# COMPARISON OF FACTORS IN CUSTOMER SATISFACTORY OF YOGHURT IN WESTERN AND SOUTHERN PROVINCES

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Dissertation submitted in partial fulfillment of the requirements for the degree Master of Science in Business Statistics

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## **DECLARATION OF THE CANDIDATE**

I hereby certify that this dissertation does not incorporate, without acknowledgement, any material previously submitted for a Degree or Diploma in any University and to best the best of my knowledge and belief, it does not contain any material previously published or written by another person or myself except where due reference is made in the text. I also here by give consent for my dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and summary to be made available to outside organizations.

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# **DECLARATION OF THE SUPERVISOR**

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#### **ABSTRACT**

The dairy industry has a potential to contribute considerably to Sri Lanka's economic development. Lucky Lanka Milk Processing Company produces various products to enhance Sri Lanka's dairy industry. Due to the variance demand of 80g yoghurt, market strategies of the Lucky Lanka Milk Processing Company have been expanding and consequently sales of the company have been increased over the years. However, sales in the Western province has a bad situation compared that with the Southern province. The Objective of the present study was therefore to identify the factors in customer satisfactory of yoghurt in western and southern provinces in Lucky Lanka Milk Processing Company. A survey was carried out using sample size of 300. The sampling method was the purposive two stage proportional random sampling. The statistical analyze used are; (i) 2 way cross table using likelihood ratio chi-square test and (ii) binary logistic regression models. It was found that brand orientation, factory area, type of business, benefit of customer, quality of yoghurt, discipline of the company sales representatives, and advertising campaign were commonly in both Western and Southern provinces and price, competitors and customer knowledge were in only Western province and flavor of yoghurt only in Southern province were statistically significantly associated (p<0.05) with the usage of Lucky yoghurt, when each factors were considered separately. However, when all significant variables were considered together using binary logistic regression, it was identified that brand name, quality of the yoghurt and customer knowledge in Western province and brand orientation, quality of the yoghurt and benefits of the customers in Southern province were significantly associated with usage of Lucky yoghurt. The validity of the binary logistics model was confirmed by both likelihood ratio and Wald test.

**Keywords:** Binary logistic regression analysis, Llikelihood ratio test, Lucky yoghurt, Wald statistics

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### **CHAPTER 01**

#### INTRODUCTION

#### 1.1. Sri Lankan Dairy Context

Organizing milk producers into dairy cooperatives and marketing the dairy production has been an evident fact in Sri Lanka as far back since the 1930s. The enthusiasm for diary production and marketing was generated by the successful achievements in neighboring India. The Ministry of Rural Industrial Development in Sri Lanka plays a significant role in this regard (National Milk Board, 2013). One of the weaknesses of the dairy cooperative movement in Sri Lanka is the high degree of dependence on government institutions for management and operational control (National Milk Board, 2013). At present, the establishment and strengthening of dairy cooperatives is being actively encouraged by all parties concerned, including donor agencies.

Sri Lanka imports around 68,000 MT of dairy commodities annually (Department of Custom, 2012), and dairy development is therefore considered as an instrument to replace this large volume of imported commodities. The domestic milk production only constitutes 17 percent of the national requirement and the rest was imported according to 2006 statistics. The importation bill on dairy commodities is around 17 billion rupees (National Milk Board, 2013). This figure is expected to double or triple in future because of the doubling price of the imported milk powder due to the large demand for milk and short supply worldwide. At present annual availability of milk per person is only 40 liters, which is just a 0.11 liters per day per person (National Milk Board, 2013). Through we import larger percentage, there is a high potential for increasing the supply of milk in Sri Lanka. The government policy on dairy development is aimed at producing 50% of country's milk requirement by the year 2015 (Mahinda Chinthana, 2005).

The government has been encouraging the local milk producers to produce more milk and citizens to consume more fresh milk. Of the total milk that is available, the volume of milk entering the formal milk market annually is around 100 million liters