



## Table of Content

Cover .....	i
Pernyataan Bebas Plagiasi .....	ii
Abstract .....	iii
Intisari .....	.iv
Acknowledgements .....	v
Table of Contents .....	vii
Figures .....	x
Tables .....	.xi
Abbreviations .....	xii
Chapter 1. Introduction .....	1
1.1. Research Background .....	1
1.2. Research Questions .....	6
1.3. Research Method .....	7
Chapter 2. Tourism Big Data .....	8
2.1. What is Big Data? .....	8
2.1.1. The Dynamic of Data .....	10
2.2. Literature Study of Big Data .....	10
2.2.1. Volume .....	11
2.2.2. Variety .....	12
2.2.3. Velocity .....	13
2.3. Big Data in Tourism .....	13
2.3.1. Advantages of Big Data in Tourism .....	14
Chapter 3. Indonesia Tourism Development .....	18
3.1. Tourism Development in Indonesia.....	18
3.1.1. Visit Indonesia Year and Wonderful Indonesia Campaign.....	20
3.2. Indonesia Foreign Tourist Statistics in 2017.....	22
3.2.1. Visit Pattern .....	24
3.2.2. Duration of Stay .....	25
3.2.3. Expenditure.....	26



3.3. The Indonesia Ministry of Tourism.....	26
3.4. Concept and Definition of Foreign Tourist.....	30
3.5. Indonesia Past Experience in Tourism Statistics.....	32
3.5.1. The Republic of Indonesia Arrival/Departure Card.....	32
3.6. Current Indonesia Foreign Tourist Data Source.....	35
3.6.1. Passenger Exit Survey.....	36
3.6.2. Mobile Positioning Data for Tourism Statistics in Indonesia .....	37
3.6.3. Indonesia Tourism Intelligence Platform .....	39
Chapter 4. Japan Tourism Big Data .....	41
4.1. Tourism in Japan .....	41
4.2. The Establishment of Japan Tourism Agencies .....	42
4.2.1. Japan Tourism Agency .....	43
4.2.2. Japan National Tourism Organization .....	43
4.3. The Establishment of Japan Tourism Statistics.....	47
4.3.1. The International Visitor Survey .....	47
4.3.2. Japan Embarkation/Disembarkation Card .....	48
4.4. The Development of Japan Tourism Big Data .....	49
4.4.1. The Dynamic Statistics of Foreign Touris Visiting Japan .....	50
4.4.2. Mobile Roaming Data.....	50
4.4.3. GPS Location Data.....	53
4.4.4. SNS Data .....	56
Chapter 5. Discussion .....	59
5.1. Tourism Big Data Comparative Study.....	59
5.1.1. Mobile Roaming Data.....	60
5.1.2. GPS Location Data.....	60
5.1.3. SNS Data .....	61
5.2. Traditional Tourism Statistics Comparative Study .....	61
5.2.1. The Embarkation/Disembarkation Control .....	62
5.2.2. The Passenger Exit Survey .....	63
5.2.3. Other Surveys .....	63
5.3. Challenges in Tourism Big Data Analysis .....	64
Chapter 6. Review and Conclusion .....	65



6.1. Comparison Review .....	65
6.2. Conclusion .....	66
Bibliography .....	68
Appendix 1. Nawa Cita Jokowi .....	72
Appendix 2. Guidance on Survey of Visiting Foreign Tourist Dynamics Using ICT .....	73