

**DEVELOPING A DECISION MODEL FOR SELECTING
FREIGHT FORWARDERS IN THE SRI LANKAN FOOD
AND BEVERAGE MANUFACTURING SECTOR.**

Singappuli Arachchige Krishani Piumali Sandalanka
(218468P)

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Department of Transport Management and Logistic Engineering

University of Moratuwa

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Declaration

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.

Signature:

Date: 30th June 2024

The above candidate has carried out research for the Masters Dissertation under my supervision.

Name of the supervisor: Mrs. GMBP Abeysekera

Signature of the supervisor:

Date: 2nd July 2024

ABSTRACT

In Sri Lanka, the Food and Beverage manufacturing sector is faced with a number of logistics and supply chain management challenges, mainly in choosing freight forwarders for international trading. To transport the cargo efficiently, comply with international regulations and efficiently manage logistics operations at low costs, it is important to have a right freight forwarder. Knowing what influences selection of a freight forwarder benefits firms to improve operational efficiency and stay competitive in the global market.

This study addresses three primary objectives. First, to identify the factors influencing the selection of a freight forwarder in Sri Lanka's F&B manufacturing sector; second, to evaluate the critical factors that stakeholders prioritize when selecting a freight forwarder; and third, developing a robust decision model that integrates these factors to guide effective freight forwarder selection procedures. These objectives aim to provide stakeholders with clear guidelines for making effective decisions on freight forwarding services within the Sri Lankan food and beverage sector.

The research methodology adopted a quantitative approach, to collect data from key stakeholders in the Sri Lankan F&B industry. Data analysis was conducted using the Confirmatory Factor Analysis method. It used to validate the underlying constructs and assess the relative importance of each factor in the decision-making process. Structural Equation Modelling was used to establish and analyse complex relationships between latent variables, develop a model for understanding the relationship between important factors.

The study identified five primary criteria that significantly influence the selection of shippers in the Sri Lankan F&B industry: price, service quality, accuracy and industry experience. SEM analysis confirmed strong correlations between reliability and service quality, indicating that timely delivery and responsive service are critical to maintaining supply chain integrity and customer satisfaction. These findings underscore the heterogeneity of consignee selection in Sri Lanka's F&B manufacturing sector. The decision model derived from this study provides stakeholders in the Sri

Lankan F&B industry with a structured approach to evaluate and select consignees based on objective criteria. Future research directions could explore the implementation of advanced technologies such as blockchain and IoT in logistics management, longitudinal studies to assess the long-term performance of the model, and comparative analyses with shipper selection practices in other global markets.

Key Words: *Food and Beverage Industry, Freight Forwarder, Logistics Efficiency, Productivity Improvement, Cost Reduction, Transportation, Structural Model, Critical Factors.*

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Table of Contents

Chapter 01 - Introduction.....	1
1.1. Research Background	1
1.1.1. Introduction.....	1
1.1.2. Overview of the Freight forwarder selection in the Sri Lankan food and beverage industry.....	3
1.2. Problem Statement	4
1.3. Key Research Questions	5
1.4. Research Objectives.....	5
1.5. Research Process.....	5
1.6. Research Scope	6
1.7. Significance of the study.....	6
1.8. Time Plan	7
1.9. Chapter breakdown	7
Chapter 02 – Literature Review.....	10
2.1 Freight Forwarding and Their role.....	10
2.2 Factors for affecting selecting a Freight Forwarder.....	15
2.1.1 Pricing.....	16
2.1.2 Service Quality.....	17
2.1.3 Reliability.....	17
2.3 Research Gap	18
2.4 Chapter Summary	19
Chapter 03 – Methodology	20
3.1 Introduction.....	20
3.2 Conceptual framework.....	20
3.3 Operationalization Table.....	21
3.4 Hypotheses.....	24
3.5 Research Design.....	25
3.5.1. Research Methodology	26
3.5.2. Research Strategy.....	27
3.6 Population and Sampling	27
3.7 Data collection method	28
3.8 Data Analysis Method.....	29
3.8.1 Detailed Comparison of Data Analysis Methods.....	29

3.8.2	Reason for Selecting CFA.....	31
3.9	Statement of Ethics	32
3.10	Chapter Summary	33
Chapter 04 – Data Analysis		34
4.1	Introduction.....	34
4.2	Demographic Factor Analysis.....	34
4.2.1	Type of the Organization (In Food and Beverage Sector)	34
4.2.2	Nature of job role	36
4.2.3	Years of experience working with freight forwarders	37
4.3	Reliability Analysis.....	38
4.4	Structural Equation Modelling - 01	39
4.4.1	Model Validity Measures.....	40
4.5	Structural equation modelling – Re-creation	42
4.5.1	Model Validity Measures.....	42
4.5.2	Regression Weights:	44
4.5.3	Correlations:.....	47
4.5.4	Model Fit Summary	48
4.6	Discussion.....	49
4.7	Chapter Summary	51
Chapter 05 – Conclusion.....		53
5.1	Summary of the Research Findings & Conclusion	53
5.2	Future Research Directions	55
5.3	Research Limitations	56
<i>References</i>		58
Appendix.....		63
Appendix 01:.....		63
Appendix 02.....		67
Appendix 03.....		69

List of Figures

Figure 3:0:1 Conceptual Framework of the Study	20
Figure 3:0:2 Research Design	25
Figure 4:0:1 Demographic Factor analysis of Types of Organization (In Food and Beverage Sector)	35
Figure 4:0:2 Demographic Factor analysis of Nature of job role	36
Figure 4:0:3 Demographic Factor analysis of Years of experience working with freight forwarders.....	37
Figure 4:0:4 Structural Equation Modelling 01	40
Figure 4:0:5 Re constructed SEM	42

List of Tables

Table 1:0:1 Time plan.....	7
Table 2:0:1 Literature review findings	17
Table 3:0:1 Operationalization Table	21
Table 3:0:2 List of Food and Beverage Companies	27
Table 4:0:1 Demographic Factor Analysis of Types of the Food and Beverage Sector	34
Table 4:0:2 Nature of the Job role.....	36
Table 4:0:3 Demographic Factor analysis of Years of experience working with freight forwarders	37
Table 4:0:4 Summary of Reliability Analysis of Variables	38
Table 4:0:5 Validity Analysis	40
Table 4:0:6 Model Fit Measures	40
Table 4:0:7 Cutoff Criteria of the Model Fit Measures.....	41
Table 4:0:8 Validity Analysis	43
Table 4:0:9 Model Fit Measures	43
Table 4:0:10 Regression weights of the model	45
Table 4:0:11 Correlation among Latent Factors.....	47
Table 4:0:12 Model Fit Summary	48

List of Abbreviations

F&B	Food and Beverage
FF	Freight Forwarder
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
TLI	Tucker-Lewis Index

RMSEA	Root Mean Square Error of Approximation
SRMR	Standardized Root Mean Square Residual
SPSS	Statistical Package for the Social Sciences