could never have done it without my faith in you.

Secondly, I would like to thank my parents and sister for their support, motivation, endless prayer and for always believing in me. I am beyond grateful and to have a loving and supportive family.

In my journey of completing this thesis, I was helped and guided by my beloved advisor and co-advisor, Pak Bowo and Pak Adit. Thank you for patiently answering all of my questions and thank you for the time and energy you both put in guiding me. For my advisor in PT.XYZ thank you for the opportunity and guidance.

To my dearest classmates, thank you for all the times we spend together and for the ups and downs that we all went through together, I hope to see you all on top! Lastly, I would like to thank my dearest friends, Arya, Ilona, Raka, Raras, Mika and Kanya, for the presence at times when motivation is needed, and for ensuring that I never give up and to always have faith in what I do.

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