

## Table of Contents

<b>LIST OF ABBREVIATIONS .....</b>	<b>4</b>
<b>LIST OF FIGURE .....</b>	<b>5</b>
<b>LIST OF TABLE .....</b>	<b>6</b>
<b>ABSTRACT .....</b>	<b>7</b>
<b>ZUSAMMENFASSUNG .....</b>	<b>8</b>
<b>1. INTRODUCTION.....</b>	<b>9</b>
1.1. BACKGROUND.....	9
1.2. PROBLEM STATEMENT .....	14
1.3. RESEARCH QUESTION .....	14
1.4. RESEARCH OBJECTIVE.....	15
1.5. RESEARCH METHODOLOGY .....	15
<b>2. DEVELOPMENT OF DATA INFORMATION TECHNOLOGY .....</b>	<b>17</b>
2.1. DATA COLLECTION .....	18
2.1.1. Data Collection Overview .....	18
2.1.2. Source of Data Collection.....	20
2.2. DATA STORAGE DEVELOPMENT .....	20
2.3. DATA EXCHANGE.....	23
2.3.1. Data Exchange Overview.....	23
2.3.2. The Development of Data Exchange.....	23
2.3.3. Data Exchange Security .....	25
<b>3. PERSONAL DATA PROTECTION IN LEGAL COMPARISON .....</b>	<b>27</b>
3.1. INDONESIA PERSONAL DATA PROTECTION LAW .....	27
3.1.1. The Overview of Personal Data Protection .....	27
3.1.2. Personal Data Protection Law Concept of Scope, Controller, and Regulator .....	28
3.1.3. Data in Safety Standard requirement .....	30
3.1.4. Personal Data Protection History.....	31
3.1.5. Personal Data Protection Penalties.....	33
3.2. MALAYSIA PERSONAL DATA PROTECTION ACT .....	35
3.2.1. Malaysia Personal Data Protection Act Overview.....	35
3.2.2. Malaysia Personal Data Protection Concept of Scope, Controller and Regulator .....	36
3.2.3. Data in Safety Standard Requirement.....	38
3.2.4. Malaysia Personal Data Protection Act History .....	40
3.2.5. Malaysia Personal Data Protection Penalties .....	41
3.3. SINGAPORE PERSONAL DATA PROTECTION ACT .....	42
3.3.1. Singapore Personal Data Protection Act Overview.....	42
3.3.2. Singapore Personal Data Protection Data Protection Concept of Scope, Controller and Regulator .....	43
3.3.3. Data in Safety Standard Requirement.....	45
3.3.4. Singapore Personal Data Protection Act History.....	47
3.3.5. Singapore Personal Data Protection Act Penalties.....	48
3.4. THE EUROPEAN PERSONAL DATA PROTECTION REGULATION.....	52
3.4.1. The European Personal Data Regulation Overview .....	52
3.4.2. General Data Protection Regulation Concept of Scope, Controller and Regulator .....	53
3.4.3. Data in Safety Standard Requirement.....	54
3.4.4. General Data Protection Regulation History .....	56
3.4.5. The European Union – GDPR Penalties.....	58
<b>4. FINDING CHALLENGE IN CASE STUDY.....</b>	<b>60</b>
4.1. INDONESIA PERSONAL DATA PROTECTION CASE STUDY AND CHALLENGE .....	60

4.1.1.	Case Study .....	60
4.1.2.	Challenge .....	62
<b>4.2.</b>	<b>MALAYSIA PERSONAL DATA PROTECTION CASE STUDIES AND CHALLENGE .....</b>	<b>63</b>
4.2.1.	Case Study .....	63
4.2.2.	Challenge .....	64
<b>4.3.</b>	<b>SINGAPORE PERSONAL DATA PROTECTION CASE STUDIES AND CHALLENGE .....</b>	<b>66</b>
4.3.1.	Case study .....	66
4.3.2.	Challenge .....	67
<b>4.4.</b>	<b>THE EUROPEAN UNION PERSONAL DATA PROTECTION CASE STUDIES AND CHALLENGE .....</b>	<b>68</b>
4.4.1.	Case Study .....	68
4.4.2.	Challenge .....	69
<b>5.</b>	<b>DISCUSSION .....</b>	<b>73</b>
5.1.	COMPARISON IN SECURITY STANDARD .....	73
5.2.	COMPARISON IN PERSONAL DATA PROTECTION LAW .....	76
5.3.	DETERMINE PERSONAL DATA PROTECTION CHALLENGE IN INDONESIA BASED ON BUSINESS PERSPECTIVE .....	79
5.4.	COMPARISON PERSONAL DATA PROTECTION CHALLENGES .....	82
<b>6.</b>	<b>CONCLUSION AND RECOMMENDATION .....</b>	<b>85</b>
6.1.	CONCLUSION .....	85
6.2.	RECOMMENDATION .....	86
6.2.1.	Indonesia PDP Law .....	86
6.2.2.	Scientific Research .....	86
	<b>DECLARATION .....</b>	<b>87</b>
	<b>PUBLICATION BIBLIOGRAPHY .....</b>	<b>88</b>
	<b>APPENDIX .....</b>	<b>98</b>