# A STATISTICAL ANALYSIS OF CUSTOMER SATISFACTION ON INTERNATIONAL DIRECT DIALING PREPAID CALL CARDS IN SRI LANKAN MARKET

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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**

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#### **ABSTRACT**

Satisfying customers is an essential element to staying in business in this modern world of global competition. Hence, it is the key to the profitability of business sectors. Therefore, companies should have gained better understanding of the importance of customer satisfaction. International Direct Dialing (IDD) plays a major role in telecommunication industry in Sri Lanka as various IDD services are available for the customers. Therefore, at present the prepaid IDD call card market is one of the most competitive areas in the telecommunication industry in Sri Lanka. This research study, therefore mainly focused on to identify the association among demographic variables (gender, age group, marital status, employment status) with customer satisfaction variables (quality, perceived value, customer loyalty and customer support) also that with overall customer satisfaction and to identify the factors affected by the IDD prepaid call card market. The required data were acquired through a structured questionnaire and sampling method was purposive random sampling with a sample size of 222. To attain the customer satisfaction five different brands of prepaid IDD call cards were used. The chi-square analysis for 2-way categorical data confirmed that customer satisfaction with IDD prepaid cards was not significantly influenced by demographic variables. Each of the individual customer satisfaction variables were significantly positive correlated (p < 0.05) with overall customer satisfaction with IDD prepaid call cards. Furthermore, it revealed all four variables perceived quality, perceived value, customer loyalty and customer support have a positive significant effect and each variable increase the level of customer satisfaction. Factor Analysis found that irrespective of the significances the six customer satisfaction variables can be explained by three common factors, namely Customer Loyalty, Value for Money and User Friendly. The percentage of overall satisfaction of the IDD prepaid call cards is 93.2%, irrespective of any demographic variables.

**Keywords:** Customer Satisfaction, Factor Analysis, International Direct Dialing, Prepaid Call Cards

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### LIST OF ABBREVIATIONS

Abbreviation Description

**ACSI** American Customer Satisfaction Index

**CBSL** Central Bank of Sri Lanka

**CFA Confirmatory Factor Analysis** 

DS **Divisional Secretariats** 

**EFA Exploratory Factor Analysis** 

**EGO** External Gateway Operator

FA **Factor Analysis** 

IDD **International Direct Dialing** 

**IVR** Interactive Voice Response

**KMO** Kaiser-Meyer-Olkin Measure

Measuring of Sampling Adequacy University of Moratuwa, Sri Lanka. **MSA** PC

Electron Principal Component sertations

www.lilsmuanka.Telecom **SLT** 

**SPSS** Statistical Package for the Social Sciences

**TRCSL** Telecom Regulatory Commission in Sri Lanka

## LIST OF APPENDICES

Appendix Description

Appendix I References

Appendix II Questionnaire Used for the Study

