FACTORS AFFECTING DAILY PRODUCTION WASTAGE OF TEA BAGGING MANUFACTURING

MASTER OF BUSINESS ADMINISTRATION IN SUPPLY CHAIN MANAGEMENT

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ABSTRACT

This research identifies and analyses of factors affecting production wastage of teabagging manufacturing. Minimizing production wastage is a very important operation consideration of any production oriented organization. The aim of this study is to identify the variables and their relationship in relation to Packing Materials (PM) wastage of tea bags. In other words, the purpose of this study is to answer the questions what are the factors affecting tea bag production wastage, which factor is significantly contributing to generating wastages and what is the nature of the relationship of these factors. The industrial norms for tea bags PM wastage in a production run is 2% or below that however in this study, wastage of above PM's constitute nearly 2% and above 2% hence there is a gap between expected level and the outcome. Therefore, the issue has been identified and analyzed empirically. Nevertheless, much literature and related research knowledge on wastage of tea bag manufacturing were not found thus related knowledge is limited. In addition, there were many limitations such as the inability to access of some information, sudden changes of management decisions on production lines, even though there were variable but not significant to achieve the objective of this research trying to achieve. A descriptive approach using primary data gathered from questionnaire-based interview survey design was adopted. A statistical modelling approach using secondary data from teabagging production records from January 2017 to December 2017 was also used. According to the analysis of primary data, gathered from the structured questionnaire the employees of the organization have been able to capture many problematic areas of the packing function that was not paid enough attention by the management which causes tea bag wastage. The most statistically significant and correlated problems discovered from the primary data are as follows: Flavored Black tea/ Green tea tends to generate less wastage while Black tea/ Green tea with herbs tend to generate more wastage, Envelope tea bags generate lower wastage and other variable does not have an impact on wastage. However, according to the analysis of secondary data, the total of wastage is less impacted by wastage of Flavored Black tea/ Green tea bags than of Black tea/ Green tea with herbs while total production significantly influences the total wastage. It is concluded that on average 2% of the total production of tea bags are wasted under the existing production process. However, this study can be further extended to find out the impact on the cost of production regarding PM wastage, production vs. wastage by machines, impact on inventory management of PM by wastage, and impact on tea export supply chain by wastage.

Key Words: Production Wastage, Machine Change Over, Constanta Machine, Compacta Machine, IMA Machine, String & Tag Tea Bag, Envelope Tea bag, Pacing Materials

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M. A. Danushka Perera.

DECLARATION OF ORIGINALITY

I declare that this is my own work and this thesis/dissertation does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or Institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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STATEMENT OF THE SUPERVISOR

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LIST OF ACRONYMS

PM – PACKING MATERIALS

CBSL-CENTRAL BANK SRI LANKA

TB- TEA BAG

CON: CONSTANTA

COM: COMPACTA

MAI: MAISA

FUS: FUSO

IMA: IMA