CO-CREATION OF VALUE BETWEEN CUSTOMERS AND PROVIDERS IN GOVERNMENT E-SERVICE DELIVERY

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Dedicated to:

My late parents; through whom I was able to lay a
measure of claim to academic success.
"My Lord! Bestow on them Your Mercy as they
did cherish me in childhood"

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All praises and thanks are due to Allah, the Eternal Besought of all Who teaches man what he knew not. May His blessings be upon the best of His creations, Muhammad-the unlettered Prophet- and all his followers until the Day of Reckoning.

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ABSTRACT

Many governmental agencies are employing information and communication technology (ICT) to modernize service delivery to citizens which affords them to put a lot of information online for citizens' use. Despite this, there is greater demand for service value by citizens that meet their needs in all facets of life. However, lack of co-creation value mechanism impedes government understanding of customers and providers e-service value. The research aims to explore government e-service value between customers and providers from a co-creation value perspective. The research adopts an interpretive paradigm approach as a mode of inquiry. The approach is an integrated framework comprising soft system methodology (SSM) and Dialogue-Access-Risk Management-Transparency (DART) model. It serves as a theoretical lens to gain deeper insights into data collection and analysis. The framework was applied to two case studies to understand the value of government e-service for customers and providers. Qualitative data collected from respondents through interviews, observations and documents were analyzed verbatim. The study identified various current practices of government that influenced co-creation of e-service value and experience sharing between customers and providers. Apart from this, co-creation values applicable to government e-service were identified and the process of generating values between customers and providers were established and described. These findings led to the refinement of the integrated framework which considers organisation context, co-creation values categorisation and recommended practices. The framework serves as a guide for understanding customers and providers for co-creation value in government online environment.

ABSTRAK

Banyak agensi kerajaan yang menggunakan teknologi maklumat dan komunikasi (ICT) untuk memodenkan penyampaian perkhidmatan kepada rakyat yang membolehkan mereka untuk manyalurkan maklumat secara atas talian untuk kegunaan rakyat. Namun begitu, terdapat permintaan yang tinggi daripada rakyat untuk nilai perkhidmatan yang memenuhi segala keperluan mereka dari segenap aspek kehidupan. Walau bagaimanapun, kekurangan mekanisme nilai penciptaan bersama, mengekang kefahaman kerajaan dalam memahami nilai e-perkhidmatan pelanggan dan pembekal. Kajian ini bertujuan untuk meneroka nilai e-perkhidmatan kerajaan antara pelanggan dan pembekal daripada perspektif nilai penciptaan bersama. Kajian ini mengambil pendekatan paradigma pentafsiran sebagai mod perolehan maklumat. Pendekatan ini adalah satu kerangka kerja integrasi yang terdiri daripada Metodologi Sistem Lembut dan Model Dialog-Capaian-Pengurusan Risiko-Ketelusan. Ia bertindak sebagai lensa teori untuk memperolehi pemahaman yang lebih mendalam dari pengumpulan dan analisis data. Rangka kerja ini diaplikasi kepada dua kajian kes untuk memahami nilai e-perkhidmatan kerajaan dari pandangan pelanggan dan pembekal. Data kualitatif dikumpul daripada responden melalui temu bual, pemerhatian dan dokumen, dan kemudian dianalisis. Kajian ini mengenal pasti pelbagai amalan terkini kerajaan yang mempengaruhi nilai penciptaan bersama e-perkhidmatan dan perkongsian pengalaman antara pelanggan dan pembekal. Selain itu, nilai pembuatan bersama yang boleh diaplikasi kepada e-perkhidmatan kerajaaan telah dikenal pasti dan proses menjana nilai antara pelanggan dan pembekal dibina dan diperihalkan. Penemuan ini membawa kepada perincian dalam kerangka kerja integrasi yang mempertimbangkan konteks organisasi, kategori nilai penciptaan bersama dan amalan baik yang dicadangkan. Kerangka kerja ini bertindak sebagai panduan dalam memahami nilai penciptaan bersama dikalangan pelanggan dan pembekal dalam persekitaran atas talian kerajaan.

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LIST OF ABBREVIATIONS

BIR - Board of Inland Revenue
CATWOE - Customer /Actor /Transformation /Worldview/ Owner /Environment
CBO - Community Based Organisation
JCC - Johor City Council
CoP - Committee of Practice
CSC - Civil Service Commission
DART - Dialogue/ Access /Risk Management/ Transparency
ECC - Experience Co-Creation
EDG - Electronic Discussion Group
ESVEC - E-Service Value and Experience Co-creation
EVA - Economic Value Added
FP - Foundational Premise
G2B - Government to Business
G2E - Government to Employee
G2G - Government to Government
G2C - Government to Citizens
GSA - General Service Administration
GTP - Government Transformation Programme
H2H - Human to Human
H2M - Human to Machine
IBM - International Business Machine
ICT - Information and Communication Technology
IRB - Inland Revenue Board
IRBM - Inland Revenue Board of Malaysia
IRC - Internet Relay Chat
IRS - Inland Revenue Service

IS	-	Information Systems
IT	-	Information Technology
ITO	-	Income Tax Office
ITRF	-	Income Tax Return Form
MSC	-	Multimedia Super Corridor
NGO	-	Non Governmental Organisation
NMP	-	Ninth Malaysian Plan
NPV	-	Net Present Value
PROI	-	Public Return On Investment
PSV	-	Public Service Value
R&D	-	Research and Development
REDF	-	Robert Enterprise Development Fund
SDL	-	Service -Dominant Logic
SIGS	-	Special Interest Groups
SROI	-	Social Return On Investment
SSA	-	Social Security Administration
SSM	-	Soft System Methodology
TMP	-	Tenth Malaysian Plan
UGC	-	User Generated Content Website
UTM	-	Universiti Teknologi Malaysia
VMM	-	Value Measurement Methodology
WOM	-	Word of Mouth

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CHAPTER 1

INTRODUCTION

1.1 Overview

This research explores government e-service applications between customers and providers value-in-use experience from co-creation of value perspective. Exploration of government e-service from co-creation of value perspective creates mutual benefit for both customers and providers and at the same time affords government the opportunity to understand e-service value. Enable government to provide better services for citizens. This chapter is an introductory part and it gives an overview of the study. It comprises discussions on co-creation of value and e-services as a background to the study. This is followed by statement of the problem. It then gives specific research questions and objectives that enable the readers to gain insight into the research focus. Significance of the study and scope of the research were also given. The chapter also provides contribution of the study and concludes with the overall structure of the study.

1.2 Research Background

In contemporary times, most of the service based organisations emphasise on the service value jointly created by both customers and providers. This enables the organisations to understand the value that are embedded in sharing e-service idea and experience with customers. This practice of sharing e-service experience with end users has contributed immensely to the economy growth of some organisation and stakeholders' mutual benefit. The Public sector is also venturing into this idea by seeking customer contribution in joint value assessment that bring mutual benefit as well as understanding e-service value-in-use. The issue related to the necessity of government e-service joint value assessment is presented in the subsequent sections.

1.2.1 Paradigm Shift in Value Assessment

The traditional way of value co-creation which although had served us so well for over a century has become outdated (Prahalad and Ramaswamy, 2004a). The need for a new way of exploring public e-service value between customers and providers for improvement and mutual benefit cannot be overlooked. The assertion was premised upon the fact that we live in a changing world such that expediency warrant that the approach to issues equally change in order to suit the dynamics of the modern time. Changes in approach manifest as a result of scientific and technological advancement. Such changes have brought about revolution in Information and Communication sector of the society. It has further revolutionised every facet of human relations be it economic, social and political due to accessibility of available information which affords customer / citizens the opportunity to have global outlook and network with people around the world. This situation has further prompt customer into becoming active, since they have the chance to interact, compare and contrast e-service value thereby assisting them to make informed decision and choices among several available alternatives. As a result of this, government can no longer have exclusive right of value creation. Government offices are also embracing this digital transformation and many of its services are online for use by citizens. Despite the increasing research on service dominant (S-D) logic and co-creation of value in marketing, few researchers applied the process to government e-service applications. Although, there had been suggestions as well as attempts in paradigm shift in analysing services experience (Gummerus, 2011), yet e-service literature is at present are basically concerned with features of e-service rather than their impacts or effects particularly as it relates to the customer in terms of their experience. Burgelman et al (2005) argued that failure of government to address the citizens' demand has remained a major weakness in government e-service delivery. However, studies show that many customers view the service quality delivered through commercial websites as unsatisfactory (Lenon and Harris, 2002). There is no evidence to suggest that citizens' view of government e-service value differs (Connolly and Bannister, 2008). The major weakness remains in the limited assessment of mutual value to both government and the citizens (Jaeger and Thompson, 2003). Therefore, it is necessary to co-create value with customer to develop a comprehensive way of understanding customers and providers value-in-use of e-service applications.

1.2.2 Informed Customer/ End Users Involvement in Value Assessment

Customers are always the co-creator of value because service dominant logic attributes importance to the value creation process that involves the customer as a co-creator. A fundamental principle of service dominant logic indicates that customer is always a co-creator of value (Lusch and Vargo, 2006). Co-creation value is primarily based on the assumption that customer have right to interact with government and co-create value. Citizens of countries nowadays are increasingly demanding that their government provides better and high quality services that meet their needs in all areas (Uden and Naaranoja, 2011). Burgelman et al (2005) and Welch et al (2004) stressed that government needs to address the demand of citizens which have been neglected for over a period of time, and there is need for government to intensify effort to interact more with citizens in order to share e-service experience to create mutual value and citizens' satisfaction. Owing therefore to this observable shortcoming of the age long traditional approach, the foundational premise (FP6) of Vargo and Lusch (2004) asserted that mutual interaction between government and customer brings about co-creation of value in the interest of the parties involved. Consequently, government should innovate to improve the lives of their citizens. The service offered should provide value. Co-creation of value in government e-service application is inevitable. The customer nowadays rather than being isolated are these days connected and has rather than unaware become well informed much as they have changed from being passive to active. Hence government could no longer unilaterally design service, delivery process and control channel without taken customer idea, experience and need into consideration (Prahalad and Ramaswamy, 2004a; Ramaswamy, 2008). The customer is no more ordinary end user of e-service as they want to interact with service provider to co-create value (Prahalad and Ramaswamy, 2004b). From the customer's viewpoint, value can be achieved when customer's expectations are met regarding service being delivered by the provider (Chang et al, 2005). It is this joint interaction and mutual reciprocative influence between provider and customer that in the final analysis brings about the new phenomenon or concept called co-creation of value. This forms premises upon which the concept or theory is based which requires further studies more especially with regards to government e-service applications between customers and providers. The current study is geared towards this end as it attempts to fill the vacuum. In the context of this study, customers are considered as citizens and at the same time value co-creator with service provider, that is, government.

1.2.3 Technology as Agent of Change for Citizens Benefit

In modern day, information and communication technology (ICT) has reached a level at which, it is considered as an instruments or enabler by various establishments for change and reform in all ramification. This brings about success for the government agencies and other government establishment. The present day has witnessed a lot of development from different sectors as a result of the upsurge of ICT (Liu et al., 2008). The rapid growth of internet usage enable many organisations, public and private sectors, providers and customers to network, collaborate and interact with others to co-create value either at traditional level or information technology platform. The emergence of the world wide web as a tool for mass communication has had profound social and economic implications. It has transformed the way we interact and most definitely the way we do business.

Today, customers are more informed than ever before. In essence, the internet has provided a global infrastructure that allows for a more direct interaction between customers and services. Customer interaction with government services is related to citizen perception of online service convenience (transaction), reliability of information (transparency), and engaged electronic communication (interactivity) (Welch et al., 2004). According to Moon (2002), the rapid development has enabled the government of different regions of the world to direct their attention towards ICT as a result of the opportunities it assumes to bring to their community. As a result, it propels the government to spend huge amount of money on ICT project. The government perceived the benefit it will bring to the citizen and country at large in the long run. In order to make this more effective government invest largely on e-service applications. Some local government authority has also invested on e-government project but has not been progressing and having favourable outcome due to the fact that it is just recent (Moon, 2002; 2008). Due to this fact, it is necessary for government both at local and national level to create awareness of e-service value-in-use. Make the concept clear to the public in order to facilitate their understanding of the value-in-use of government e-service application. The government need to know how public perceive e-government project (such as e-service applications) value. However, Liu et al., (2008) pointed out that assessing government e-service from co-creation of value is one of the greatest challenges facing both researcher and the government and there is no collective design and system that will cater for the challenge.

1.2.4 Value through Information Systems Model

So far, much attention has been given to value in information systems. The information systems success model has addressed the user satisfaction and has been applied into many areas by researchers (DeLone & McLean, 2004; Bharatia and Chaudhury, 2004; Iivari, 2005). Similarly, SERVQUAL and E-S-QUAL had also delved extensively into website service quality such as satisfaction, empathy, fulfilment, perceived value (Zeithmal et al., 2002; Kanyama and Black; 2000; Connolly and Bannister, 2008; Parasuraman et al, 1991, 2005). Despite this, value co-creation of government e-service applications between providers and customers has received less attention. Thus, current study tries to explore this aspect and fill the existing gap. Studies have shown that attention have mostly been focused on studying customer perception of online shopping and retailing sites (Parasuraman, 2005; Jeong, Fiore, Niehm and Lorenz 2009) compared to that of content based websites – most particularly those of informational sites to which little attention has been given (Gumezin, 2009). Equally, researchers in the area of e-service continued to beam their search light towards service evaluation much as their effects on value, satisfaction as well as loyalty (Parasuraman et al. 2005) to the alter neglect of value co-creation of government e-service. Hence, this study is particularly concerned with public e-service value co-creation. It should be stated no matter how brief, that most of the available works on e-service are centred on enquiries relating to e-retailing or customer to customer service. Those having to do with government e-services have escaped their conscious and scientific study. It is therefore, as stated above that the current study attempts to bridge this gap.

Conclusively, co-creation of value research in government e-service is still in embryonic stage compared to other research field. It is a growing phenomenon in marketing firm where the interaction of providers and customer are essential in value co-creation. Besides, most of the work done in government e-services evaluation adopted quantitative approach whereas in the present study qualitative method is used due to the dynamism and subjective nature of value. Also, qualitative approach paves way for face to face interaction with government e-service stakeholders to obtain their e-service value-in-use experience. For this reason and in order to provide a different perspective, the current study focuses on exploring co-creation of value in government e-service application context through value-in-use and experience sharing. More so, there is need to understand both government and individual citizens value of government e-services. Co-creation of value aids government to have adequate plan as well as avenue for improving e-service. Understanding both providers and customers' co-creation value generation process promotes relationship and improvement which geared towards development and provision of social amenities for citizens.

1.3 Statement of the Problem

Based on the discussion so far, the problem statement that forms the core of this research is shaped by four major issues.

a. Most research on e-service focus on either e-retailing or consumer-consumer (C2C) perception of online shopping services. Despite the dramatic increase in research on co-creation of value in the corporate and service sectors, relatively little attention has been paid to government to citizens (G2C) e-service value co-creation. The public sector e-service typically includes the exchange of intangible services. Therefore, this study address government e-service to citizen (G2C) since it is still under-researched (Parasuraman, Zeithmal and Malhotra, 2005; Jeong, Fiore, Niehm and Lorenz 2009)

b. Lack of knowledge and experience sharing to co-create government e-service value-in-use. In the literature, service dominant logic laid much emphasis on the role of customer in value co-creation. The foundational premise (FP6) of service dominant (S-D) logic proposed that value should be jointly created between providers and the customers i.e. customer is a co-creator of value. However, customers interaction with providers to exchange ideas, e-service value-in-use experience and knowledge sharing to create mutual value and improvement is lacking in government e-services. This is responsible for many complaints of customer on government e-services much as it partly lead to greater demand for quality service. For this reasons and in order to bridge this gap, there is need to understand e-service value-in-use co-creation to create mutual benefit (Vargo and Lusch, 2004; 2008; Prahalad and Ramaswamy, 2004; McCormick, 2011; Uden and Naraanoja, 2011)

c. Scanty research has been conducted on customer value-in-use of e-service despite the paradigm shift in the unit of analysis from product / service to customer experiences. The e-service literatures still focus largely on the characteristics of website in which a lot of effort has been focussed on measuring the website technical capacity, usage information and services availability. As a result of this, there is need to explore government e-service from qualitative context so as to understand customer e-service value (Heinonen and Tore, 2009; Palapac, 2008; Di Gangi and Wasko, 2009).

d. Lack of value co-creation framework for understanding government e-service value-in-use despite the emphasis on transformation from goods dominant logic to service dominant logic. There is major weakness in the assessment of e-service value-in-use hence, the need to subject government e-service application to exploration is necessary. The resultant is to have e-service value-in-use experience sharing and value co-creation (ECC) guideline for government to understand providers value and individual customer need, mutual benefit and continuous improvement (Jaeger and Thompson, 2003; Prahalad and Ramaswamy, 2004a, 2004b; Ramaswamy, 2010; McCormick, 2011).

Therefore, the study gives more insight into customer idea and experience sharing of e-service value-in-use. Considering the providers and customers joint value creation, it affords a comprehensive way of understanding stakeholders' mutual benefit of e-service as well as an opportunity for the government agencies to have improvement of their e-service applications.

1.4 Research Questions

The main research question to be dealt with in this study is identified as "How can government e-service be explored from co-creation of value perspective for understanding applicable co-creation values to providers and customers"? The research is trying to understand providers value (government agencies that provide e-services for citizens) as well as individual customer value that are using government e-services. Therefore, the study seeks to provide answers to the following pertinent questions among others:

1. What are the government current practices of co-creation of values in e-services?
2. What are the co-creation values applicable for government e-services?
3. How does the government generate the co-creation values in e-services?
4. What is the appropriate framework for understanding the government e-service from co-creation of values perspectives?

1.5 Objectives of the Research

1. To identify government current practices of co-creation of values in e-services
2. To identify co-creation values applicable for government e-service
3. To describe government process of generating co-creation values in e-services.
4. To provide government with appropriate framework for understanding e-service from co-creation of values perspectives.

1.6 Significance of the Research

Having stressed the need to focus on what makes the citizen as a customer satisfied in obtaining the service and the need to co-create value. The research aims at complementing the ongoing government initiatives in the field, looking at it from a perspective of customers and providers, thus providing a closer attention to the stakeholders' needs. This research resulted in a number of contributions for government as well as customer. Government should find the research useful. The following are the contributions of the study:

a. The significance of the study is identification of value co-creation current practices the government use to influence customer to share their value-in-use and experience sharing of e-service. The current practices bridge communication gap among providers, customers and staff. To complement this information, providers can improve on relationship with customer. Such relationship fosters co-creation of value.

b. The mechanisms that lead to value co-creation are described. Values that applicable to government and customer were also identified. The identified values afford government to meet customer and staff demand. Providers can also use this information to assess and communicate the benefit of e-service.
c. This research provides government with appropriate framework for understanding value inherent in e-service. Using this information, provider can make decision and adequate plan for staff, employee and customers' satisfaction in general. Similarly, the framework can be used as a reference to understand various stakeholders' value as well as service improvement.

1.7 Scope of the Research

It is difficult to study every aspect of government e-service applications within the scope of a single research. Therefore, it is essential that we limit the area of focus at a time. In essence, the findings obtained from this research may be limited in their generalizability to other e-service. The scope of the research can be described in terms of three major aspects as follow:

a. The scope of this research includes service dominant logic (S-D), co-creation of value as well as Malaysian government agencies e-service applications. The unit of analysis are e-Filing and e-Complaint of Inland Revenue Board of Malaysia (IRBM) and Johor Bahru City Council (CC) respectively.
b. The target respondents include different level of customers (employee, (G2E); business (G2B), organisation and individual citizen (G2C) that are familiar with government e-service applications usage and senior staff of selected Malaysian government agencies.
c. The study focus more on exploring both government agencies staff and customer value-in-use experience and knowledge sharing of government e-service applications to understand both providers and customers applicable co-created value.

1.8 Structure of the Thesis

The thesis is organised in six chapters as depicted in Figure 1.1. All the chapters are interrelated with one another. Thus, the chapters could not be read in isolation. Chapters 1 and 2 introduce the research topic, reviewed the relevant literature and provide theoretical framework for conducting the research respectively. Chapter 3 describes the research methodology. Empirical / field work was conducted and analysis of the research was discussed in chapters 4 while cross case analysis of the two case studies and framework refinement were highlighted in chapter 5. Chapter 6 gives the overall analysis, recommendation and conclusion of the research.

The first chapter is an introduction to the research topic. It comprises discussion that leads to the background of the study relating to co-creation of value and government e-service, statement of the problem, specific research questions and objectives were highlighted. The scope and significance of the research based on its contribution were also given. To sum up, the chapter shows an overview of the thesis arrangement.

In Chapter two, discussions revolved around relevant concepts such as government e-service, co-creation of value, service dominant logic, research on co-creation of value. The theories and perspectives from the previous studies related to the studied phenomenon were reviewed and analysed. Similarly, value categories and frameworks from previous studies that are relevant to the study were identified. Thus, the chapter detailed out the development of the initial theoretical framework for the study.

Chapter three explores the research design and the methodology used in the study. The chapter examined research paradigm and approach used in social sciences and Information Systems (IS). Interpretive paradigm is embraced for the study and qualitative case study was adopted in conducting the study. The chapter described the preliminary study conducted among the experts that are familiar with the use and development of e-service applications to develop research instruments. The preliminary study provides background knowledge on e-service value-in-use and value categories. Finally, the research operational framework that described in detail the phases and activities involved throughout the study was also built up.

In chapters four, the organisational context was described. The theoretical framework was used to guide the data collection and analysis throughout the case studies. The findings were represented in a rich picture in order to convey real situation of the case study and how customers and providers understand co-creation of value in government e-service. The whole chapter was structured according to the four research questions. Each research question was analysed to achieve the objective. In the same way, government co-creation of value current practices and value co-created were identified and discussed. Both providers and customers' value thinking generation process were explored and mapped together to achieve a revised e-service value and experience co-creation framework.

Chapter five brings together the findings from the two case studies reported in the previous chapter. Findings from the two case studies were compared, contrasted and discussed in detail. At the end of cross-case analysis, government co-creation of value current practices and co-created value were updated. Furthermore, e-service value and experience co-creation between provider and customer framework was developed and refined.

Finally, chapter six concludes the study and the research contributions were identified. The chapter draws conclusion by describing the research outcomes in relation to the achievement of the research objectives. Similarly, the four research questions were revisited to ensure that the research objectives are met. Emphasis was also made on the e-service value and experience co-creation guideline to guide government on the usage of the framework. Also, the guideline enables government to understand e-service value, customers and providers' co-created value. The chapter finally examines the research methodological contribution and theoretical contribution. Practical contribution to customers, top management, providers and e-service developers were discussed. Furthermore, research reflection, study limitation and recommendations for future research were given.

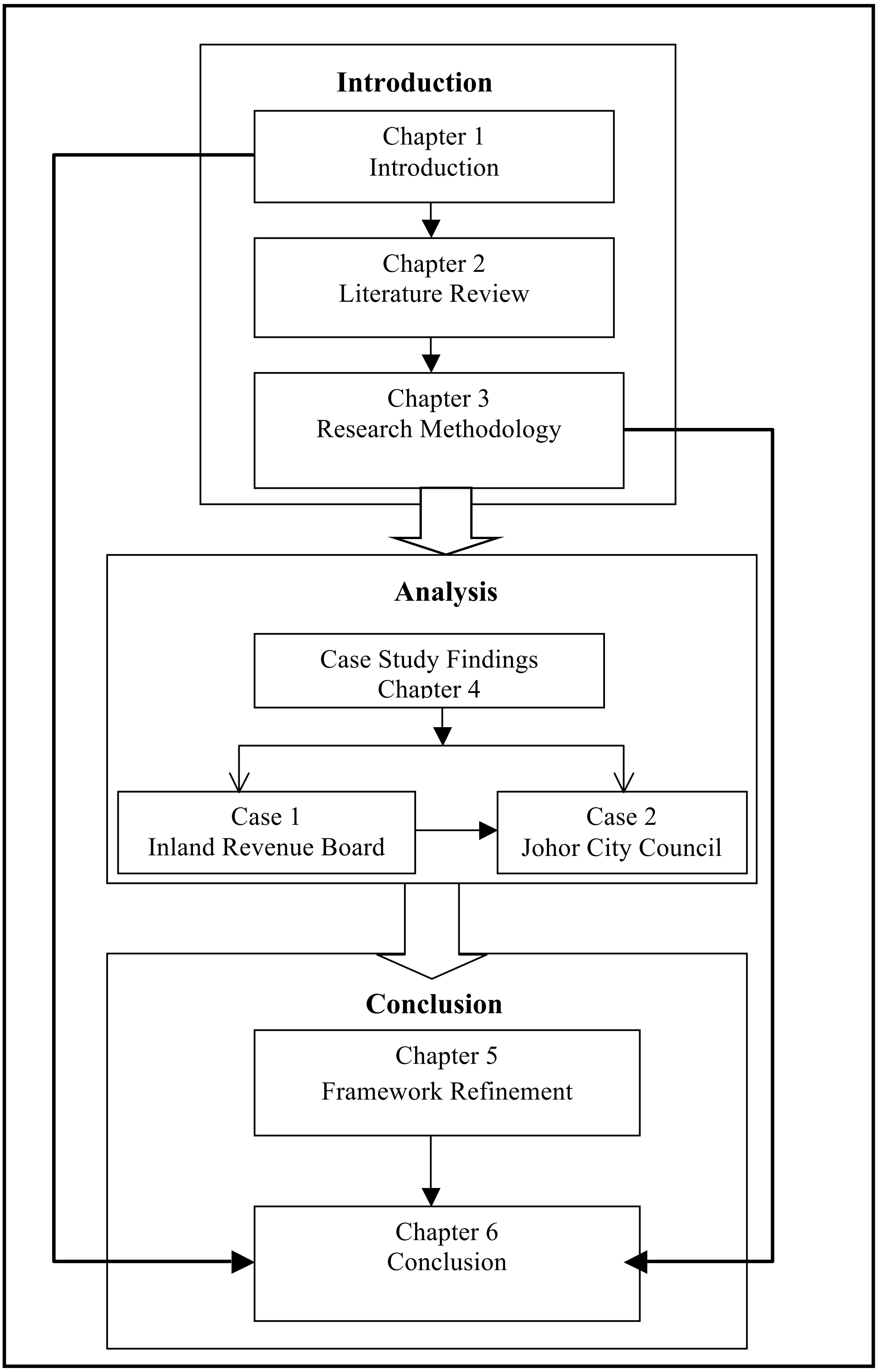
Introduction
Chapter 1
Introduction
Chapter 2
Literature Review
Chapter 3
Research Methodology
Analysis
Case Study Findings
Chapter 4
Case 1
Inland Revenue Board
Case 2
Johor City Council
Conclusion
Chapter 5
Framework Refinement
Chapter 6
Conclusion

Figure 1.1: Organisation of the Thesis

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