

TABLE OF CONTENTS

ACKNOWLEDGEMENT	i
STATEMENT OF AUTHENTICITY	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	vi
TABLE OF FIGURES	vii
ABSTRACT	viii
1. INTRODUCTION	1
1.1 Background	1
1.1.1 Covid-19 Outbreak around the World	2
1.1.2 Covid-19 Situation in Indonesia	4
1.1.3 Impact of the Disposable Face Masks	5
(i) The Face Masks Market	6
(ii) The Impact of Face Masks on Economy	7
(iii) The Impact of Face Masks on Environment	7
1.1.4 The Face Masks Waste Problem	8
1.1.5 Addressing the Face Masks Waste Problem around the World	10
1.1.6 Solutions for Face Masks Waste Problem in Indonesia	12
1.1.7 Dropped Box Used Mask (Dumask)	14
1.2 Problem Statement	15
1.3 Research Questions	17
1.4 Research Objective	17
1.5 Research Contribution	17
1.6 Research Scope	18
1.7 Writing System	20
2. LITERATURE REVIEW	22
2.1 Literature Review	22
2.1.1 Circular Economy (CE)	22
(i) Concept	22
(ii) Relation between the Circular Economy and Sustainability in Corporations	23
(iii) Recycling Issues	25
(iv) Applying CE Concept in Disposable Face Masks Waste Problem	28
2.1.2 Stakeholders Management	29

(i)	Stakeholder Identification	30
(ii)	Stakeholder Analysis	30
(iii)	Expectations and Requirements	32
(iv)	The Relation of Stakeholders to DAC Impact Evaluation and Business Model	33
2.1.3	Sustainability Business Model (SBM)	34
(i)	The Triple Layered Business Model Canvas Tool (TLBMC)	34
2.2	Previous Studies on Face Mask Waste Recycling	37
2.2.1	The Potential of Recycled Products from Face Mask Waste	37
(i)	Construction Material	39
2.3	Research Framework	42
2.3.1	DAC Impact Evaluation	42
(i)	Background	42
(ii)	DAC Evaluation Criteria Definitions	43
2.3.2	Applying DAC Impact Evaluation in Face Mask Waste Recycling of Dumask	45
(i)	Attitude and Behaviours in Using Face Masks	46
3.	RESEARCH METHODS	50
3.1	Research Design	50
3.2	Data Collection Method	53
3.3	Research Instruments	55
3.4	Data Analysis Method	56
3.4.1	Reliability and Validity	56
3.5	Case Profile	59
4.	RESULTS AND DISCUSSIONS	60
4.1	Description of the Data	60
4.1.1	Findings	60
(i)	Socio Demographic Characteristics and Socio-Economy Status	61
(ii)	Usage of Masks, Awareness and Motivation	62
(iii)	Safety and Impact	65
(iv)	Preferences, Opinions and Expectations	67
(v)	Dumask	68
(vi)	Stakeholders	73
4.1.2	Summary of Findings	75
4.2	Discussions	76

4.2.1 Socio Demographic Characteristics and Socio-Economy Information	76
4.2.2 Stakeholders	77
4.2.2.1 Identification	77
4.2.2.2 The Roles and Responsibilities of Stakeholder	78
4.2.3 Awareness and Motivation of the Stakeholder	81
4.2.4 Perception and Satisfaction of Stakeholder toward Face Mask Recycling and Dumask	83
4.2.5 Comparing the Needs of the Stakeholders and Dumask's Objective	84
4.2.6 Customers Behavior (Purchasing, Buying Habits, Preferences and Expectations)	85
4.2.7 The Participation	86
4.2.8 Findings from Dumask	87
4.2.9 Impact Evaluation	90
4.2.10 Sustainability Business Model	97
5. CONCLUSION	108
5.1 Conclusion	108
5.2 Implication	110
5.3 Limitations and Suggestions	112
5.4 Managerial Recommendation	113
BIBLIOGRAPHY	115
APPENDIX	118
Appendix 1. Questionnaires for surveys	120
A. Survey 1 (mixed questions)	120
B. Survey 2 (open-ended questions)	122
Appendix 2. Survey Analysis	123
A. Survey 1 Analysis	123
B. Survey 2 Analysis	123
Appendix 3 Interview List of Questions	123
A. Interview with Stakeholder (PIAT)	123
B. Interview with Dumask	124
Appendix 4 Interview Analysis	124
C. Interview Transcripts	124
D. Interview Analysis	124

LIST OF TABLES

Table 2.1 Recycled Products from Face Masks	39
Table 4.1 Socio Demographic Characteristics and Socio-Economic Status	61
Table 4.2 Usage of Masks, Awareness and Motivation	63
Table 4.3 Safety and Impact	65
Table 4.4 Preferences, Opinions and Expectations	67
Table 4.5 Old Version Vs Current Version of Dumask	70
Table 4.6 Findings from Dumask	72
Table 4.7 Themes and Sub-themes from Interviews	72
Table 4.8 Findings from Stakeholders	73
Table 4.9 Summary of Findings	75
Table 4.10 Impact Evaluation	95
Table 4.11 Triple Layered Business Model Canvas (TLBMC)	106
Table 5.1 Suggestions to Solve the Current Problem of Dumask	113

TABLES OF FIGURES

Figure 3.1 Qualitative Research Design	51
Figure 4.1 Dumask;s Packaging	70
Figure 4.2 Dumask’s Products	70
Figure 4.3 Pie Chart for Dumask’s Customers	71
Figure 4.4 Satisfaction Rate	71
Figure 4.5 Purchasement	71
Figure 4.6 Stakeholders of Dumask	77