

INVENTORY POLICY OF TEA AT LARESOLO TEA HOUSE

THESIS

**Submitted in Partial Fulfillment of the Requirement for the Degree of
Bachelor of Engineering in Industrial Engineering**



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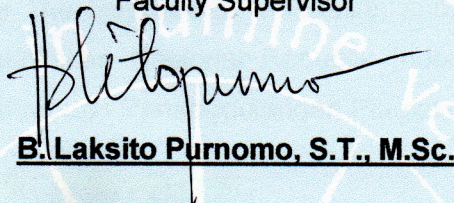
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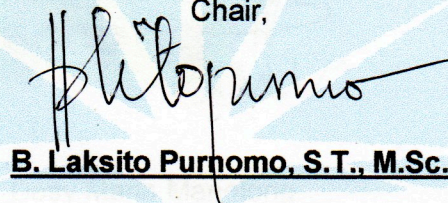
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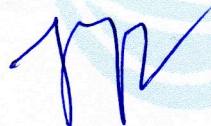

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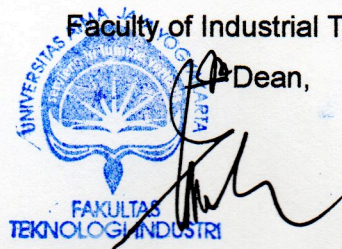
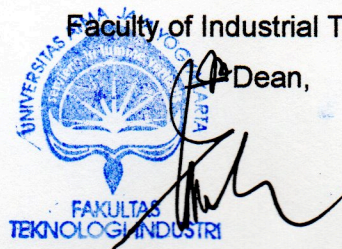
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"My Lord is bigger than my problems"

"He has made everything beautiful in it's time" – Ecclesiates 3:11

"I can do all thing through Christ who strengthens me" – Phlippians 4:13

"Dont worry about anything; instead, pray about everything; tell God your needs and don't forget to thank Him for His answers" – Phlippians 4:6

PREFACE

All praise the author turning to Almighty for all grace, invocation and salutations to the Lord Jesus, so the author can finish the research on inventory control and planning of tea by considering expired date of tea and various lot size at Laresolo Tea House to fulfill partial requirements to get bachelor degree of Industrial Engineer of Universitas Atma Jaya Yogyakarta.

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Author realize the preparation of this report is still far from perfection. Therefore, author hopes criticisms and suggestions from readers to make this report better. Author hope this report will be useful for author and all parties involved.

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ABSTRACT

Cv. Laresolo Tea House is one of small medium enterprise or a tea house that served some kind of drinks and foods. It is located on Babarsari Street Ruko Raflesia II Blok N, Yogyakarta. The special menu in this tea house is many kind of tea. It was established on December, 30th 2012. There are five variants tea that available in Laresolo Tea House such as Black Tea, White Tea, Oolong Tea, Green Tea and Thai Tea which is divided into 36 different menus of tea. These kind of tea comes from Bogor, China and Thailand, but Laresolo order the tea from Mr. Bambang (supplier) in Bogor. Demand of tea in this company is probabilistic, while Laresolo does not have a method to calculate the inventory. It can lead to over or shortage buying. Therefore Laresolo needs to reanalyze about the quantity of reordering the tea to the supplier. The order quantity should in the exact number because if it is not it can caused the stock out condition and also higher quantity of expired tea if they save the raw material in the long term. Laresolo also need the calculation of when and how much tea that should be order to the supplier. The objective of this research is to determine the optimum quantity and time or how much tea and the time to order the raw materials (tea) to avoid the over buying or shortages buying the tea to minimize the total inventory cost by considering the capacity of the storage that available. A simulation by using Microsof Excel is used to solved the inventory system in Laresolo Tea House. In this simulation, there are three scenarios such as, scenario 1 (order based on reorder point and quantity), scenario 2 (order based reorder point and the remaining of quantity target) and scenario 3 (order based on the period, reorder point and quantity). The result of simulation shows that scenario 3 with the period three days has the lowest total inventory cost that is Rp 27.458.497 per year while in the actual the total inventory cost is Rp 42.000.000 per year. It is clearly shows that the actual cost is higher than simulation cost in scenario 3. Then can be concluded that scenario 3 is better than actual inventory system.

Keywords : Inventory, Raw Material Ordering, Expired Date, Various Lot Size