Analyzing Health Factor in Human Machine Interaction : A Case studyof The Impact of Low Back Pain to The Productivity of The Packaging Department of Poultry Industry

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, 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.

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ABSTRACT

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The Human Machine Interaction in Charoen PokhphandBalaraja, Indonesia requires the workers to adapt to the machine and it affects the health of the workers. The workers are not given enough attention because they are considered to be expendable.This research tries to find factors that affect the workers' health in this case, low back pain which would inevitably impact the productivity. Questionnaires and interview were conducted to see factors which affect the health of the workers. Hawthorne effect experiment was also done to see the impact of monotony and rest break. It was found that nature of the work, lifestyle, and environmental factor have impact on their health. In order to increase productivity, the health of the worker and working condition must be improved. Further research such as motion study, ergonomic design and human performance improvement are still possible to further enhance the productivity.

Keywords: Human Machine Interaction, Low Back Pain, Environmental Factor, Health Factor, Productivity.

DEDICATION

I dedicate this thesis to my parents who have given me support both material and spiritually and my friends who have been cheering me on through this semester.

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