

TABLE OF CONTENT

VALIDITY SHEET	ii
PLAGIARISM-FREE STATEMENT	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENT	vi
LIST OF TABLES	x
LIST OF FIGURES	xii
ABSTRACT	xiii
CHAPTER 1	1
INTRODUCTION.....	1
1.1 Background.....	1
1.2 Problem Statement.....	8
1.3 Research Questions	10
1.4 Research Benefits	10
1.5 Research Outline.....	11
CHAPTER 2	13
THEORETICAL FOUNDATION AND LITERATURE REVIEW.....	13
2.1 Company Overview	13
2.2 Omnichannel Supply Chain.....	18
2.3 Internet of Things (IoT).....	22
2.4 Collaborative Planning, Forecasting, and Replenishment (CPFR)	25
2.4.1 Mean Absolute Percentage Error (MAPE).....	30
2.5 Stimulus-Organism-Response (S-O-R) Model.....	34
2.6 Service Quality (SERVQUAL)	36
2.7 Previous Studies	40
CHAPTER 3	43
RESEARCH METHOD	43
3.1 Research Design	43
3.2 Operational Definition of Variables	45
3.3 Population and Sample	47

3.4 Research Instrument	52
3.5 Data Collection Technique	57
3.5.1 Data Collection Implementation Time.....	58
3.5.2 Interview	59
3.5.3 Document Analysis	60
3.5.4 Observation	61
3.5.5 Questionnaire	62
3.6 Data Analysis Technique.....	64
3.6.1 Interview	65
3.6.2 Document Analysis	67
3.6.3 Observation	67
3.6.4 Questionnaire	69
CHAPTER 4	72
RESEARCH FINDINGS AND DISCUSSION	72
4.1 Data Description	72
4.1.1 Interview	72
4.1.2 Document Analysis	73
4.1.3 Observation	75
4.1.4 Questionnaire	75
4.2 Data Analysis Result	76
4.2.1 Interview Result	76
4.2.2 Document Analysis Result.....	89
4.2.3 Observation Result.....	95
4.2.4 Questionnaire Result.....	108
4.2.4.1 Survey Data Overview	108
4.2.4.2 Data Quality Test	109
4.2.4.2.1 Data Validity Test.....	109
4.2.4.2.2 Data Reliability Test.....	118
4.2.4.3 Service Quality (SERVQUAL) Calculation Result	120
4.3 Discussion/Analysis	124
CHAPTER 5	128

CONCLUSION AND RECOMMENDATION	128
5.1 Conclusion	128
5.2 Limitation	129
5.3 Recommendation	130
5.3.1 Conceptual Recommendation	130
5.3.1.1 Artificial Intelligence (AI) Integration into Inventory Management System	131
5.3.1.2 Augmented Reality (AR) Adoption of Better Space Management	132
5.3.1.3 Comprehensive Digital Training Program for Internal Stakeholders	133
5.3.2 Practical Recommendation	135
5.3.2.1 Inclusive Approach for Interviewee Selection	136
5.3.2.2 Time Sampling on Observational Setting	136
5.3.2.3 Expansion of Distribution Channels for Questionnaire	136
5.4 Implication	137
BIBLIOGRAPHY	138
APPENDIX	158
Appendix 1. Omnichannel Customer Journey Process Breakdown	158
Appendix 2. Interview Question List and Transcript	162
Appendix 3. Questionnaire List	164
Appendix 4. Questionnaire Results: Demographic Composition	171
Appendix 5. Questionnaire Results: Experience in Sociolla	172
Appendix 6. Questionnaire Results: Frequency of Using Sociolla's Service	174
Appendix 7. Questionnaire Results: SERVQUAL	177
Appendix 8. Step-by-step SERVQUAL Calculation (Google Sheet/Microsoft Excel)	181
Appendix 9. Sentiment Keyword Grouping Definitions	190
Appendix 10. Definitions of Documents Needed in the Flow Process	191
Appendix 11. SPSS Results for Data Validity (Full Version)	192
Appendix 12. SPSS Results for Data Reliability – Tangible Dimension	193
Appendix 13. SPSS Results for Data Reliability – Reliability Dimension	193

Appendix 14. SPSS Results for Data Reliability – Responsiveness Dimension	193
Appendix 15. SPSS Results for Data Reliability – Assurance Dimension	193
Appendix 16. SPSS Results for Data Reliability – Empathy Dimension.....	194
Appendix 17. SPSS Results for Data Reliability – SERVQUAL Dimension Importance Rating	194
Appendix 18. Observation Output: In-store Footages	195
Appendix 19. Observation Output: CCTV Footage 1	196
Appendix 20. Observation Output: CCTV Footage 2	197
Appendix 21. Observation Output: Warehouse Footages	198
Appendix 22. SOCO by Sociolla Application Sample Screenshots.....	199
Appendix 23. Sociolla Website Sample Screenshot.....	199
Appendix 24. Original Footage: Likert-based Customer Feedback Survey of Sociolla	200

LIST OF TABLES

Table 2. 1 Departmental Responsibilities of Sociolla	14
Table 2. 2 Omnichannel Building Blocks	18
Table 2. 3 Primary Technologies of IoT	23
Table 2. 4 Forecasting Error Level of Mean Absolute Percentage Error (MAPE) 34	
Table 2. 5 Interpretation of Gap Score	39
Table 2. 6 Previous Studies	40
Table 3. 1 Operational Definitions	45
Table 3. 2 Population, Sample and Estimated Sample Size.....	48
Table 3. 3 Internal Expert Selection Criteria.....	50
Table 3. 4 Respondent Selection Criteria.....	51
Table 3. 5 Pearson's Product-Moment Correlation Validation Ranking	56
Table 3. 6 P-Value Interpretation (with significance level $\alpha = 0.01$).....	56
Table 3. 7 Cronbach's Alpha Reliability Ranking	57
Table 3. 8 Implementation Timeline and Research Setting	57
Table 3. 9 Document Analysis Overview	64
Table 3. 10 Example of Keyword Sentiment Grouping.....	66
Table 3. 11 Likert-based Customer Feedback Survey of Sociolla Breakdown	68
Table 3. 12 Example of Customer Assistance Frequency Grouping	69
Table 4. 1 Interviewees' Profile from Sociolla	73
Table 4. 2 Operational Metrics of Sociolla	74
Table 4. 3 Integrated Supply Chain Process of Sociolla Breakdown (Appendix 10)	78
Table 4. 4 Stakeholder Responsibility.....	81
Table 4. 5 Sentiment Keyword Grouping	84
Table 4. 6 Interview Result Response Sentiment Grouping	85
Table 4. 7 Actual Sales Volume and Forecasted Sales Volume	90
Table 4. 8 Total Sales Revenue and Forecasted Sales Revenue Formula.....	92
Table 4. 9 Overstocking and/or Understocking Assessment using MAPE.....	93
Table 4. 10 MAPE Forecasting Error Level Indication	94
Table 4. 11 Consumer Time Spent in Specific Store Layout.....	97
Table 4. 12 Frequency in Customer Assistance Request	97
Table 4. 13 Consumer Impression After Purchase.....	98
Table 4. 14 Behavioral Observation Findings in Sociolla's Physical Store.....	99
Table 4. 15 Sociolla Heatmap Process Breakdown (Appendix 10)	102
Table 4. 16 Key Responsibilities of Stakeholders Involved in the Heatmap Process	105
Table 4. 17 SERVQUAL Dimension: Tangible Attribute	110
Table 4. 18 SERVQUAL Dimension: Reliability Attribute	111



Table 4. 19 SERVQUAL Dimension: Responsiveness Attribute	112
Table 4. 20 SERVQUAL Dimension: Assurance Attribute.....	114
Table 4. 21 SERVQUAL Dimension: Empathy Attribute.....	115
Table 4. 22 Importance Rating Attribute for SERVQUAL Dimension	117
Table 4. 23 Data Reliability Results.....	119
Table 4. 24 SERVQUAL Score for SOCIOLLA.....	120
Table 5. 1 Solution to Tackle Sociolla's Problem.....	130

LIST OF FIGURES

Figure 1. 1 Change in Beauty Market Retail Sales (Weaver et al., 2024)	2
Figure 1. 2 Cosmetic Industry Supply Chain Flow in Indonesia (Putri, T., and Ardi, R., 2022).....	5
Figure 1. 3 Investors' Plan in Sustainable Investments (Morgan Stanley Institute for Sustainable Investing, 2024).....	7
Figure 2. 1 Sociolla Logo (Sociolla, 2025)	13
Figure 2. 2 Sociolla Organizational Structure (Sociolla, 2025)	14
Figure 2. 3 Omnichannel Customer Journey (Bijmolt et al., 2019).....	21
Figure 2. 4 Omnichannel Customer Journey (Chen et al., 2021).....	22
Figure 2. 5 Influence of IoT on Decision Making (Rajan, 2024).....	24
Figure 2. 6 CPFR Model (Edwards, 2003)	27
Figure 2. 7 S-O-R Flow Model (Russell and Mehrabian, 1977).....	35
Figure 3. 1 Questionnaire Structure (Dalati and Gómez, 2018).....	63
Figure 3. 2 Likert-based Customer Feedback Survey of Sociolla (Sociolla, 2025)	68
Figure 4. 1 Integrated Supply Chain Process of Sociolla (Processed Data, 2025) 77	
Figure 4. 2 Total Sales Revenue vs Forecasted Sales Revenue in 2024 (Processed Data, 2025).....	91
Figure 4. 3 Heatmap Analysis of Sociolla at JCM (Sociolla Internal Company Report, 2025).....	96
Figure 4. 4 Sociolla Heatmap Process Flowchart (Processed Data, 2025)	101
Figure 4. 5 Gap Score for SERVQUAL Dimensions (Processed Data, 2025) ...	121
Figure 4. 6 Expectation vs Perception Average of SERVQUAL Dimensions (Processed Data, 2025).....	122
Figure 4. 7 Importance Rating for SERVQUAL Dimensions (Processed Data, 2025)	123
Figure 4. 8 S-O-R Model of The Study (Processed Data, 2025)	126