THE PUBLIC VALUE OF GOV 2.0: THE CASE OF VICTORIAN LOCAL GOVERNMENT, AUSTRALIA

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Abstract

No tools to assess the value generated from the use of Government 2.0 (Gov 2.0) initiatives are currently available. This research study aims to investigate the public value of Gov 2.0 in Victorian local governments. In order to achieve the research aims, this study develops a theoretical framework by hypothesising the critical public values for evaluating the literature on public value of Gov 2.0. The framework draws together the elements of Public Value as determined by Moore (1995), Kelly et al. (2002), Kearns (2004), and the public values inventory by Jørgensen and Bozeman (2007). This research uses a mixed methods approach.

In Phase 1 of the study, Victorian local government officials and administrators were interviewed to understand their aim towards public value creation. The data collected from Victorian residents were then used to validate the theoretical framework using structural equation modelling (Phase 2). The findings of the quantitative phase were further explored using thematic analysis of the interview data collected from residents (Phase 3). The findings of the three phases were then triangulated in order to gain in-depth understanding of the public value of Gov 2.0 in Victorian local government.

A new framework is proposed based on the critical public values identified consisting of three main areas of public trust in government, delivery of quality public services, and the achievements of social outcomes. The investigation of the public value of Gov 2.0 initiatives in Victorian local government using the proposed framework leads to some recommendations for increasing public value generated through the use of Gov 2.0 initiatives in local government.

This study makes a significant contribution to both theoretical and practical perspectives in the information systems domain. From a theoretical perspective, this study validates the ability of the concept of Public Value to assess the contribution of Gov 2.0 initiatives towards public value creation. The study develops a new framework that will extend the use of public value evaluation into the Gov 2.0 environment. The new framework addresses the main shortcomings of previous frameworks, as none of them have been developed on the basis of evaluating the public value of Gov 2.0, where social media tools are employed in government service delivery and interaction with their citizens. From a practical perspective, this research study offers an in-depth understanding using three phases of investigation of the public value of Gov 2.0 in Victorian local government.
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Declaration

I certify that except where due acknowledgement has been made, this thesis is my own work and contains no material previously published or written by another person except where due reference is made. The thesis contains no material which has been accepted for previous academic awards, in whole or part.

...........................

Khayri Hamed OMAR

December, 10/07/ 2015
Publications

The following papers have been published based on this PhD research:

1. E-government service quality assessed through the public value lens.

This paper assesses the role of e-government service quality in the creation of public value from the citizens’ perspective. By assessing the added value of e-government services through a public value lens, we aim to explore more deeply how e-government service quality impacts upon public value creation. We propose a conceptual framework based on theoretical perspectives of public value and e-service quality to support the examination of e-government service quality from the citizens’ viewpoint. An exploration of the literature on public value, e-service quality, and e-government indicates that the creation of public value is highly dependent on the level of quality of a service delivered by a public organisation. The framework draws together the elements of public value as determined by Moore (1995) and Kelly et al. (2002), and quality dimensions from the updated IS success model by DeLone and McLean (2003).


2. How Mature is Victorian Local E-Government: An Overall View?

The purpose of this empirical study is to analyse the level of maturity of e-government in Victorian local government. The study will help to determine the extent to which Information and Communication Technologies (ICTs) help local governments to provide citizens with more transparent and advanced services, and to close the gap between the government and its citizens. Analysis of 30 local government websites was conducted using 52 evaluation variables (items) in a questionnaire. The evaluations were performed from 1 March to mid July 2011 on 38% of all Victorian council websites. The results of this study show that e-government initiatives in Victorian local government have achieved considerable levels of maturity in terms of transparency and interactivity. However, this maturity is hindered by the low level of website usability. The main contribution of this study is that it provides a clear picture as to the maturity of Victorian local government websites.
3. Adoption of social media in Victorian local governments.

The use of the Internet and social media tools by Australians has increased significantly over the last five years. Social media tools provide local governments with the opportunity to inform, serve, and interact with their constituents on a level not previously possible. This paper uses a mixed method approach to firstly review current use of social media tools by Victorian local governments and secondly interview elected officials and administrators of four Victorian local councils about barriers to the adoption of social media tools. The results show that while 59 Victorian local governments (74%) are utilizing at least one social media tool, there are 20 councils (25%) that still do not utilise social media tools. The interviews indicate that the main barriers hindering social media implementations are: uncertainty, fear of risk, lack of knowledge and experience, lack of resources, lack of trust and, the culture of government. The main contribution of this study is a review of the current level of adoption of social media tools by Victorian local governments and identifies a number of barriers that prevent local government from fully utilizing the advantages of social media tools. Currently most Victorian local governments use social media to disseminate information.


4. The use of social media in Government 2.0 assessed through the public value lens.

This paper investigates the role of social media in the creation of public value by local governments. By assessing the added value of social media through a public value lens, we aim to explore more deeply how the use of social media tools impact upon public value creation. We propose a conceptual framework based on the theoretical perspectives of public value concepts and public value inventories to support the examination of Gov2.0 services. An exploration of the literature indicates that the creation of public value is highly dependent on three main sources: development of public trust in government, delivery of quality public services, and the achievement of...


5. Social Media Use in Local Government: An Australian Perspective.

Social media offers governments extensive opportunities to engage with citizens, particularly at the local level. This study investigates the issues that local governments face in implementing social media initiatives. It builds on existing literature by using an interpretive approach to examine the perceptions of public employees and elected officials of local councils in an Australian context. The article reports on the issues that inhibit a move to a more interactive use of social media and examines how these may be addressed. Implications for research and practice are given.

Table of Contents

Abstract ....................................................................................................................................................... i
Acknowledgements ....................................................................................................................................... ii
Declaration ................................................................................................................................................ iii
Publications ................................................................................................................................................ iv
Table of Contents ...................................................................................................................................... vii
List of figures ............................................................................................................................................... xi
List of tables ............................................................................................................................................... xii
List of abbreviations ................................................................................................................................ xiv
CHAPTER 1: INTRODUCTION .................................................................................................................. 1
  1.1 Background to the Study ................................................................................................................. 1
  1.2 Research Aims, Questions, and Objectives .................................................................................... 5
    1.2.1 Research aims and questions ................................................................................................. 5
    1.2.2 Research objectives ................................................................................................................ 5
  1.3 Research Methodology .................................................................................................................... 6
  1.4 Contributions of the Study ............................................................................................................. 8
  1.5 Structure of the Thesis .................................................................................................................... 11
CHAPTER 2: LITERATURE REVIEW .................................................................................................. 14
  2.1 Introduction ...................................................................................................................................... 14
  2.2 The Evolution Process of E-government ....................................................................................... 14
    2.2.1 Definitions of e-government .................................................................................................... 14
    2.2.2 E-government evolution .......................................................................................................... 17
    2.2.3 E-government and Web 2.0 .................................................................................................... 22
    2.2.4 Government 2.0 ...................................................................................................................... 24
  2.3 Public Value ..................................................................................................................................... 27
  2.4 Gov 2.0 and Public Value Creation ............................................................................................... 35
    2.4.1 Gov 2.0 and public trust in government .................................................................................. 36
    2.4.2 Gov 2.0 and public service quality ......................................................................................... 39
    2.4.3 Gov 2.0 and social outcomes .................................................................................................. 41
  2.5 Public Value Evaluation .................................................................................................................... 42
  2.6 Chapter Summary .............................................................................................................................. 50
CHAPTER 3: THEORETICAL FRAMEWORK .................................................................................. 51
  3.1 Theoretical Background .................................................................................................................... 51
  3.2 Theoretical Framework .................................................................................................................... 53
    3.2.1 Development of public trust .................................................................................................... 55
    3.2.2 Quality of public services ........................................................................................................ 60
    3.2.3 Achievement of social outcomes ............................................................................................ 63
    3.2.4 Theoretical framework hypothesis ......................................................................................... 66
CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

4.2 Research Approaches
4.2.1 Philosophical perspectives
4.2.2 Research design

4.3 Research Strategy
4.3.1 Timing choice
4.3.2 Weighting choice
4.3.3 Mixing choice

4.4 Context of the Case
4.4.1 E-government development at the federal level
4.4.2 E-government development at state and local levels in Victoria
4.4.3 Current situation of Australian e-government maturity

4.5 Sample Selection

4.6 Implementation of Sequential Mixed methods

4.7 Data Analysis

4.8 Research Reliability

4.9 Research Validity

4.10 Ethical Considerations

4.11 Chapter Summary

CHAPTER 5: INTERVIEWS WITH ELECTED OFFICIALS AND ADMINISTRATORS (PHASE 1)

5.1 Introduction

5.2 Data Collection Procedures
5.2.1 Targeting potential interviewees
5.2.2 Designing interview questionnaire
5.2.3 Gaining access to interviewees
5.2.4 Conducting interviews

5.3 Data Analyses

5.4 Local Government Aims toward Public Value Creation
5.4.1 Motivations behind the implementation of Gov 2.0 initiatives
5.4.2 Strategies implemented
5.4.3 Evaluation methods in use

5.5 Local Government Views toward Examined Public Values

5.6 Discussion
5.6.1 Local government aim towards public value creation
5.6.2 Values in line with local government activities
5.6.2.1 Development of public trust in government
5.6.2.2 Improving the quality of public services
5.6.2.3 Achievement of social outcomes

5.7 Chapter Summary

CHAPTER 6: SURVEY QUESTIONNAIRE WITH CITIZENS (PHASE 2)
6.2 Survey Development Procedures .................................................................... 123
6.3 Data Collection ............................................................................................ 126
  6.3.1 Sample selection ..................................................................................... 126
  6.3.2 Sample size ............................................................................................. 126
  6.3.3 Survey respondents’ profile ..................................................................... 127
6.4 Data Analysis ................................................................................................ 129
  6.4.1 Data screening .......................................................................................... 129
  6.4.2 Assessment for normality ......................................................................... 130
  6.4.3 Reliability of the questionnaire ................................................................ 131
6.5 Measurement Model ...................................................................................... 132
  6.5.1 CFA of the full measurement model assessment of fit ............................. 135
  6.5.2 Analysis of one-factor congeneric measurement models ....................... 137
     6.5.2.1 Public trust construct congeneric analysis ...................................... 137
     6.5.2.2 Service quality construct congeneric analysis ................................ 142
     6.5.2.3 Social outcomes construct congeneric analysis ............................... 146
  6.5.3 Construct validity and reliability .............................................................. 148
  6.5.4 Final measurement for model validity ..................................................... 150
6.6 Phase 2 Findings of the Survey Questionnaire with End Users (Citizens) .... 152
6.7 Chapter Summary .......................................................................................... 153

CHAPTER 7: FINDINGS OF CITIZENS’ INTERVIEWS (PHASE 3) ...... 154

7.1 Introduction ................................................................................................... 154
7.2 Data Collection Procedures .......................................................................... 154
  7.2.1 Targeting potential interviewees .............................................................. 155
  7.2.2 Designing interview questionnaire .......................................................... 155
  7.2.3 Conducting interviews ............................................................................ 155
7.3 Data Analysis ................................................................................................ 157
7.4 Citizens’ Perceptions of Trust in Government .............................................. 158
  7.4.1 Responsiveness ....................................................................................... 160
  7.4.2 User democracy ...................................................................................... 161
  7.4.3 Citizens’ involvement .......................................................................... 162
  7.4.4 Self-development ................................................................................... 164
  7.4.5 Dialogue ................................................................................................. 165
  7.4.6 Listening to public opinion .................................................................... 167
  7.4.7 Openness ............................................................................................... 168
  7.4.8 Professionalism ..................................................................................... 169
  7.4.9 Honesty .................................................................................................. 169
  7.4.10 Integrity ............................................................................................... 170
  7.4.11 Accountability ...................................................................................... 170
7.5 Citizens’ Perceptions of Quality of Public Services ...................................... 171
  7.5.1 Adaptability ........................................................................................... 173
  7.5.2 Reliability .............................................................................................. 174
  7.5.3 Stability ................................................................................................ 175
  7.5.4 Timeliness ............................................................................................. 175
  7.5.5 Robustness ........................................................................................... 176
  7.5.6 Friendliness .......................................................................................... 176
  7.5.7 User orientation ..................................................................................... 177
7.6 Citizens’ Perceptions of Social Outcomes ................................................... 178
  7.6.1 Fairness ................................................................................................ 179
List of figures

Figure 1.1: Structure of the thesis ................................................................................................................................ 11
Figure 2.1: Components of e-government (Heeks, 2006b) ...................................................................................... 16
Figure 2.2: Evolutionary model for e-government (Layne and Lee (2001) ................................................................. 18
Figure 2.3: Different operational definition of Web 2.0 (adapted from Alam & Lucas, 2011) ................................. 23
Figure 2.4: Evolution of the utilisation of Web 2.0 in government (Anttiroiko, 2010) .............................................. 25
Figure 2.5: Strategic triangle (Moore, 1995) and public value main sources (Kelly, 2002) .............................. 30
Figure 2.6: e-Government Economics Project (eGEP) measurement framework (European Commission, 2006) ................................................................................................................................. 44
Figure 2.7: Framework for concepts and relational pathways for public value production (Grimsley & Meehan, 2007) ............................................................................................................................................. 45
Figure 2.8: Indicators for government portals assessment and their impact on public value (Golubeva, 2007) ..................................................................................................................................................... 46
Figure 2.9: Conceptual framework for evaluating public value of e-government (Karunasena & Deng, 2011) ...................................................................................................................................................... 47
Figure 3.1 Proposed theoretical framework for evaluating the public value of Gov 2.0 .................................................. 54
Figure 3.2 Evaluation of development of public trust in government through Gov 2.0 ........................................ 55
Figure 3.3: Evaluation of quality of public service delivered through Gov 2.0 ............................................................ 60
Figure 3.4: Evaluation of the achievement of social outcomes through Gov 2.0 ................................................... 63
Figure 3.5: Theoretical framework hypothesis for evaluating public value of Gov 2.0 ........................................... 67
Figure 4.1: Framework for research design (Creswell, 2009) .................................................................................... 71
Figure 4.2: Research methods and procedures ......................................................................................................... 76
Figure 4.3: Three aspects of Australian Government 2.0 (Government 2.0 Taskforce) ........................................ 82
Figure 4.4: Sequential multiphase mixed methods design ......................................................................................... 89
Figure 6.1: Initial measurement model ....................................................................................................................... 134
Figure 6.2: Initial one-factor congeneric measurement model for public trust ...................................................... 138
Figure 6.3: Re-specified one-factor congeneric measurement model of public trust ........................................... 142
Figure 6.4: Initial one-factor congeneric measurement model of service quality .................................................. 143
Figure 6.5: Re-specified one-factor congeneric measurement model of service quality .................................. 145
Figure 6.6: Initial one-factor congeneric measurement model of social outcomes ..................................................... 146
Figure 6.7: Re-specified one-factor congeneric measurement model of social outcomes .................................. 147
Figure 6.8: Final measurement model of public value of Government 2.0 ............................................................... 151
Figure 8.1: How public value is created in the Gov 2.0 environment ................................................................. 192
Figure 8.2: Revised framework for evaluating the public value of Gov 2.0 .............................................................. 209
List of tables

Table 2.1: Subcategories of e-government (Yildiz, 2007) ................................................................. 17
Table 2.2: Classifications of Web 2.0 applications (adapted from Anttiroiko, 2009) ......................... 21
Table 2.3: Differences between e-government and social media use in the public sector (Mergel, 2012) ................................................................................................................................. 26
Table 2.4: Paradigms of public sector management (Kelly, et al. 2002) ................................................ 29
Table 2.5: Category of public values (Jørgensen &Bozeman, 2007) ..................................................... 34
Table 3.1: A summary of the dimensions and indicators of the theoretical framework .................... 68
Table 5.1: Participants’ codes at each government level .................................................................... 96
Table 5.2: Participants’ codes, characteristics and roles .................................................................... 97
Table 5.3: Victorian local government motivations behind the implementation of Gov 2.0 initiatives ................................................................................................................................. 103
Table 5.4: Examples of local government officials and administrators’ views toward development of public trust .................................................................................................................. 111
Table 5.5: Examples of local government officials and administrators’ views toward quality of public services delivered ......................................................................................................... 112
Table 5.6: Examples of local government officials and administrators’ views toward achievements of social outcomes ........................................................................................................... 113
Table 5.7: Public values behind the implementation of Gov 2.0 initiatives ........................................ 116
Table 6.1: Survey questions linked to the values and areas investigated ............................................. 125
Table 6.2: Survey participants’ gender ................................................................................................ 128
Table 6.3: Survey participants’ age group .......................................................................................... 128
Table 6.4: Survey participants’ education level .................................................................................. 128
Table 6.5: Survey participants’ motivations behind their use of council websites ............................... 129
Table 6.6: Reliability of the Questionnaire ....................................................................................... 132
Table 6.7: Goodness-of-fit cut-off values ........................................................................................ 136
Table 6.8: The standardised factor loadings for the Public Trust ...................................................... 140
Table 6.9: Standardised residual among public trust construct observed variables ......................... 141
Table 6.10: The standardised factor loadings for the service quality ................................................ 144
Table 6.11: Standardised residual among service quality construct observed variables .................. 145
Table 6.12: The standardised factor loadings for the Social Outcome .............................................. 147
Table 6.13: Standardised residual among social outcomes construct observed variables ................ 148
Table 6.14: Initial and re-specified congeneric measurement models of GOF results ...................... 148
Table 6.15: Convergent validity test results of re-specified constructs ........................................... 149
Table 6.16: Discriminant validity ..................................................................................................... 150
Table 6.17: Regression coefficient results for the model hypotheses ............................................ 152
Table 7.1: Interviewees’ demographic ............................................................................................. 156
Table 8.1: Gov 2.0 public values

Table 8.2: Summary of the creation of public values related to public trust in government through Gov 2.0

Table 8.3: Summary of the creation of public values related to quality of public services through Gov 2.0

Table 8.4: Summary of the creation of public values related to social outcomes through Gov 2.0
List of abbreviations

ABS: Australian Bureau of Statistics
AGFI: Adjusted Goodness-of-Fit Index
AGIMO: Australian Government Information Management Office
AMOS: Analysis of Moment Structures
ASDO: Achievement of Socially Desirable Outcomes
CFA: Confirmatory Factor Analysis
CFI: Comparative Fit Index
CR: Critical Ratio
Df: Degree of Freedom
DOPCD: Department of Planning and Community Development
EFA: Exploratory Factor Analysis
GFI: Goodness-of-Fit Index
GOF: Goodness-of-Fit
Gov 2.0: Government 2.0
IBM: International Business Machines
ICT: Information and Communication Technology
IS: Information Systems
KMO: Kaiser-Meyer-Olkin
K-S: Kolmogorov-Smirnov
MI: Modification Indices
ML: Maximum Likelihood
MMV: Multimedia Victoria
NBN: National Broadband Network
NFI: Normed Fit Index
NPM: New Public Management
NPV: Net Present Value
OECD: Organisation for Economic Co-operation and Development
P: Probability value
PGFI: Parsimony Goodness-of-Fit
PNFI: Parsimony Normed Fit Index
PR: Parsimony Ration
PSI: Public Sector Information
QUAL: Qualitative
QUAN: Quantitative
RMSEA: Root Mean Square Error of Approximation
RMSR: Root Mean Square Residual
RNI: Relative Non-centrality Index
RQ: Research Question
RSS: Really Simple Syndication
SE: Standard Error
SEM: Structural Equation Modelling
SFL: Standardised Factor Loadings
SNS: Social Network Sites
SPSS: Statistical Package for Social Sciences
SR: Standardised Residual
SRMR: Standardised Root Mean Residual
SRW: Standardised Regression Weights
SUHREC: Swinburne University Higher Research Education Committee
TLI: Tucker-Lewis Index
UGC: User-Generated Content
URW: Un-standardised Regression Weight
$\chi^2/\text{Df}$: Normed chi-square or the ratio of $\chi^2$ to degree of freedom
$\chi^2$: Chi-square
Chapter 1: Introduction

1.1 BACKGROUND TO THE STUDY

Creating public value is becoming the primary goal of e-government using Web 2.0 technologies (United Nations, 2014). Web 2.0 and its social media tools are thus being extensively adopted by the public sector around the globe (Noveck, 2009). Social media tools build on Web 2.0 technology applications and are considered to be the next generation of official government websites (Bonsón et al., 2012). The main advantage of Web 2.0 use for the public sector lies in its capabilities for collaboration, participation, and empowerment of citizens to take part in governance (Bertot et al., 2010a). Such tools offer governments significant means by which to engage communities and make services more efficient (Jayakanthan, 2011). They also allow for and encourage governments to value civil society as a legitimate partner for change (Williamson, 2011). Public organisations refer to the use of Web 2.0 technologies as ‘Government 2.0’ (Gov 2.0 hereafter) (Anttiroiko, 2010; Williams, 2010). The United Nations (2003) stressed that regardless of the motivation behind e-government adoption or how it is defined, the eventual objective of e-government is to create public value for citizens. This new era of government ‘Gov 2.0’ is associated with the values of openness, transparency and collaboration, along with the concept that the voices of many are smarter than the voice of one (Sadeghi et al., 2012). Moreover, online interaction using Web 2.0 platforms fosters the creation of public value through public services and legislation (Misuraca, 2012). In its recent 2014 report the UN identified that creating public value is becoming the primary goal of e-government using Web 2.0 technologies (United Nations, 2014). However, the empirical research on governments’ public value creation is immature (Meynhardt & Bartholomes, 2011).

The developmental level of e-government in Australia was the main motivator to conduct this research study within the Australian context. The UN survey e-government 2012 report ‘E-Government for the People’ shows that Australia continued to be a leader in the Oceania region and is considered one of the global leaders in e-government development, ranked 12th in the E-Government Development Index. Australia is leading those countries that concentrate on multichannel service delivery including
Bahrain, Canada, Denmark, France, the Netherlands, Qatar, the Republic of Korea, etc. (United Nations, 2012). The recent UN e-government survey report ‘E-Government for the Future We Want’ shows that Australia has moved from 12th ranking to second position in the global E-Government Development Index (United Nations, 2014). Thus, Australia is considered to be a good environment to conduct such research.

Local governments are the closest tier of government to citizens, and thereby constitute the level of government that directly interacts and serves citizens. Local governments need to be in the same space as citizens in order to inform, serve, and interact with them (Scott, 2006). The use of social media platforms by 62% of Australian citizens (Sensis, 2011) puts pressure on Australian local governments to be on these platforms as well. Approximately half of Australians (47%) are using social media platforms to communicate and interact with different government tiers (AGIMO, 2012). Furthermore, the Australian Government Information Management Office (AGIMO) reports a significant increase in Australians’ use of government online services (AGIMO, 2012). Howard (2011) argues that governments should have already moved past the honeymoon phase with social networking platforms, and should now be asked to deliver and create value using social media.

Local governments need to develop measures of the outcomes from citizen engagement approaches (Svara & Denhardt, 2010). While the overall tendency of Web 2.0 and its social networks in Australia and worldwide have increased, little is known about the value of these new technology platforms at local government level. The increased implementation and use of Gov 2.0 initiatives require that government administrators gain external and objective feedback on their e-government efforts (Huang, 2007). External feedback can help them have a better understanding of the benefits and return on their investments. Wimmer et al. (2008), for example, argue that “a clear understanding of the value of e-government, and value for whom, is needed” (p. 6). In the age of social media, Wigand (2012, p. 13) calls for further research to identify the “metrics [that] can be used to assess the effectiveness of social media”. One method of evaluation that takes the citizens’ perspective and enables a holistic assessment is that of public value.
The Public Value concept was first articulated by Mark Moore from Harvard's Kennedy School of Government as a new way of thinking about public management that could assist public managers. Moore (1995) describes public value as the value that the government generates for its people. Moore suggests that public managers should focus on creating public value. Moore argues that public managers should satisfy individual and collective desires instead of basing their work on traditional New Public Management (NPM) strategy, considered best practice in the 1980s and 1990s. Furthermore, Moore (1995) questions NPM’s quantitative measures, arguing they often fail to address the fundamental, intangible issues of public service quality. The concept of Public Value is gaining considerable attention from many academics and experts (O’Flynn, 2007; Raus et al., 2010). Moore’s public value management model demonstrates a new way of thinking which moves away from NPM era approaches that focused on quantitative, measurable outputs (Hefetz & Warner, 2004).

A considerable number of tools have been developed to help the public sector evaluate their efforts in implementing e-government initiatives using the public value approach. For example, the AGIMO (2004) developed a method for Australian public sector agencies to assess the demand for and value of e-government initiatives. Kearns (2004) provided a set of key criteria arguing that the success of e-government initiatives from a public value perspective should be evaluated based on the proposed set of key criteria. The European Commission (2006) proposed a measurement framework constructed upon the three value drivers of efficiency, democracy, and effectiveness and detailed multidimensional evaluation tools of e-government public value. Grimsley and Meehan (2007) developed a framework for evaluation of e-government projects based upon Moor’s concept of Public Value. Karunasena and Deng (2009, 2010, 2011) proposed, developed, and revised a framework for evaluating the public value of e-government in Sri Lanka from the citizens’ perspective.

These studies have provided very important measures and tools in evaluating the public value of e-government. However, none of these tools have been developed to evaluate the public value of Gov 2.0 whereby social media tools are implemented and used by government to interact and serve their constituents. Furthermore, they are not assessing public value at the local government level.
In this context, this study aims to investigate the public value of Gov 2.0 in Victorian local government in Australia. The contribution of this research is clarifying the public value of Gov 2.0 through a) identifying critical public values, b) developing a framework for evaluation, c) understanding government aims toward public value creation, d) understanding how residents perceive the public value gained from their use of Gov 2.0 services, and e) providing local government with recommendations for increasing the value of Gov 2.0 initiatives.

Research questions have been formulated to address the research aim. In order to answer the research questions, a theoretical framework has been developed by hypothesising critical public values for evaluating the literature on public value of Gov 2.0. Three phases of research have been conducted using a sequential multiphase mixed methods approach. The first phase qualitatively investigated local government aims toward public value creation. The second phase used Structural Equation Modelling (SEM) to test and validate the theoretical framework using survey data collected from four Victorian local governments. To fully understand the public value of Gov 2.0, the findings of the quantitative phase are further explored using thematic analysis on the interview data collected from the citizens who use Gov 2.0 services (Phase 3). The findings of the three phases were triangulated to further validate the research findings and gain in-depth understanding of the public value of Gov 2.0 in Victorian local government. The use of a multiphase mixed methods approach in this study allows for the results from one method to help develop and inform another (Greene et al., 1989; Creswell, 2009). Thus the study can gain richer and more reliable research results by using this approach (Mingers, 2001; Creswell, 2009).

The remainder of this chapter is structured as follows: the next section (1.2) presents the research aims, questions, and objectives. The subsequent section (1.3), describes the research methodology used to answer the research questions. The contribution to both theory and practice is then presented (1.4). The final section (1.5) outlines the structure of the thesis.
1.2 RESEARCH AIMS, QUESTIONS, AND OBJECTIVES

1.2.1 Research aims and questions

The aim of this research is to investigate and assess the public value of Gov 2.0 initiatives in the Victorian local government context. To fulfil the research aim, the key Research Question (RQ) has been formulated:

RQ: How do Gov 2.0 initiatives contribute towards public value creation?

To facilitate answering the main research question comprehensively, sub-research questions have been formulated as follows:

a) What aims do government officials have in implementing Gov 2.0 initiatives to create public value?

b) What public values do citizens perceive from using Gov 2.0 initiatives?

c) How do citizens perceive public values from their use of Gov 2.0 initiatives?

1.2.2 Research objectives

The conception of Public Value is very important for public sector administration (Jørgensen & Bozeman, 2007). Enhancing public trust in government, improving public services, and achieving social outcomes have been identified as potential and significant areas to create public value that can be truly perceived by citizens (Kelly et al., 2002; Kearns, 2004). Gov 2.0 initiatives have been considered a good means to enhance public trust in government (Grabner-Kräuter, 2009; Bertot et al., 2010b; Theunissen & Wan Noordin, 2012), improve public services (Misuraca, 2012), and achieve outcomes (Fyfe & Crookall, 2012). Consequently, it is important to incorporate Gov 2.0 initiatives in a detailed examination of how these initiatives contribute towards public value creation in Victoria.

Both the use of public value as an assessment tool for evaluating government performance and the use of Gov 2.0 initiatives in the public sector are relatively new. For these reasons, it can be suggested that clarifying the relationships involving Gov 2.0 and public value creation is necessary. Web 2.0 offers an innovative and sophisticated means for government-citizen communication and interaction, as reflected by the growth and development of a new stream of Web 2.0 and social media research. Likewise, information systems researchers are challenged to research the effects of
using Web-based technologies for citizens. However, despite the fact that understanding within this area has grown, the theoretical platform relating to the assessment of Gov 2.0 initiatives from the public value point of view has not received much attention. Hence, additional scientific research is needed to fill the research gaps associated with public value, particularly for Gov 2.0. Thus, the research objectives to achieve the research aim stated above are to:

a) Identify the critical values for evaluating the public value of Gov 2.0 at local government level

b) Develop a theoretical framework for evaluating the public value of Gov 2.0 initiatives based on the literature, government and citizens’ perspectives

c) Provide policy recommendations particularly those to Victorian local government.

As a result, this thesis will contribute to Gov 2.0 by proposing a method that can be used to examine the perceptions of public value. Essentially assessment tools are vital for researchers to examine the relationships between government initiatives and citizen's perceptions of value or even the impact of Gov 2.0 on society as a whole.

1.3 RESEARCH METHODOLOGY

Leedy and Ormrod (2005, p. 4) defined research as “the systematic process of collecting and analysing information (data) in order to increase our understanding of the phenomenon about which we are concerned or interested”. The ultimate aim of research is to advance knowledge in a chosen subject area (Remenyi & Williams, 1996). Thus in order to develop coherent research within the exploratory nature of this study, this research uses a multiphase mixed methods approach utilising the exploratory sequential strategy.

Mixed methods research is characterised as a study that comprises components of both qualitative and quantitative approaches (Reichardt & Cook, 1979; Miles & Huberman, 1984; Howe, 1988; Brewer & Hunter, 1989; Creswell, 2009). The mixed methods approach allows results from one method to help develop or inform another (Greene et al., 1989; Creswell, 2009). The study can gain richer and more reliable research results by using this approach (Mingers, 2001; Creswell, 2009).
To gain in-depth understanding on how Gov 2.0 initiatives contribute towards public value creation from a citizen’s perspective, this study is conducted in a multiphase sequential exploratory design suggested by Creswell (2009) in the following manner:

a) Initially, the researcher evaluated the maturity of all Victorian local government websites to understand each council’s maturity and implementation level of Gov 2.0 initiatives to select the most appropriate local governments for data collection.

b) The first phase uses semi-structured interviews with four selected local governments. Elected officials and administrators were interviewed to understand government aims toward public value creation.

c) The second phase uses survey questionnaires with end users (citizens) to identify public values perceived by citizens from their use of Gov 2.0 initiatives, and to understand the relationship between these values and the main components of public value creation (trust, service quality, and social outcomes).

d) The third phase uses semi-structured interviews with citizens. The purpose of the interviews is to gain an in-depth understanding of their experience and the value they perceived from using Gov 2.0 services.

The sequential exploratory strategy adopted in this research was appropriate, as both areas (public value and Gov 2.0) are relatively new, and the data that could emerge from the initial stages could not be predicted. The sequential exploratory design helped to use the results gained from each phase to inform the next phase, and also helped the researcher to handle some unexpected results as they emerged.
1.4 CONTRIBUTIONS OF THE STUDY

This study contributed to the fields of Information Systems (IS) and public administration research from both theoretical and practical perspectives as follows.

A) Theory

- This study validates the use of the concept of Public Value to assess the contribution of Gov 2.0 initiatives towards public value creation by developing an investigative framework. The developed framework addresses the main shortcomings of previous frameworks, as none of them were developed to evaluate the public value of Gov 2.0, and the interpretation of public values used may not reflect the Gov 2.0 environment.

- This study contributes to IS research by developing an investigative framework for assessing the public value of Gov 2.0 initiatives. The framework is developed using the areas of public value as outlined by Moore (1995), Kelly et al. (2002), Kearns (2004), and the public values inventory by Jørgensen and Bozeman (2007).

- The study has identified the ways that Victorian citizens perceive each of the public values approved in this study. These identified ways established a base of values that can be used as indicators to evaluate citizens' perceptions of public values through Gov 2.0 initiatives.

- A further contribution is the developed framework, a first in evaluating the public value of Gov 2.0 from the citizen’s perspective at local government level. The framework can be useful for assessing the public value of Gov 2.0 initiatives in all local governments and agencies around Australia, and other developed countries where the same Gov 2.0 initiatives are implemented.

B) Practice

Although this study was carried out in Victorian local government, the findings are not restricted to Victoria alone.

- The study assessment will enable local governments to discover what they have achieved from their implementation and use of new technologies.
• This study’s revised framework has identified the public values and associated indicators associated. This will provide Victorian local government with a public value compass that can be utilised for decision making and to focus council efforts to achieve these values.

• The study identifies the ways that Victorian citizens perceive each of the public values approved. Such a level of detail can significantly facilitate the way staff and elected officials of Victorian local government interact and serve their citizens on Gov 2.0 platforms.

• The study determined dominant values that local governments can target in order to facilitate creating other values.

• The study captures the way citizens perceive the value from their interactions with their local government on Gov 2.0 platforms. These findings provide local government with a clearer picture of what their citizens think about many aspects involved in the interactions taking place on these platforms. Understanding how citizens think and behave helps governments steer interactions more effectively to create public value among citizens.

• The study provides Victorian local government with a tool to evaluate the government efficacy using the framework indicators to assess the citizens’ perspective.

• These research results also could be very helpful for Victorian local government to justify investments in Gov 2.0 initiatives to higher levels of government (i.e. state or federal governments). These findings would also help Victorian local government to attract more support for future Gov 2.0 implementation or for recruiting more staff to manage and implement more platforms.

• To sum up, the study findings assist Victorian local government to develop Gov 2.0 strategies by:
  o setting the aims for implementing Gov 2.0 initiatives;
  o identifying the objectives of implementing Gov 2.0 initiatives;
  o clarifying how to achieve these objectives and aims;
  o identifying local government officials who need to be involved and how;
o evaluating the impact of local government Gov 2.0 initiatives; and
o justifying the resources needed to support Gov 2.0 initiatives with constrained budgets.
1.5 STRUCTURE OF THE THESIS

This thesis contains nine chapters (see figure 1.1) following the writing structure suggested by (Creswell & Plano Clark, 2011) for mixed methods research.

Figure 1.1: Structure of the thesis
Chapter One is the introductory chapter of the thesis introducing the background to the study, research aims and questions, research methodology, contributions to the study, definition of key terms, relevant publications, and structure of the thesis.

Chapter Two examines the literature on the emergence of Gov 2.0 with a focus on social aspects of these new technologies. The chapter explores the concept of Public Value and how Gov 2.0 can contribute to its creation. This chapter also discusses existing frameworks developed for assessing public value of e-government, their strengths and limitations, and the need for developing a new theoretical framework for assessing the public value of Gov 2.0 initiatives in Victoria, Australia.

Chapter Three develops and presents a theoretical framework for assessing the public value of Gov 2.0 in Victoria, as well as the study hypotheses.

Chapter Four focuses on the methodology employed for this study. It begins with illustrating the context of the research, followed by discussion of the research philosophical perspectives employed, with an emphasis on the sequential multiphase mixed methods approach underpinning this research. Details are then provided on the research design and procedures including a description of the mixed methods strategy implemented in this study. The chapter also presents the sampling selection process, research reliability, validity, and ethical considerations.

Chapter Five describes the analysis of first phase interviews with government elected officials and administrators, including a description of the data collection and analysis procedures. This is followed by a detailed discussion of findings from in-depth interviews on government aims toward public value creation and values targeted by Victorian local government activity.

Chapter Six presents the second phase survey with end users (citizens) data analysis. Survey development and data collection procedures are described including sampling selection, sample size, and respondents’ profiles. The chapter discusses the procedures undertaken to prepare the data for structural equation modelling (SEM) analysis, and it begins by describing how the data was screened, assessed for normality, and the reliability of the questionnaire to perform confirmatory factor analysis (CFA).

Chapter Seven describes the analysis of third phase interviews with citizens, including a description of the data collection and analysis procedures, followed by a detailed discussion of findings from in-depth interviews. The focus of this chapter is on how
citizens perceive public values related to the main public value areas (public trust in government, quality of public services delivered, and social outcomes).

**Chapter Eight** integrates results from the three phases of the study, and presents a comprehensive discussion of the role of Gov 2.0 in public value creation. The chapter revises the initial framework for evaluating the public value of Gov 2.0 in Victoria. The chapter concludes with a number of specific recommendations to Victorian local government on how to maximise public value creation through the implementation and use of Gov 2.0 initiatives.

**Chapter Nine** concludes the thesis, reflects on the research questions and the creation of public value in the Gov 2.0 environment at local Victorian government level. Research contributions for both theory and practice are also addressed. The chapter concludes with a reflection on the research strengths and limitations, addressing research objectives, directions for future research, and final concluding remarks.
Chapter 2: Literature Review

2.1 INTRODUCTION

The purpose of this chapter is to discuss the background against which this research project is set. The evolution process of e-government is discussed first, in order to clarify the emergence of Government 2.0 (Gov 2.0). This section begins with a review of the concept of e-government as an evolutionary process, and how e-government can be perceived and approached. The development of Web 2.0 technologies and their increased use by governments are highlighted along with the social aspect of these new technologies are discussed in the next section (2.2). The following section (2.3) reviews the concept of Public Value and how it can be created and developed. The next section (2.4) identifies the potential ways that the use of Gov 2.0 initiatives can contribute to public values creation. These potential values will be reviewed and discussed under the three main areas of public value creation identified by Kelly et al. (2002): public trust in government, quality public services, and social outcomes. The next section (2.5) discusses how public value approaches have become a new tool to evaluate the level of public sector e-services. A number of frameworks developed to evaluate the public value of e-government (e.g. AGIMO 2004; Kearns 2004; European Commission 2006; Grimsley & Meehan 2007; Karunasena & Deng 2011) will be extensively reviewed. This section also identifies key limitations of these frameworks that make them insufficient to evaluate the public value of Gov 2.0 where social media tools are employed in government service delivery activity and interaction with citizens (Omar et al., 2013). This is followed by the chapter summary.

2.2 THE EVOLUTION PROCESS OF E-GOVERNMENT

2.2.1 Definitions of e-government

The term ‘e-government’ was introduced by a joint report ‘Access America: Reengineering through Information Technology’ of the National Performance Review and the Government Information Technology Services Board in 1997 (Relyea, 2002). Brown and Brudney (2001, p. 1) define e-government as “the use of technology,
especially Web-based applications to enhance access to and efficiently deliver government information and services”. In the early years of electronic government the emphasis was on “the use of information and communication technologies and particularly the Internet, as a tool to achieve better government” (OECD, 2003, p. 1). Governments adopted e-government to enhance their service provision and boost the efficiency of public management as a support for many functions and services such as: information and service delivery (Bekkers & Zouridis, 1999), efficiency and effectiveness (Heeks, 2001), interactivity (DiCaterino & Pardo, 1996; Wong & Welch, 2004), decentralisation, transparency (La Porte et al., 2002; Wong & Welch, 2004), and accountability (Ghere & Young, 1998; Heeks, 1998; McGregor, 2001).

Yildiz (2007) suggests that it is possible to approach e-government in different ways based on one's focus. The concept of e-government can be perceived and approached from any of its components including e-administration, e-citizens, e-services, and e-societies (Heeks, 1999, 2001, 2002; Prattipati, 2003; Heeks, 2006a; Jones et al., 2007). The components of e-government are outlined in figure 2.1. E-administration deals mainly with improving work within the public sector including: a) cutting financial costs and/or time costs, b) planning, monitoring and controlling the performance of process resources, c) connecting government arms, agencies, levels and data stores, and d) transferring power, authority and resources for processes from their existing locations to new locations (Heeks, 2002).

An e-citizen’s approach to e-government is about how government connects and interacts with citizens by consulting with and engaging them for improving public services, listening to their opinions to support user’s democracy, and government accountability (Heeks, 1999, 2006b; Jones et al., 2007). An e-services approach is when governments focus on improving the delivery and quality of public services to citizens by providing them with online services (Jones et al., 2007). An e-society perspective is generally about building relationships between public organisations and other organisations including public and private organisations, not-for-profit organisations, and community organisations (Heeks, 2002, 2006b; Jones et al., 2007).
E-government can also be approached based on the interaction perspective. There are many types of e-government interactions; for instance, Brown and Brudney (2001) classified e-government into three wide classifications including Government-to-Government (G2G), Government-to-Citizen (G2C), and Government-to-Business (G2B). When interaction among citizens is related to one of the above three categories, two additional categories can be included: Government-to-Civil Societal Organisations (G2CS) and Citizen-to-Citizen (C2C) (Brown & Brudney, 2001) as detailed in table 2.1. This interaction classification is widely supported in the e-government literature (see for example Tan et al., 2005; Evans & Yen, 2006; Gupta et al., 2008; Wang & Liao, 2008).

The Government-to-Government (G2G) category is an interaction within government agencies and levels or with other governments, mainly to increase the efficiency of transactions (Evans & Yen, 2006; Ray et al., 2011). Government-to-Citizen (G2C) interaction is the service delivery activity by the government, concentrating on the ability of both government and citizens to communicate with each other online (Evans & Yen, 2006).
Table 2.1: Subcategories of e-government (Yildiz, 2007)

<table>
<thead>
<tr>
<th>Parties of communication</th>
<th>Content</th>
<th>Dominant characteristics</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government-to-Government (G2G)</td>
<td>Government information and services</td>
<td>Communication, coordination, standardization of information and services</td>
<td>E-administration</td>
<td>Establishing and using a common data warehouse</td>
</tr>
<tr>
<td>Government-to-Citizen (G2C)</td>
<td>Communication, transparency, accountability, effectiveness, efficiency, standardization of information and services</td>
<td>E-government</td>
<td>Government organization Web Sites, e-mail communication between the citizens and government officials</td>
<td></td>
</tr>
<tr>
<td>Government-to-Civil Society Organizations (G2SC)</td>
<td>Communication, coordination, transparency, accountability</td>
<td>E-governance</td>
<td>Electronic communication and coordination efforts after a disaster</td>
<td></td>
</tr>
<tr>
<td>Citizen-to-Citizen (C2C)</td>
<td>Communication, coordination, transparency, accountability, grassroots organization</td>
<td>E-governance</td>
<td>Electronic discussion groups on civic issues</td>
<td></td>
</tr>
</tbody>
</table>

The Government-to-Business (G2B) classification focuses on conducting business in a more cost-effective way and obtaining data to analyse and support decision making (Evans & Yen, 2006; Esteves & Joseph, 2008). The Government-to-Civil Societal (G2CS) focuses on developing civil society and improve the quality of citizens’ lives through enabling the development of a knowledge-based society (Heeks, 2006a; Yildiz, 2007; Esteves & Joseph, 2008). The Citizen-to-Citizen (C2C) category concerns the interaction between citizens using technology. Beynon-Davies et al. (2004) argue that C2C will be a fundamental part of future governance, especially the links with other areas of government functions such as accountability and the policy making process.

2.2.2 E-government evolution

Characteristically, there are many types of activities that can take place within each of the interactive areas described above. Generally, scholars have characterised e-government development as an evolutionary process (Layne & Lee, 2001; Moon, 2002; Gupta & Jana, 2003; Akman et al., 2005; Affisco & Soliman, 2006; Gil-Garcia &
Pardo, 2006; Esteves & Joseph, 2008). This evolutionary development encompasses a number of stages (as shown in figure 2.2) that includes the following:

a) *Initial presence stage* – exists with the employment of the internet by the government to publish information through few individual pages (Layne & Lee, 2001; Reddick, 2004; Gil-Garcia & Pardo, 2006; Beynon-Davies, 2007).

b) *Extended presence* – in this stage government has many websites to deliver more dynamic, focused information that is regularly updated (Gil-Garcia & Pardo, 2006).

c) *Interactive presence* – in this stage government increases the interaction between citizens and businesses and diverse public organisations by implementing a statewide or national portal as the primary page to access services (e.g. e-mails, forums, etc.) in several public organisations (Hiller & Belanger, 2001; United Nations & American Society for Public Administration, 2002).

d) *Transactional presence* – in this stage the state wide or national portals can be personalised by users. Users’ needs are the essential criteria for portal design and access (United Nations & American Society for Public Administration, 2002) enabling secure transactions and payments (e.g. tax, fines, and services payments) (Layne & Lee, 2001).
e) **Vertical integration** – in this stage services provided by diverse levels of government are combined (Layne & Lee, 2001) virtually, physically, or both (Gil-Garcia & Pardo, 2006).

f) **Horizontal integration** – horizontal integration stage takes place between diverse government sectors at the same government level (local, state, or national) but offer different services to provide citizens with one-stop service (Layne & Lee, 2001; Reddick, 2004).

g) **Totally integrated presence** – this stage refers to a situation where services are completely integrated (vertically and horizontally) (Hiller & Belanger, 2001; United Nations & American Society for Public Administration, 2002). Governments carry out institutional and administrative reforms that enable the potential of ICTs (Grönlund, 2001) where citizens can access all government services from one web page using a unique ID and password (Gil-Garcia & Pardo, 2006).

Following the growth of the Internet in the 1990s, recent types of online communities, social networking and user content sharing began to affect the utilisation of the Internet in the 2000s. These types of innovative communication are referred to as Web 2.0, a notion which was introduced by professionals who aspired to help redesign innovative developments of the World Wide Web (Breindl & Francq, 2008). Most literature dates the term Web 2.0 to 2005 and Tim O’Reilly (Sanders, 2008). Till the mid-2000s Internet users were considered to be rather passive (the read-only Web, also known as Web 1.0) when Web 2.0 emerged and highlighted the interactivity of the Internet, which is all about user networks, user-generated content, and related hosted services (Anderson, 2012). O'Reilly (2005) defined Web 2.0 as:

> The network as platform, spanning all connected devices; Web 2.0 applications are those that make the most of the intrinsic advantages of that platform: delivering software as a continually-updated service that gets better the more people use it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an "architecture of participation," and going beyond the page metaphor of Web 1.0 to deliver rich user experiences.
Web 2.0 is affiliated with content sharing, supporting many forms but particularly sharing written content, such as diaries, opinions, stories etc. or media content, such as photos, music, videos, games or webcam, or a combination of such content. Technologically, these functions and characteristics of the social networks phenomenon are referred to as Web 2.0 technologies, social computing or social media (Anttiroiko, 2010). The term ‘social networking’ has recently been adopted and has replaced the older generation of online community clusters such as online community, virtual community or a few comparable concepts that belong to the earlier type of social networking (Anttiroiko, 2010).

Social Network Sites (SNS) mainly supported by Web based network services, provide particular social network users with many different ways to develop their profile pages, and get connected to other users (Boyd & Ellison, 2007). SNS also enables focused interactions with people and groups rather than broadcast information, (which mainly featured Web 1.0) resulting in building relationships between users. Users are able to share media (photos, videos, etc.) post feedback and reviews about products or services, engage in dialogue with others, and tagging (Dalsgaard & Sorenson, 2008). The combined term is ‘user-generated content’ (UGC) (Anderson, 2012).

UGC allow users not only to consume content materials, but to share peer-to-peer files, as well as create content. Users share (online) messages, locations, social bookmarks, content, images, videos, as well as (online) friends. These types of actions, together with high speed Internet networks, offer several opportunities to design new and modern services. Anttiroiko (2009) classified Web 2.0 applications based on their social aspect and features as shown in table 2.2.
Table 2.2: Classifications of Web 2.0 applications (adapted from Anttiroiko, 2009)

<table>
<thead>
<tr>
<th>Application’s type</th>
<th>Features and functionalities</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social networking</td>
<td>profile-based hosted services that allow people to create and maintain networks of friends and contacts based on general social interests</td>
<td>MySpace, Facebook, Bebo, Friendster, hi5, Tagged, Ning, Okut, Netlog, PerSpot, etc.</td>
</tr>
<tr>
<td>Special interest networks (SINSs)</td>
<td>varieties of interest communities and networks in the Web</td>
<td>43 Things, Hobere, Minit, WetCanvas, WAAYN, MyTrip, Dogster, etc. professional networks LinkedIn, Xing, Visible, Path, etc. lifestyle and consumerist social networks: Stylehive, Zebo, ALL. Consuming, etc. activism and political movements: GoodTree, Care2, MySociety.org, etc. confessional communities: e.g., MyChurch.</td>
</tr>
<tr>
<td>Media communities and content-based SINSs</td>
<td>producing, storing and sharing videos, webcam views, photos, music and other content materials</td>
<td>YouTube, DailyMotion, EarthCam, Flickr, Slide.com, imren, Last.fm, WordPress, etc.</td>
</tr>
<tr>
<td>Blogging</td>
<td>sharing experiences and views using blogs and e-diaries</td>
<td>LiveJournal, Multiply, Blogger, WordPress, e-diary uki.com, etc.</td>
</tr>
<tr>
<td>Reference works</td>
<td>collecting and sharing generic or thematic knowledge on a peer-to-peer basis in online forums</td>
<td>e.g., Wikipedia and other wiki applications</td>
</tr>
<tr>
<td>Sharing opinions, reviews and news</td>
<td>sharing experiential knowledge, opinions, evaluations and news released on a peer-to-peer basis using opinion, review and rating sites</td>
<td>Epinions.com, PublicOpinion, etc. news 2.0 sites: Fark, reddit, Gabhr, Wikio, etc. alert features and RSS feeds: e.g., Sabinoo combines IM with RSS social bookmarking: Delicious, short messaging: Twitter sharing knowledge and evaluations through user-centric market places and networks: eBay, book reviews in Amazon.com, user evaluations in travel web sites etc.</td>
</tr>
<tr>
<td>Collective intelligence</td>
<td>WWW sites or applications which combine content from different sources, synthesizes such content and utilizes new presentation tools in presenting them to the public, including such applications as mashups</td>
<td>e.g., Diigo, location-based applications: e.g., EveryBlock knowledge networks and follow-up sites: e.g., Public Whip, which watches MP’s voting patterns in the UK, or TheyWorkForYou.com, a site which follows the actions of British politicians</td>
</tr>
<tr>
<td>Communication services</td>
<td>global multifunction portals with communication tools</td>
<td>MSN, Google, Yahoo, AOL, etc., and tools for real-time communication: instant messaging: IM, Voice over IP (VoIP), Internet Relay Chat (IRC) and other tools with a range of supporting SNS functionalities (MSN, Yahoo, Google, ICQ, AIM, Identity, Skype etc.).</td>
</tr>
</tbody>
</table>

Recently, with the development of Web 2.0 technologies and its increased use by government, both government and researchers have realised that e-government is about more than improving government efficiency. E-government can improve the relationship between government and its citizens and strengthen civil society as a whole. Thus, e-government has been redefined as “the use by government agencies of information technologies that have the ability to transform relations with citizens,
businesses, and other arms of government” (World Bank, 2005, ph. 2) and the focus of government has shifted from the use of ICTs as service provision tools to increasing the value of services and achieving better government (United Nations, 2008). This shift has been motivated by many factors. For instance, the way people communicate has been redefined by Web 2.0 applications, which transform the Web into a participation and co-production platform. Yet, regardless of the motivation behind e-government adoption or how it is defined, the eventual objective of e-government is to create public value for citizens (United Nations, 2003).

2.2.3 E-government and Web 2.0

The diversity of platforms and applications of ICTs allow governments to deliver and manage a variety of different services (United Nations, 2005). The use of Web 2.0 technologies by the public sector, for example, can bring both governments and citizens various benefits including enhancing the efficiency and responsiveness at all government levels and in departments (Landsbergen Jr & Wolken Jr, 2001; Edmiston, 2003; Gauld et al., 2009); improving the quality of government service delivery (Irani et al., 2005; Shim & Eom, 2008); increasing citizens’ participation in the political process (Heeks, 2001; Tung & Rieck, 2005; Sharifi & Manian, 2010); strengthening the openness of government functions by raising citizens’ awareness of public sector decision making (West, 2004; Bertot et al., 2010b); and enhancing citizens’ knowledge, learning, and knowledge sharing (Evans & Yen, 2006; Gupta et al., 2008).

The significance of the implementation of Web 2.0 technologies has been recognised by many governments around the globe (Shackleton et al., 2006). However, the huge potential of Web 2.0 technologies motivated many governments to identify the use of such technologies and platforms, especially the use of social media tools as a high priority area in modern public management policy (Dunleavy et al., 2008). Web 2.0 has changed the means by which people communicate with each other by allowing two-way interactions amongst people and between individuals and organisations. Additionally, the use of Web 2.0 technologies can overcome geographical and time issues. The unique role of users, user-generated content, and user networks are among the important attributes of Web 2.0 where the user becomes an active participant rather than being simply a consumer and become the creator of content (Allen, 2008; Bruns, 2008).
Anttiroiko (2010, p. 19) refers to Web 2.0 as “the second generation of Web-based communities, networks and hosted services, which facilitates interaction between users”. As such Web 2.0 does not refer to technology but rather it refers to the societal side of the phenomena. Anttiroiko’s (2010) conception of Web 2.0 draws on the collaborative practices and visions of the Internet, highlighting its social aspect which draws governments to this technology.

Because of its wider range of impact (technologically, socially, etc.), Web 2.0 has been defined in many different ways (Alam & Lucas, 2011). Based on the different operational definitions of Web 2.0, Alam and Lucas (2011) identified two groups of values associated with Web 2.0 use in the public sector from a communication perspective including Gov 2.0 values and social values (as illustrated in figure 2.3).

![Figure 2.3: Different operational definition of Web 2.0 (adapted from Alam & Lucas, 2011)](image)

Generally, the social effects of Web 2.0 tend to be viewed as a key contribution. Scholars and government officials consider Web 2.0 as an essential democratising tool to enhance government effectiveness and efficiency, and also as an important factor in
governmental success (Ostergaard & Hvass, 2008). Web 2.0 has been seen as a shifting paradigm because it is much more than merely improvements across quantities of information and services. Web 2.0 is actually an essential improvement in the approach people take to doing things and communicating with each other and their organisations, particularly governing bodies (O'Reilly, 2005; Baumgarten & Chui, 2009).

Many scholars have asserted that Web 2.0 technologies are going to result in open government and so endorse citizen participation and collaboration (Holzer et al., 2004; Chun et al., 2010; Scavo & Kim, 2010; Piaggesi et al., 2011). The revolution of Web 2.0 applications during 2003–2004 placed pressure on the public sector to make use of the knowledge of online crowds in the public service and governance functions, which happen to be anticipated to enhance public sector responsiveness (Anttiroiko, 2009). Therefore, Frissen (2005) stressed that one of the vital features of this Internet era is the empowerment of users.

Online communities, social networking and user-generated content production are bringing new elements to the development of electronic government. These new features are based on a new logic of the Web, referred to as Web 2.0. When applied to the public sphere, this idea has been labeled as Government 2.0. This is a new trend that challenges governments to assess their role in society and especially their relationship with citizens (Anttiroiko, 2010, P. 18).

The following section will expand on the concept of Government 2.0.

### 2.2.4 Government 2.0

Public organisations refer to the use of Web 2.0 technologies as ‘Government 2.0’ (Gov 2.0) (Anttiroiko, 2010; Williams, 2010). For example, in the United States, the term Government 2.0 has become commonly used with President Obama’s administration’s Open Government Directive to transform government interaction using Web 2.0 technologies. In Australia, the Australian Government 2.0 Taskforce report defined Government 2.0 as “the use of the new collaborative tools and approaches of Web 2.0” (Gruen, 2009, p. x).

The development of Government 2.0 in the public sector is about the level of complexity of Web 2.0 technologies. This development follows typical e-government maturity models that illustrate development, beginning at a basic presence online.
through interactive and transactional stages to the entire transformation of government (e.g., Al-Sebie et al., 2005; Siau & Long, 2005), where government becomes citizen-centred e-government (Anttiroiko, 2010). However, Anttiroiko stated that Government 2.0 development may not be consistent and linear and the progression of the main functions of government (political, administrative, service and development) probably will develop asynchronously. The author illustrates the influence on the developmental stages of e-government applied to Web 2.0 applications as follows (see figure 2.4 below).

![Figure 2.4: Evolution of the utilisation of Web 2.0 in government (Anttiroiko, 2010)](image)

Citizen generated content over social networks can add value through communication, content sharing, social networking and collective intelligence (Anttiroiko, 2010). Typically, citizen collaboration and widespread intelligence are significant drivers for the cohesive value of Government 2.0, based on collective problem solving. Government 2.0 is founded on the concept of providing citizens with an innovative role in public service and governance activities through the use of their social networking and content sharing activities (Osimo, 2008).

Social media tools provide governments with a very powerful and entirely new communication approach to change the way they communicate and stay relevant to their citizens (Department of Innovation, 2009). Social media tools arise from the development of Web 2.0 technology applications (Bonsón et al., 2012). The meaning of social media is closely aligned with the concept of Web 2.0 (Ayanso & Moyers, 2012). Web 2.0 and its social media tools are mainly about the ‘wisdom of crowds’, where
online information is connected and communication spread to reach citizens collaboratively (Godwin, 2009).

Social media tools, such as RSS feeds, Twitter, Facebook, and YouTube, can be used by governments to inform citizens with the most recent information about what is happening in their neighbourhood or about the government itself. Likewise, citizens can express and share their experiences with public services with their government, which can help to enhance public services (Misuraca, 2012). Furthermore, through these tools citizens can also participate in the public policies development process by providing their opinions, making assessments, or drafting input or creating media content, and consequently enhancing public governance outcomes (Anttiroiko, 2010).

The increased use of social media by the general population was one of the main drivers behind the government use of social media tools (Obama, 2009). Social media is a two-way communication tool built to be used for listening, engaging in dialogue, building trust, expanding reach, gauging sentiment, reciprocity and responsiveness (Wigand, 2012). Therefore, there are significant differences between the government use of Web 1.0 (e-government) and the use of Web 2.0 technologies (Gov 2.0) such as social media (Mergel, 2012). Table 2.3 summarises the differences between e-government and Gov 2.0 when government uses social media tools to interact and serve their citizens.

Table 2.3: Differences between e-government and social media use in the public sector (Mergel, 2012)

<table>
<thead>
<tr>
<th>E-Government</th>
<th>Social media use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static</td>
<td>Bi-directional, interactive</td>
</tr>
<tr>
<td>Push information</td>
<td>Pull information</td>
</tr>
<tr>
<td>Single author (usually Webmaster)</td>
<td>Multiple authors (providing agency &amp; members of their audiences)</td>
</tr>
<tr>
<td>Information- or transaction-focused</td>
<td>Interaction-focused</td>
</tr>
<tr>
<td>Large financial investments</td>
<td>Applications created by third parties – free use</td>
</tr>
</tbody>
</table>

Bertot et al. (2010b) argued that the main potential strengths of the use of social media tools in the public sector lie in their capability to be used as tools for collaboration, participation, empowerment, and time saving. The use of Web 2.0 technologies and social media tools offered government more possibilities to generate additional values by allowing citizens to interact with their government in usable and helpful means. Furthermore, it can help government to provide citizens with specific services and accomplish specific tasks in a short time frame at a low cost (Kloby, 2012). Through the
use of social media tools citizens can easily express their opinions and concerns, and also offer ideas to enhance government (Hau-Dong et al., 2010). Technological innovation is going to make governments more professional and even more democratic and therefore superior (Noveck, 2009). Ayanso and Moyers (2012) concluded that best practices and opportunities of the use of social media in the public sector were in the areas of crowdsourcing, open data, law enforcement, disaster planning, and analytics and intelligence.

This section (2.2) and its subsections discussed the evolution process of e-government and the potential opportunities and values that can be harnessed. However, the level and type of benefits that can be gained from these technologies depend on the level and way they are implemented and used by a particular government.

So far, only the technological side of government has been discussed, how the implementation of Web technologies by government is promising, and enhancing the creation of the public value in an innovative way. In the next section, the discussion will shift to public administration, presenting the idea of public value, how it could be created, and how it can be used to evaluate the performance of government.

### 2.3 PUBLIC VALUE

The concept of Public Value is significant for public sector administrators as stressed by Jørgensen and Bozeman, because there is “no more important topic in public administration and policy than public values” (2007, p. 355). As mentioned earlier, public value was first articulated by Mark Moore from Harvard's Kennedy School of Government as a new way of thinking about public management that might help public managers. Moore (1995) describes public value as the value that government generates for its people. He suggests that public managers should focus on creating public value by satisfying individual and collective desires instead of basing their work on traditional New Public Management (NPM) strategy, which was seen as best practice in the 1980s and 1990s. Furthermore, Moore (1995) questions NPM quantitative measures, arguing they often fail to address the fundamental, intangible issues of public service quality.

All around the world, reform of the public sector is a common experience (Pollitt & Bouckaert, 2004). The public sector was reformed from traditional public administration to NPM and more recently towards public value management (Moore, 1995; Stoker,
In the 1980s, countries such as the UK, US, Australia, New Zealand, and many other Organisation for Economic Co-operation and Development (OECD) countries adopted the strategy of NPM to modernise and reform the public sector (Hood, 1991). NPM always stressed cost-efficiency over any other criteria arising from the tendency to focus on those things that can be evaluated easily and turned into objectives, whilst those that are difficult to evaluate are not used (Moore, 1995).

A common problem of NPM is that it evaluates public service efficiency based on the average cost of processing a given output, rather than examining potential outcomes valued by citizens (Raus et al., 2010). For example, Raus et al. (2010, p. 124) stress that “measuring how cost-effective a government website provides quantity of information rather than the usefulness and relevance of the information to the citizen”. This example indicates that in this narrow sense, efficiency improvements do not contribute to the enhancement of public value. In view of the fact that NPM strategy focuses more on output rather than outcome, public managers often cannot see the bigger picture beyond the service they provide, leading to weak coherence in the public services sector (Coats, 2006). As a consequence, the idea of Public Value has been developed to give a clearer view of government performance and to overcome the disadvantages of NPM. Table 2.4 contrasts the main attributes of traditional public administration and new public management toward the public value management paradigm.
Moore (1995) identified that public organisation strategy should be about three main concepts (see figure 2.5): (1) creating public value, (2) being legitimately and politically sustainable, and (3) being operationally and administratively feasible. Creating public value is about the value that public organisations want to create for their citizens (e.g. organisation aims and objectives). Legitimacy and political sustainability is the foundation of authority and sustainable resources that public organisations depend on to offer services. Operational and administrative feasibility refers to the operational capacity of the public organisation including their employees (e.g. financial and technological resources). Moore (1995) illustrates public value strategy in ‘the strategic triangle’ (see figure 2.5), and stresses that creating public value should be central to the activities of public managers. As Moore explains, private companies create value by
offering consumer products and services and creating economic value for stakeholders. For public organisations, their clients are the citizens who profit from their services and their goal is to create public value for them, and their stakeholders are the politicians/legislators who offer resources and empower them to manage.

![Figure 2.5: Strategic triangle (Moore, 1995) and public value main sources (Kelly, 2002)](image)

The concept of Public Value is gaining considerable attention from many academics and experts (O’Flynn, 2007; Raus et al., 2010), and it “has spread outside the academy to practitioners and think tanks” (Alford & O'Flynn, 2009, p. 179). Moore’s public value management model demonstrates a new way of thinking which moves away from NPM approaches that focused on quantitative measurable outputs (Hefetz & Warner, 2004).

However, there is varying stances toward the idea of public value. While a large proportion of public managers who have been introduced to this new management approach have embraced it enthusiastically (Alford & O'Flynn, 2009), academics have been divided into two groups. Some who pursue it (e.g., Silverman, 2001; Alesina & Angeletos, 2003; Talbot, 2006; Alford & O'Flynn, 2009; Australian Bureau of Statistics, 2012), and others oppose it (e.g., Stanley, 2003; Rhodes & Wanna, 2007).

Those who criticized the idea of Public Value asserted that it is a normative and pragmatic theory (Alford & O'Flynn, 2009). The concept of Public Value is criticized for being too abstract and it cannot be operationalized due to its lack of concrete guidance (Stoker, 2006). Rhodes and Wanna (2007) believe that Moore has over emphasizing the role of public managers, and over trusting the public organizations and private sector experience and understated the significance of politics and elected officials. They claimed that his approach is not clear, questioning whether it is “a paradigm, a concept, a model, a heuristic device, or even a story” (2004, p. 408). The
concept of Public Value was also sharply criticized by Stanley (2003) arguing that public value introduced by Moore is an equivalent to shareholder value.

Academics who support the idea of the public value believe it is a valid theory though it is confusing and substantial work needs to be conducted (Silverman, 2001; Alesina & Angeletos, 2003). Silverman (2001) defended Moore’s public value idea providing refutations to all Rhodes and Wanna’s criticisms (see also Alford & O'Flynn, 2009). Alford emphasizes on Moore’s strategic triangle as “a legitimate limit on the public manager’s autonomy to shape what is meant by public value” (Silverman, 2001, p. 177).

Generally, the public value concept “has been well received by numerous public sector commentators” (Wilson & Howarth, 2002, p. 11).

Kelly et al. (2002) highlighted the usefulness of the Public Value concept by Moore (1995) to advance public policies and the relationship between government and citizens. Besides its use for e-government evaluation, the concept of Public Value has been used in a number of public sector domains as a framework for change and improvement including areas such as criminal and justice (e.g., Rhodes & Wanna, 2007; United Nations, 2010), learning and skills (e.g., Grigg & Mager, 2005; Fauth, 2006; Fryer, 2011), higher education (e.g., Garnett & Ecclesfield, 2008) and health (e.g., Chapman, 2005; Mahdon, 2006; Williams et al., 2007; Constable et al., 2008). This wider range of use suggests potential for the Public Value concept as a framework for public sector improvement (such as Kelly et al., 2004; Smith, 2004; Blaug et al., 2006).

Kelly et al. (2002) focus on the practical implications of public value strategy by identifying the sources of public value. They build on Moore’s (1995) work, beginning with defining public value as “the value created by government through services, laws, regulation and other actions” (Kelly et al., 2002, p. 4). The authors argue that public organisations can generate value that will be genuinely valued by citizens in many ways, for instance, by improving the quality of public services. However, the authors identified three main sources of public value: outcome, trust (including legitimacy and confidence), and services (see figure 2.5). For Kelly et al. (2002) these three sources of public value creation provide government with the foundation for new ways of thinking about the value they create for their citizens.

The value that is created through outcome is associated with the following: security, poverty reduction, reduced social exclusion, advancing levels of public health and
education, equity and reduced levels of homelessness. Trust, legitimacy and confidence in government are at the core of the relationship between citizens and government and are crucial for public value creation (Kelly et al., 2002). The value created by government through services is highly dependent on the level of service quality delivered by public administration. The quality of service provision is driven by a series of factors including service availability, satisfaction levels with services, importance of services offered, fairness of service provision, and cost (Kelly et al., 2002).

The three main sources of public values creation identified by Kelly et al. (2002), (quality of public services delivery, achievement of social outcomes, and development of public trust in government) are very useful to investigate the public value of e-government. For example, Kearns (2004) was the first who used these sources to examine the public value of e-government. Kelly et al. ’s (2002) sources of public value have also been used by a significant number of scholars in e-government field by extending Kearns (2004) framework in different ways (including Golubeva, 2007; Grimsley & Meehan, 2007; Karunasena et al., 2011). Kelly et al. (2002) highlighted the usefulness of the Public Value concept to advance public policies and the relationship between government and citizens (Kelly et al., 2002). Gov 2.0 can enhance the relationship between citizens and government in policy-making processes that allow for additional participatory democracy (Nabatchi & Mergel, 2010). Therefore, the sources of public value creation identified by Kelly et al. (2002) are useful to investigate the Public Value of Gov 2.0.

Public value attempts to capture the difference between outputs and outcomes (Walker, 2009) and exists at both individual and collective levels (Bozeman, 2007). There is no singular public value but rather multiple public values (Talbot, 2008). Public and governmental interaction continuously defines and redefines public value, thus public value is not fixed and it should be continually explored (Jantz, 2009) and multiple values addressed through either aggregation and/or choice (Talbot, 2008). For example, Jørgensen and Bozeman (2007) examined essential issues to public value: clarifying the origins of public values, illustrating the hierarchy of public values, investigating the public values evaluation, and demonstrating the relationships between public values. To identify public values Jørgensen and Bozeman (2007) offer an inventory of seven main “value constellations” with seventy-two categories of public values: the first constellation contains values associated with the public sector’s contribution to society;
the second constellation covers values associated with transformation of interests to decisions; the third constellation encompasses values associated with the relationship between public administration and politicians; the fourth constellation comprises values associated with the relationship between public administration and its environment; the fifth constellation comprehends values associated with intra-organisational aspects of public administration; the sixth constellation includes values associated with the behaviour of public-sector employees; and the seventh constellation embraces values associated with the relationship between public administration and citizens. Table 2.5 shows the public value sets and categories by Jørgensen and Bozeman (2007).

The main limitation of Jørgensen and Bozeman’s (2007) inventory approach as the authors have advised is that “values are quoted out of context” (p. 357). However, they have provided a very helpful way showing how their clusters of values might be related, which can be used as a principle for future empirical analysis. Furthermore, Jørgensen and Bozeman (2007) suggested that values can be related in different ways including by proximity (how close a value is to another), hierarchy (a relative primacy of values), and causality (analysis of means to an end). Thus, Jørgensen and Bozeman’s (2007) inventory approach can be used to evaluate the public value in different public administration areas. It is helpful to investigate and relate the authors’ inventory values to Gov 2.0 initiatives in this study.

This leads us to the next section, and the ways in which Gov 2.0 can contribute to the creation of these public values.
Table 2.5: Category of public values (Jørgensen & Bozeman, 2007)

<table>
<thead>
<tr>
<th>Value Category</th>
<th>Value Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public sector's contribution to society</td>
<td>Common good</td>
</tr>
<tr>
<td></td>
<td>Public interest</td>
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<tr>
<td></td>
<td>Social cohesion</td>
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<tr>
<td></td>
<td>Altruism</td>
</tr>
<tr>
<td></td>
<td>Human dignity</td>
</tr>
<tr>
<td></td>
<td>Sustainability</td>
</tr>
<tr>
<td></td>
<td>Voice of the future</td>
</tr>
<tr>
<td></td>
<td>Regime dignity</td>
</tr>
<tr>
<td></td>
<td>Regime stability</td>
</tr>
<tr>
<td>Transformation of interests to decisions</td>
<td>Majority rule</td>
</tr>
<tr>
<td></td>
<td>Democracy</td>
</tr>
<tr>
<td></td>
<td>Will of the people</td>
</tr>
<tr>
<td></td>
<td>Collective choice</td>
</tr>
<tr>
<td></td>
<td>User democracy</td>
</tr>
<tr>
<td></td>
<td>Local governance</td>
</tr>
<tr>
<td></td>
<td>Citizen involvement</td>
</tr>
<tr>
<td></td>
<td>Protection of minorities</td>
</tr>
<tr>
<td></td>
<td>Protection of individual rights</td>
</tr>
<tr>
<td>Relationship between public administrators and politicians</td>
<td>Political loyalty</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
</tr>
<tr>
<td></td>
<td>Responsiveness</td>
</tr>
<tr>
<td>Relationship between public administrators and their environment</td>
<td>Openness–secrecy</td>
</tr>
<tr>
<td></td>
<td>Responsiveness</td>
</tr>
<tr>
<td></td>
<td>Listening to public opinion</td>
</tr>
<tr>
<td></td>
<td>Advocacy–neutrality</td>
</tr>
<tr>
<td></td>
<td>Compromise</td>
</tr>
<tr>
<td></td>
<td>Balancing of interests</td>
</tr>
<tr>
<td></td>
<td>Competitiveness–cooperativeness</td>
</tr>
<tr>
<td></td>
<td>Stakeholder or shareholder value</td>
</tr>
<tr>
<td>Intra-organizational aspects of public administration</td>
<td>Robustness</td>
</tr>
<tr>
<td></td>
<td>Adaptability</td>
</tr>
<tr>
<td></td>
<td>Stability</td>
</tr>
<tr>
<td></td>
<td>Reliability</td>
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<tr>
<td></td>
<td>Timeliness</td>
</tr>
<tr>
<td></td>
<td>Innovation</td>
</tr>
<tr>
<td></td>
<td>Enthusiasm</td>
</tr>
<tr>
<td></td>
<td>Risk readiness</td>
</tr>
<tr>
<td></td>
<td>Productivity</td>
</tr>
<tr>
<td></td>
<td>Effectiveness</td>
</tr>
<tr>
<td></td>
<td>Parsimony</td>
</tr>
<tr>
<td></td>
<td>Business-like approach</td>
</tr>
<tr>
<td></td>
<td>Self-development of employees</td>
</tr>
<tr>
<td></td>
<td>Good working environment</td>
</tr>
<tr>
<td>Behaviour of public-sector employees</td>
<td>Accountability</td>
</tr>
<tr>
<td></td>
<td>Professionalism</td>
</tr>
<tr>
<td></td>
<td>Honesty</td>
</tr>
<tr>
<td></td>
<td>Moral standards</td>
</tr>
<tr>
<td></td>
<td>Ethical consciousness</td>
</tr>
<tr>
<td></td>
<td>Integrity</td>
</tr>
</tbody>
</table>
Table 2.5 (continued)

<table>
<thead>
<tr>
<th>Value Category</th>
<th>Value Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship between public administration and the citizens</td>
<td>Legality</td>
</tr>
<tr>
<td></td>
<td>Protection of rights of the individual</td>
</tr>
<tr>
<td></td>
<td>Equal treatment</td>
</tr>
<tr>
<td></td>
<td>Rule of law</td>
</tr>
<tr>
<td></td>
<td>Justice</td>
</tr>
<tr>
<td></td>
<td>Equity</td>
</tr>
<tr>
<td></td>
<td>Reasonableness</td>
</tr>
<tr>
<td></td>
<td>Fairness</td>
</tr>
<tr>
<td></td>
<td>Professionalism</td>
</tr>
<tr>
<td></td>
<td>Dialogue</td>
</tr>
<tr>
<td></td>
<td>Responsiveness</td>
</tr>
<tr>
<td></td>
<td>User democracy</td>
</tr>
<tr>
<td></td>
<td>Citizen involvement</td>
</tr>
<tr>
<td></td>
<td>Citizen’s self-development</td>
</tr>
<tr>
<td></td>
<td>User orientation</td>
</tr>
<tr>
<td></td>
<td>Timeliness</td>
</tr>
<tr>
<td></td>
<td>Friendliness</td>
</tr>
</tbody>
</table>

2.4 GOV 2.0 AND PUBLIC VALUE CREATION

The close relationship between the concept of Public Value and the use of ICTs by the public sector was first highlighted by Kearns (2004) when he applied Kelly et al. (2002) work to evaluate e-government. The concept of Public Value can be used to understand the process of how value is created or co-created, and by whom and with whom it was created (Benington, 2009). In the public value paradigm where the “Value is rooted in the desires and perceptions of individuals” (Moore, 1995, p. 52), the main emphasis of public managers shifts from results to relationships (O’Flynn, 2007). Gov 2.0 allows for, and optimistically encourages, governments to value civil society as a legitimate partner for change, and the effective use of social media tools is the real challenge for governments at this point (Williamson, 2011). These tools allow government agencies to invest in information technologies to transform and improve their relations with citizens (World Bank, 2005). This redefinition is supported with the change of government emphasis from the utilisation of information technologies as service provision towards improving the value of services provided and reaching greater government (United Nations, 2008).

Recently public managers are not only asking whether their targets have been achieved, but whether society has gained any net benefits as a result of their activities (Stoker, 2006). Meynhardt and Bartholomes (2011) stated that the source of public value lies in the relationships, and its creation “involves the shaping of experiences in relationships between individuals on the one hand and public entities and their services on the other”
The authors also argued that the value will be at a high level when citizens perceive they have gained value from these interactions. Online interaction using Web 2.0 platforms fosters the creation of public value through public services and legislation (Misuraca, 2012). With the use of Web 2.0 technologies modern society can save time and overcome geographic limitations, and citizens are not passive recipients of services anymore because they become more active stakeholders. In other words, with Gov 2.0 platforms citizens can contribute to the public value created through these tools as concluded by Jørgensen and Bozeman who assert that “public value is not governmental” (2007, p. 372).

Through the active engagement taking place on Gov 2.0 platforms between public officials and citizens, and between the citizens themselves government can refine and promote public value (Chang & Kannan, 2008; Baumgarten & Chui, 2009; Hui & Hayllar, 2010). The government use of Gov 2.0 initiatives to serve and interact with citizens brings participants together in a creative and deliberative process (Bonabeau, 2009; Kane & Fichman, 2009), and it have been labelled as the most powerful way for uniting citizens’ collective action and allowing them to evaluate and design services (Weinberger, 2002; Parameswaran & Whinston, 2007; Bonabeau, 2009; Kane & Fichman, 2009; Kim et al., 2009). This way of citizens’ use of Gov 2.0 initiatives will improve governance where it “can be considered as a means to increase the public value produced by public administration” (Savoldelli et al., 2013, p. 376).

Thus, many studies encourage and advise governments to adopt and implement these new technologies to gain the potential advantages they offer. Waller (2010) suggested that Web 2.0 applications and social media tools needed to be utilised at the same time as existing government websites, but not replace them. Scholars have stressed that citizen interaction with government using Gov 2.0 initiatives have significant potential for public values creation. These potential advantages will be reviewed in relation to the main areas of public value creation, identified by Kelly et al. (2002) in the following sub-sections.

### 2.4.1 Gov 2.0 and public trust in government

Various studies have suggested that public trust can be maintained and enhanced through increasing government responsiveness (Tolbert & Mossberger, 2006; Gauld et al., 2009), user democracy (Goldfinch, 2009), citizen involvement (Christensen, 2005),
self-development (Roberts, 2002), dialogue (Grabner-Kräuter, 2009), listening to public opinion (Yang, 2005), openness (Tolbert & Mossberger, 2006; Gauld et al., 2009), professionalism (Misuraca, 2012), honesty (Ulbig, 2004), integrity (Keele, 2007), and accountability (Bertot et al., 2010b).

The primary goal of e-government is to encourage electronic democratic governance by making use of Web based applications and tools (West, 2008). Social media can play a transformative role in many areas linked to public trust in government, such as transparency, accountability, communication and collaboration, and to promote deeper levels of civic engagement (Mergel, 2012). The literature suggests that citizens’ use of Gov 2.0 initiatives can contribute to a number of values that directly link to citizens’ perceptions of trust in their government. Citizens’ use of these initiatives, mainly social media tools, can create and enhance citizens’ perceptions of value responsiveness (Coleman & Gotze, 2001; Welch et al., 2005; Tolbert & Mossberger, 2006; Bertot et al., 2010b), user democracy (Cormode & Krishnamurthy, 2008), citizen involvement (Christensen & Lægreid, 2005; Nabatchi & Mergel, 2010), self-development (Roberts, 2002), dialogue (Chadwick, 2008; Grabner-Kräuter, 2009; Wigand, 2012), listening to public (Chadwick, 2008), openness (Mergel, 2012; Wigand, 2012), professionalism (Misuraca, 2012), honesty (Zambonini, 2006), integrity (Open Government Partnership, 2011), and accountability (Bertot et al., 2010b).

Citizen participation is mainly about the involvement of citizens in government decision making at any level, whether willingly or compulsory which are performed to enhance engagement. Citizen involvement is a crucial aspect for democratic governance which results in knowledgeable administration decisions (Berman, 2005; Callahan, 2006), transparency and fairness in policy development (Lukensmeyer & Torres, 2006), capacity building (Cuthill & Fien, 2005) and increased trust in government (Keele, 2007). However, there are many reasons for low public attendance of government meetings and discussions, such as work schedules, lack of interest, child-care needs, or fear of public speaking, which result in weak citizen involvement in public policies (King et al., 1998; Adams, 2004). The utilisation of social media tools and Web 2.0 technologies as a medium for government-citizen interaction will boost citizen engagement and overall satisfaction of government (Mathur, 2010). Through its excellent communication mediums, social media platforms, such as Facebook and YouTube, are enhancing the democratic process via the important role they play in
online citizen participation (Council of Europe, 2009). The practice of e-democracy utilising Web 2.0 technologies is considered to re-empower citizens (Mejias, 2004). Through the use of Web 2.0 platforms citizens are motivated to take part in policy definition and decision-making activities, even reaching the point of becoming co-designers of public services and active contributors in public value creation (Broster et al., 2011).

With Web 2.0 capabilities and social media tools, anything could be taped, publicised, shared and distributed, in an organised way in real-time to a massive number of citizens. This allows non-profit organisations, citizens and loosely organised communities to elevate concerns to the wider community. Furthermore, it also provides a new way of overseeing individuals, including government officials and figures, by the public. This new way of monitoring will make both officials and public organisations more mindful in what they say and do than ever before. On the whole, the use of these advanced technologies in the public sector can enhance openness, accountability, and governance systems (Misuraca, 2012). As previously mentioned, there are several social online tools which are being utilised to take advantage of the effectiveness of citizen’s online engagement such as Facebook and Twitter. These online tools offer citizens the capability to post, discuss, share content, be involved in dialogue and work collectively on public policies (Sheridan et al., 2008). These tools are utilised by citizens and groups as platforms to organise their demonstrations and campaigns to raise their concerns and collective voice.

Web 2.0 platforms, such as Mash-ups, afford citizens as well as private organisations the capability to mix various groups of data to be reused. This can lead to innovative approaches to dealing with a number of government issues (Baumgarten & Chui, 2009). Allowing citizens and social media access to a large amount of sensitive and confidential information and facts for reuse through social media initiatives will improve government transparency, the sharing of this information and facts on social media can increase dissemination. This will force government organisations and officials to improve their policy and practice and to be more accountable, consequently enabling greater governance systems. Thus, Gov 2.0 has significant potential to enhance public sector accountability (Misuraca, 2012).

Through the replacement of government tasks by bottom-up user driven innovation, online interaction using social media tools also has another possible impact upon public...
organisations where public value can also be generated by citizens (Misuraca, 2012). In *The Wisdom of Crowds*, Surowiecki (2005) emphasised crowdsourcing as an attempt to capture the concept of mining ideas from massive numbers of people. Howe (2008) defines crowdsourcing as “the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call” (p. 1). Citizens’ use of Gov 2.0 initiatives can encourage crowdsourcing by helping those who share similar interests or concerns to find each other and work collectively within online communities that can be built in any governance area or public service (Misuraca, 2012).

The Human Capital Institute (2010b) survey at all US government levels showed that nearly 63% of government organisations are using social media applications internally. This use is mainly for dialogue and information sharing between staff and also with other organisations, as well as externally to improve information and services provision to the community. Additionally, the agencies that utilise Web 2.0 applications were optimistic about the long-term effects these applications will have on increased collaboration and dialogue. They indicated that social media is powerful and essential for contacting citizens and obtaining feedback (Human Capital Institute, 2010a). Citizens’ feedback through social media platforms had a positive impact on responsiveness and transparency (Mergel, 2012). While the use of social media tools improved government interactions with citizens and allowed them to create direct and immediate feedback, on the other hand it increased citizens’ demands to receive real-time feedback from government (Mergel, 2012). These feedback cycles allow government to determine their citizens’ needs and positively put into practice further functionalities (Mergel, 2012) which can improve their professionalism.

The process of addressing governmental response to issues raised on social media through discussion or solving of local issues improves citizen’s trust in government (Kim & Robinson, 2012), and can improve the quality of public services and public sector organisations’ efficiency and effectiveness (Misuraca, 2012).

### 2.4.2 Gov 2.0 and public service quality

A number of factors can contribute to the quality of services delivered online. In an e-government context, system quality is one of the main constructs used to measure the quality of service (Wang & Liao, 2008), and is shown to be inextricably linked to
service quality (Halaris et al., 2007; Wang & Liao, 2008). Citizens can perceive the system quality through its adaptability (Delone & Mclean, 2004; Wang & Liao, 2008), reliability (Delone & Mclean, 2004; Wang & Liao, 2008), stability (Berry, 1995), timeliness (Wixom & Todd, 2005), robustness (Zhang & Prybutok, 2005), friendliness (Papadomichelaki & Mentzas, 2009) and user orientation (Misuraca, 2012).

A previous study on public value by Meynhardt (2009) considered those related to public service technical functionality ‘instrumental-utilitarian dimension’ as a main value dimension. Providing citizens with quality e-government services can create public value, which can be improved by citizens’ positive experiences of public services (O’Flynn, 2007). Given modern public managers view the public as customers, who pay rates and taxes and should receive value in return, they should aim to satisfy citizens’ demand for high quality e-services (Magoutas et al., 2009).

The citizens’ use of their government’s Gov 2.0 initiatives can contribute to a number of values identified by Jørgensen and Bozeman (2007) and directly linked to citizens’ perceptions of system quality that support services delivered to them through these initiatives. The literature suggests that citizens’ use of Gov 2.0 initiatives, mainly social media tools, can create and enhance their perceptions of value adaptability (Sutton et al., 2008; Yates & Paquette, 2011), reliability (Yates & Paquette, 2011), stability (Danis et al., 2009), timeliness (Aschoff et al., 2007), robustness (Yates & Paquette, 2011), friendliness (Aschoff et al., 2007), and user orientation (Osimo et al., 2010).

Social media tools have the potential to enhance the adaptability of information systems used by government to serve citizens. Sutton et al. (2008) exposed the ability of these platforms to be used flexibly to meet the changing needs of users. Web 2.0 technologies can provide citizens “with the ability to respond quickly to changes in the information and the environment, and provide flexibility, adaptability, usability and customizability in both the system and the information”, especially in disasters (Yates & Paquette, 2011, p.8). These features make social media tools used by government to serve their citizens robust enough to be reliable platforms for open and timely interaction and exchange of information (Yates & Paquette, 2011).

The friendliness of the citizens’ use of Gov 2.0 initiatives can contribute to their perceptions of the quality of the services obtained through these tools where the use is fairly cheap or cost free, and user friendly (Kloby, 2012). Furthermore, with the new
innovative approach of the citizens’ use of Web 2.0 technologies, the public service delivery role is not necessarily only the government’s business any more. This approach can allow citizens to express their needs, choices and shape service delivery tools where citizens will play a significant role in framing how services will be provided, additionally “they may even take part in the actual delivery” (Misuraca, 2012, p. 103).

2.4.3 Gov 2.0 and social outcomes

Literature suggests that social outcomes can be achieved by increasing citizens’ perceptions of fairness (Alesina & Angeletos, 2003; Karunasena & Deng, 2012); equity (Kelly et al., 2002); social cohesion (Hariche et al., 2011); public interest (Sreedharan et al., 2011); and common good (Meynhardt, 2009). Gov 2.0 initiatives offer government new collaboration opportunities. These opportunities are not limited to government organisations, but the government can collaborate and work together with citizens too. Furthermore, government can engage citizens in seeking solutions and solving problems for local issues and matters (Wigand, 2012). This type of citizen engagement can boost government interactions with individuals, develop trust with special interest groups, and make better decisions by capturing the value of local knowledge (Glasco, 2012). Gov 2.0 initiatives not only facilitate government interaction with citizens, but also provide them with the opportunity to contact public figures and hear from them directly through its convenient platforms, as the Obama government is doing in the United States. President Obama, in a town hall meeting, received questions from citizens all over the US via Twitter (Galloway & Guthrie, 2010) and/or through the ‘Ask the President’ blog initiative. While this kind of interaction can be perceived by citizens as transparency, openness or integrity enhancement, it can be perceived as another avenue to have equal treatment or to have their voice heard by highest levels of government.

Wigand (2012) concluded that governments are starting to utilise social media to improve transparency, participation, and collaboration through engaging and communicating with stakeholders in debates and taking their ideas further on challenges and initiatives. Furthermore, he argued that this type of paradigm shift from monologue towards dialogue, in particular, could foster a sense of community. Furthermore, the relationships built through these interactions, and the trust and confidence being formulated on these platforms is going to have an impact upon community construction (Van Bavel et al., 2004).
How public value of e-government has been evaluated in the literature is reviewed in the coming section.

2.5 PUBLIC VALUE EVALUATION

The public value approach has become a new tool to evaluate the level of public services success as seen in the UK, Australia and some other countries. For instance, the BBC and Scottish Government have used public value to evaluate police forces, local authorities, public sports and arts (Talbot, 2008). A considerable number of tools have been developed to help the public sector evaluate their efforts in implementing e-government initiatives using the public value approach including AGIMO (2004), Kearns (2004), The European Commission (2006), Grimsley and Meehan (2007), Golubeva (2007), Karunasena and Deng (2009, 2010, 2011), and Karunasena et al. (2011).

AGIMO (2004) developed a method for Australian public sector agencies to assess the demand for and value of e-government initiatives. This approach allows public sector organisations to evaluate the organisational financial value, users’ financial value, social value, and governance value produced by their e-government initiatives. However, the AGIMO’s (2004) framework generally assigns more importance towards monetary value instead of taking into consideration societal and citizen values. The framework favours the utilisation of cost benefit evaluation, commonly used to assess finance within the private sector.

Kearns (2004) adapted the main public value concepts of Kelly et al. (2002) within the context of e-government, arguing that the success level of e-government initiatives from a public value perspective should be evaluated based on the following set of key criteria (Kearns, 2004) including:

- the provision of services that are widely used;
- increased levels of user satisfaction with services;
- increased information and choice available to service users;
- greater focus on the services that the public believes to be most important;
- increased focus of new and innovative services towards those most in need;
• reduced costs of service provision;
• improved delivery of outcomes; and
• a contribution to improve levels of trust between citizens and public institutions.

The main shortcoming of Kearns’ (2004) framework is that it focuses on evaluating public value created through the delivery of quality public services. The framework considers only a limited number of e-government service quality elements and components such as information and system quality. Furthermore, it does not offer any indicators on how to measure e-government contributions toward public trust or outcomes from the public value perspective. As depicted by Moore (1995), public value is rooted in individuals who are citizens and it should be perceived by them; the framework does not take into account the values related to the relationship between public administration and citizens such as: equal treatment, equity, fairness, dialogue, responsiveness, user democracy, citizen involvement, citizen’s self-development, user orientation, timeliness, and friendliness.

The European Commission (2006) proposed a measurement framework constructed upon the three value drivers of efficiency, democracy, and effectiveness, and detailed multidimensional evaluation tools of e-government public value as shown in figure 2.6. The framework includes both quantitative and qualitative financial impacts. Each driver of these evaluation tools is evaluated through three indicators. The efficiency driver is assessed by investigating (a) public agency cashable financial gains, (b) the level of empowerment of public employees, and (c) the organisational and IT architecture. The contributions of these indicators lead to financial and organisational value. The democracy driver is assessed by investigating (a) openness of the organisation, (b) organisation transparency and the accountability, and (c) citizens’ participation. The contributions of these indicators lead to political value. The effectiveness driver is assessed by investigating (a) administrative burden reduction, (b) users’ value and satisfaction, and (c) more inclusive public services. The contributions of these indicators lead to constituency value.
The framework of the European Commission (2006) is developed to assess the public value of European nations where e-government maturity levels are closer to Australian e-government maturity levels. However, this framework does not focus on citizens’ main perceptions of public value. Rather the framework focuses on the e-administration side of government, mainly constituency, financial and organisational values. The eGEP framework has been improved to eGEP 2.0 by Savoldelli et al. (2013), however, this improvement was not available during the development of this study framework in 2011-2012 and it could not be included in this discussion.

Grimsley and Meehan (2007) developed a framework for evaluation of e-government projects based on Moor’s concept of public value. The framework takes into account citizens’ and clients’ perceptions of service provision and service outcomes as contributors to the formation of public trust. The framework was developed and validated based on two UK case studies. The framework focuses on relational pathways between public value production concepts including service provision, service related outcomes, user satisfaction, and trust as shown in figure 2.7. The components of the proposed framework suggest the relationship between outcomes, service provision and trust in regards to three experiential proportions: “a sense of being well-informed, a sense of personal control in one’s life and a sense of influence, which appear to drive trust and satisfaction” (Grimsley & Meehan, 2007, p. 146).
Grimsley and Meehan’s (2007) framework is developed to mainly evaluate e-government projects based upon Moore’s concept of public value. Nevertheless, the framework evaluates how the service provision contributes to citizens’ trust and satisfaction where the sense of being well-informed, a sense of personal control in one’s life and a sense of influence as the main drivers. Thus, this framework can be useful to investigate the concepts and relational pathways for public value, but it would not be effective to evaluate e-government public values, especially as it does not provide measures to assess public values (service provision, service outcomes, and trust).

Another evaluation framework was developed to assess the potential governance quality improvement of regional government portals of the Russian Federation government. Golubeva (2007) developed a framework on the basis of the public value concept (see figure 2.8). The framework was built on the main sources of public value identified by Moore (1995) and Kelly et al.’s (2002) quality of public services, public trust, and public policy outcomes. The proposed framework used the openness, citizen-centricity and usability indicators to assess the service quality dimension. The public trust dimension was measured using transparency and interactivity indicators.
The main shortcoming of Golubeva’s (2007) framework is the limitation of indicators to assess the production of public value. While the framework does not suggest direct indicators to evaluate the success in public policy outcomes, it suggests that public service quality can contribute to the public policy outcomes. This framework suggested only three indicators (openness, citizen-centric, and usability) to evaluate the public value of public service quality and consequently public policy outcomes. Furthermore, the public value created through public trust can be measured using two indicators (transparency and interactivity). This limitation of indicators will not reflect the real value perceived by citizens from the use of the government portal, especially if we take into consideration the use of Web 2.0 applications and, in particular, social media tools.

With the growth in attractiveness of the Public Value concept, and a situation where it becomes the main motivation for governments around the globe to implement and develop e-government initiatives, Karunasena and Deng (2009, 2010) proposed and developed conceptual frameworks for evaluating the public value of e-government in Sri Lanka from the citizens’ perspective. The framework considered the uniqueness of e-government development in Sri Lanka, as a developing country where e-government is still not mature.

Karunasena and Deng (2011) responded to the need for filling various shortcoming in available frameworks. In this regard, they also revised their conceptual frameworks for evaluating public value of e-government (2009, 2010). The modified framework used an extensive analysis of the appropriate literature and empirically examined and validated through structural equation modelling survey data gathered in Sri Lanka. The framework developed by Karunasena and Deng (2011) is considered to be an improvement on their first frameworks (Karunasena and Deng, 2009, 2010). Figure 2.9
illustrates the Karunasena and Deng (2011) revised conceptual framework for evaluating public value of e-government (PUBVAL). The modified framework includes three main drivers of public value. These include: delivery of quality public services (DPS), efficiency of public organisations (EPO), and achievement of socially desirable outcomes (ASO). The first source dimension evaluated three indicators: quality of information, delivery of services, and user orientation of public services. The second dimension, efficiency of public organisations (EPO), assessed via three indicators included organisation efficiency, openness, and responsiveness. The achievement of socially desirable outcomes (ASO) dimension measured five indicators counting equity, self-development of citizens, trust, democracy, and environmental sustainability.

Figure 2.9: Conceptual framework for evaluating public value of e-government (Karunasena & Deng, 2011)

The main limitations of the Karunasena and Deng frameworks are that all these frameworks have been developed essentially to suit the unique situation in developing countries, namely Sri Lanka. The majority of citizens in Sri Lanka are live in rural areas, have low e-readiness, low ICT literacy, poor information infrastructure, and low household internet penetration (Karunasena & Deng, 2009). These frameworks are therefore unsuitable to be used in developed countries, such as Australia, with the mature e-government initiatives. Karunasena and Deng (2011) attempted to upgrade and cover the shortcomings of their previous frameworks, which they stressed inherited Kearns (2004) issues of limited indicators for assessing achievements associated with socially desirable outcomes and service quality.

Moreover, these frameworks neglect to take into account public values in society and employ a large amount of secondary data, which is not helpful when examining actual
public value perceived by citizens (Karunasena & Deng, 2011). The Karunasena and Deng (2011) revised framework also does not take into account the values related to the relationship between public administration and the citizens such as: equal treatment, fairness, dialogue, user democracy, citizen involvement, timeliness, and friendliness. Another shortcoming of this framework is that it does not take into account the public values such as: common good, public interest, social cohesion. Besides that the values linked to public-sector employees’ behaviour also neglected too, such as: accountability, professionalism, honesty, and integrity.

Whereas such frameworks are relatively different in their methods, they all concern validity and reliability (Kearns, 2004; Golubeva, 2007; Friedland & Gross, 2010). Some frameworks (e.g. AGIMO 2004) can apply to private sector measurements including return on investment mechanisms within the public sector (Friedland & Gross, 2010). The use of Web 2.0 in the public sector promotes services that add value for individuals and societies, which cannot be depicted in economic terms. In addition to validity and reliability issues, other frameworks that implement social values have been considered in a limited context, where other social values are considered during assessment procedures (World Bank, 2007). All previous frameworks discussed propose methods for assessing non fiscal quantitative and qualitative returns.

The frameworks reviewed previously have different shortcomings and as a consequence, they are inappropriate for evaluating public value created through the use of Government 2.0. The main shortcoming that applied to all frameworks discussed was that none of them have been developed as a basis for evaluating the public value of Gov 2.0, where Web 2.0 technologies and social media tools are implemented and used by government to interact and serve their constituents. Furthermore, none of these frameworks investigate public value created at the local level in the government hierarchy where the government is very close to citizens.

While the literature clearly indicates the potential of Gov 2.0 initiatives to generate various public values for citizens who use these initiatives, little is known about how these initiatives contribute towards public value creation. To our knowledge, up to date there is no empirical study that assess the public value of Gov 2.0 in particular. Therefore, this study is posing the main RQ: How do Gov 2.0 initiatives contribute towards public value creation?
In most cases the methods reviewed in this chapter can indeed be relatively comprehensive, addressing the complete theoretical range of e-government initiatives and offering in-depth procedures and methods for formulating assessment constructs and capturing related indicator values. However, interpretation and understanding of public values are considerably different between states and societies (Jørgensen & Bozeman, 2007). Such interpretations can differ from those that need to be implemented in a framework developed to evaluate Gov 2.0 initiatives in Victoria, Australia.

Therefore, to answer the study RQ systematically, this study needs to firstly find out whether the Victorian local governments are working towards creating public value. Secondly, if they are aiming to do so, what values do Victorian citizens perceive from their use of these initiatives and how they perceive them. These inquiries will be formulated as sub-research questions as follows:

a) What aims do government officials have in implementing Gov 2.0 initiatives to create public value?

b) What public values do citizens perceive from using Gov 2.0 initiatives?

c) How do citizens perceive public values from their use of Gov 2.0 initiatives?

In summary, the researcher draws on various topics in Information Systems and Public Administration fields as well as other insights from social media to enlighten relations between Web 2.0 and Gov 2.0 that inspire the creation of public value and government innovation. To adequately address the above issues, it is important to develop a framework to successfully and adequately evaluate the public value of Gov 2.0 initiatives within an Australian local government context. The next section will summarise the idea of Public Value, its main sources, and public value inventories to present an overview of the theoretical framework.
2.6 CHAPTER SUMMARY

This chapter aimed to discuss the literature against which this research project is set, mainly the development of e-government, and the public value concept and how it used to evaluate the performance of e-government. The chapter also critically reviewed existing frameworks developed to evaluate public value of e-government. The review of these frameworks shows that besides validity and reliability issues, they have significant shortcomings. For example, none of the frameworks have been developed on the basis of evaluating the public value of Gov 2.0 or developed to investigate public value created at local government level. Therefore, to adequately address the above issues, it is important to develop a framework to successfully and adequately evaluate the public value of Gov 2.0 initiatives in the Australian local government context.
Chapter 3: Theoretical Framework

3.1 THEORETICAL BACKGROUND

The use of the public value concept to assess public sector and Gov 2.0 initiatives is relatively new. This research mainly aims to investigate and assess the latter. In order to achieve the research target and objectives, a comprehensive theoretical framework is needed to provide a solid basis for conducting both quantitative and qualitative research. From a quantitative research perspective, the theoretical framework informs the development of a research survey questionnaire. From a qualitative research perspective, the theoretical framework helps to build the interview questions as well as allowing for the undertaking of thematic analysis around the interview data in a constructive way.

The theoretical framework has been designed in accordance with three theoretical concepts: (1) the concept of Public Value (Moore, 1995), (2) the main sources of public value creation (Kelly et al., 2002), and (3) public values inventories (Jørgensen and Bozeman (2007). As discussed earlier (see 2.3), these three concepts are useful and can be used as theoretical background for developing a theoretical framework to evaluate the public value of Gov 2.0.

The primary concept for supporting the proposed framework is Moore’s public value theory. He describes public value as that which the government creates for its people, and public managers should focus on creating public value by satisfying individual and collective desires. He states that “value is rooted in the desires and perceptions of individuals.” (Moore, 1995. p, 52).

Public value is regularly defined as the value created by the government for citizens (Moore, 1995; Kelly et al., 2002), and it is rooted, ultimately, in society and culture in individuals and groups (Melchior & Melchior, 2001). Therefore, taking into account a G2C perspective of e-government is essential in evaluating the public value of Gov 2.0. This study focuses on the potential public value created through the interactions taking place through Gov 2.0 initiatives from the citizens’ perspective (G2C), and does not focus on the other e-government interactions such as G2B.
The wider impact of e-government rests on its ability to deliver social and political values related to public service delivered (Cordella, 2007). New Public Management suggests that e-government can improve government efficiency, effectiveness and performance. Yet, the Public Value concept as developed by Moore (1995) suggests that e-government can deliver is social outcomes that match citizens’ expectations (Bonina and Cordella, 2009). If the impact of Gov 2.0 initiatives is evaluated through NPM prescriptions, which are highly weighted towards efficiency, effectiveness and performance the greater impact of the government use of Gov 2.0 initiatives will be neglected.

The second concept constitutes three main sources of public value creation: (1) development of public trust in government (Moore, 1995; Kelly et al., 2002; Kearns, 2004), (2) quality of public services delivered (Moore, 1995; Kelly et al., 2002; Kearns, 2004; O’Flynn, 2007; Karunasena & Deng, 2011), and (3) social outcomes (Kelly et al., 2002; Kearns, 2004; Karunasena & Deng, 2011).

The public sector can create value that can be truly valued by citizens in several ways (Kelly et al., 2002), for instance, the quality of public services delivered is driven by service availability, satisfaction levels with services, importance of services offered, fairness of service provision, and cost (Kearns, 2004). Trust, legitimacy and confidence in authorities are critical in the relationship between citizens and government and are essential for public value creation (Kelly et al., 2002). Outcomes comprise the development and sustainability of citizens’ common expectations (O’Flynn, 2007) of fundamental values in democratic nations of the collective ambition for example fairness, equity, equality (Moore, 1995), social cohesion, citizen involvement, and dialogue (Jørgensen & Bozeman, 2007).

The third concept is Jørgensen and Bozeman’s (2007) public value inventory. These authors classified public values into seven categories (constellations) and assigned public value sets to each category (see section 2.3): (1) values associated with the public sector’s contribution to society, 2) values associated with the transformation of interests to decisions, 3) values associated with the relationship between public administrators and politicians, 4) values associated with the relationship between public administrators and their environment, 5) values associated with intra-organisational aspects of public administration, 6) values associated with the behaviour of public-sector employees, and 7) values associated with the relationship between public administration and citizens.
In the Gov 2.0 environment, the literature suggests that many of the values included in these inventories are highly linked to the three main sources of public value creation reviewed earlier (public trust in government, quality of public services delivered, and the achievement of social outcomes). Thus, this study will use Jørgensen and Bozeman’s (2007) inventories and associated values by relating them to the main areas of public value as suggested in Gov 2.0 literature. The following section illustrates how these three theoretical concepts are linked, producing a theoretical framework for evaluating the public value of Gov 2.0.

3.2 THEORETICAL FRAMEWORK

The framework proposed for this research is based on the theoretical perspectives discussed in Chapter 2 and incorporates the two main concepts: public value and Gov 2.0. The framework indicators are derived from the public value inventories by Jørgensen and Bozeman (2007) and the literature on e-government evaluation models.

It is important to develop a framework to successfully and adequately evaluate the public value of Gov 2.0 to adequately address the aforementioned shortcomings and associated issues. Many of the values listed in Jørgensen and Bozeman’s (2007) inventory can be adopted from the public administration field for evaluating public value created through the use of Gov 2.0 initiatives, as shown in the proposed theoretical framework (figure 3.1).
Figure 3.1 Proposed theoretical framework for evaluating the public value of Gov 2.0

The above figure can be created by the development of public trust in government, quality of public services delivered, and the achievement of social outcomes. Each of these hypotheses will now be discussed.
3.2.1 Development of public trust

The development of public trust in government is one of the main sources of public value (Moore, 1995; Kelly et al., 2002; Kearns, 2004). Within Jørgensen and Bozeman (2007) public value inventories, the literature suggests there are 11 values that can contribute to public trust in government including: responsiveness (Tolbert & Mossberger, 2006; Gauld et al., 2009); user democracy (Goldfinch, 2009); citizen involvement (Christensen & Lægreid, 2005); self-development (Roberts, 2002); dialogue (Grabner-Kräuter, 2009; Theunissen & Wan Noordin, 2012); listening to public opinion (Yang, 2005); openness (Persson, 2000); professionalism (Misuraca, 2012); honesty (Ulbig, 2004); integrity (Keele, 2007), and accountability (Bozeman, 2002). In this study’s proposed framework, these values measure public value created in the development of public trust in government through the implementation of Gov 2.0 initiatives, as shown in figure 3.2 and discussed below.

![Figure 3.2 Evaluation of development of public trust in government through Gov 2.0](image)

**Responsiveness** is the level to which online services are delivered to citizens which inform them with a rapid response (Tan et al., 2008), and this determines the degree to which public institutions match the demands of their public (Jørgensen & Bozeman, 2007). Government can enhance citizen trust online by increasing dialogue with citizens and thereby increasing perceptions of responsiveness (Coleman & Gotze, 2001; Welch et al., 2005; Tolbert & Mossberger, 2006). Gov 2.0 can facilitate immediate and direct feedback and responsiveness similar to face-to-face interactions (Boyd & Ellison, 2007; Joinson, 2008). Gov 2.0 initiatives can also enhance the relationship between citizens
and government in policy-making processes which allow for additional participatory democracy as well as a robust democracy (Nabatchi & Mergel, 2010). Responsiveness is also explicitly linked to government transparency (La Porte et al., 2002), reflecting government willingness to provide citizens with information and services. Lack of transparency of government can be perceived by citizens as being unresponsive or unwilling to serve them (La Porte et al., 2002).

**User democracy** can be interpreted as “an institutionalized mechanism for feedback from users, which complements other forms of user feedback” (Andersen et al., 2012, p.6). Citizen practice of democracy online using Web 2.0 technologies is considered as re-empowering citizens (Mejias, 2004) and is linked to public trust in government (Goldfinch, 2009). For citizens to be empowered, they need to obtain information and work collectively with others (McClelland, 1975). Government use of Web 2.0 technologies assists the empowerment of citizens by offering information and suitable platforms to participate and engage with others. Web 2.0 is essentially about the ‘wisdom of crowds’, where the information shared and disseminated online is very easy and quick (Godwin, 2009). Gov 2.0 was initiated to provide citizens with an innovative role in public service delivery and governance activities through the use of social networking platforms (Osimo, 2008). Citizen dialogue on Gov 2.0 platforms is very important for boosting democratic enablement because it enhances the politicians’ degree of understanding of their constituents’ viewpoints (Meynhardt, 2009). Dialogue is one of the principles of Web 2.0 (Wigand, 2012) where Web 2.0 is mainly about removing citizen participation barriers, and user democracy is its main result (Cormode & Krishnamurthy, 2008).

**Citizen involvement** creates improved participation in the democratic practice of government (Cresswell et al., 2006) and this engagement is essential to government-citizen dialogue such as citizen involvement in local planning hearings in local governments (Jørgensen & Bozeman, 2007). The concepts citizen participation and citizen involvement are intrinsically linked (Isaías et al., 2012). Citizen participation is “the social process of taking part (voluntarily) in either formal or informal activities, programmes and/or discussions to bring about a planned change or improvement in community life, services and/or resources” (Bracht, 1991, p.478). Citizen involvement and participation enhance trust in their local councils and political parties (Christensen & Lægreid, 2005), and incorporates various forms of citizen activities in local
community problem-solving, including self-help groups. Citizen involvement and participation can make a significant contribution to improving citizens’ understanding of processes, enhancing the quality of decisions, promoting citizen empowerment and supporting democratic citizenship (Innes & Booher, 1999; Owens, 2011).

**Self-development** refers to “the empowerment of an individual’s abilities, skills, and knowledge, as that person augments and realizes his or her personal potential” (Savolainen & Kari, 2004, p. 416). Frissen (2005) stressed that the empowerment of users is one of the vital features of Web 2.0 technologies. User empowerment involves citizen empowerment (Misuraca, 2012). Empowering individuals through open dialogue is one of the main concepts behind Gov 2.0 (Sadeghi et al., 2012). Web 2.0 technologies implemented by government enable citizens to conduct a dialogue with community professionals and government officials, informing themselves and expressing their opinions. Citizen dialogue with public officials and politicians on Web 2.0 platforms supported with other features, such as accessible data and information, several accessible sources, and exchange of information and knowledge, can lead to citizen development.

**Dialogue** refers to “any negotiated exchange of ideas and opinions” (Kent & Taylor, 1998, p. 325). The relationship between trust and dialogue is extensively linked, while trust is crucial and necessary for dialogue (Theunissen & Wan Noordin, 2012), ongoing interactions and positive encounters, thus Gov 2.0 initiatives can improve the initial trust of users (Grabner-Kräuter, 2009). E-government initiatives are not only about an exchange of ideas and opinions (Kent & Taylor, 1998) or a way of understanding what citizens need or think, but it fosters a more meaningful understanding of the ways in which citizens think (Pieczka, 2011). Gov 2.0 initiatives changed the way citizens engaged in dialogue with government in order to resolve problems. This change was viewed as the government shifting from one direction to two-way directional dialogue with public officials paying more attention to citizens’ opinions and seeking their feedback (Wigand, 2012). Through continuous dialogue and sharing of values with citizens, government can plan for new services, innovative socio-economic solutions, and an improved quality of life (Glasco, 2012). The appreciative interactions developed during such dialogue, regardless of the groups involved, will help to develop trust and enhance relationships (Finegold et al., 2002). Government can enhance citizen trust
online by increasing dialogue with its citizens (Grabner-Kräuter, 2009; Theunissen & Wan Noordin, 2012).

**Listening to public opinion** is “responding more specifically to the opinion expressed in the media or in opinion polls.” (Jørgensen & Bozeman, 2007, P.364). Social media tools can be used as a means of communicating with different groups of citizens where government officials can listen, discuss, and monitor public opinions expressed about certain issues or services. Gov 2.0 initiatives allow government to experience on-going dialogue on a semi-public platform (Chadwick, 2008), post materials on social media (e.g. YouTube, Twitter, Flicker and Facebook) to establish public debate and consultation including links to related government Web pages or services to enrich the debate or discussion. The level of government listening to citizens’ expressed opinions can reflect citizens’ trust in government (Yang, 2005).

**Openness** is the only way to win trust (Persson, 2000). Jørgensen and Bozeman (2007) refer to the openness of government services as transparency. Openness indicates the degree to which government agencies show their decision-making processes and publish information and facts in a timely manner (Wong & Welch, 2004). Gov 2.0 initiatives make it possible for citizens to obtain a better picture of the performance of government. Furthermore, Gov 2.0 offers innovative means of openness through the enormous capability it offers for interaction and content sharing (Mergel, 2012). Openness impacts the improvement of relationships because it involves the readiness of partners to reveal and share sensitive data and information (Mayer & Salovey, 1993). This in turn increases citizens’ trust as they have an increased ability to access government information and consequently improve their perceptions of openness (Shim & Eom, 2008). Gov 2.0 is founded on the concept of providing citizens with an innovative role in public services, governance and content sharing (Osimo, 2008) and thus openness (Mergel, 2012). This can have an impact on citizens’ perceptions of their government’s openness (Wigand, 2012).

**Professionalism** within government implies that citizens can anticipate service delivery at a standard level of quality (Liff & Andersson, 2013). The ‘wisdom of crowds’ feature of social media can be a governmental professionalism driver, where well-informed citizens can contribute significantly towards government accountability. Citizens’ sharing of information and facts on social media can increase diffusion among citizens. This will force government officials to improve their policy and practice, and also to be
more accountable. Thus, Gov 2.0 initiatives (mainly social media tools) have significant potential to enhance government professionalism and consequently public trust in government (Misuraca, 2012). Gov 2.0 ‘wisdom of crowds’ feature can improve policy discussion and thus the level of government professionalism outcomes.

**Honesty** refers to “whether participants believe that the government agency performs its duties soundly, i.e. tells the truth.” (Grimmelikhuijsen, 2009, p.175) and involves the fundamentals of honesty (Guthrie et al., 1990). Citizen's perceptions of public officials’ honesty influence public trust (Ulbig, 2004). Citizens’ interaction with Gov 2.0 initiatives can monitor and evaluate the honesty of information published by government about its performance.

**Integrity** is defined as a discrete component of good character categorised by the consistency of words and actions (Palanski & Yammarino, 2007). Integrity in government is a fundamental value, especially in Gov 2.0 where the use of social media tools enable citizens to put pressure on governments to ensure they always put the interest of the public first. For example, integrity has been acknowledged as one of the main principals in the Open Government Declaration by the Open Government Partnership group (Open Government Partnership, 2011). Keele (2007) stressed that elected officials will gain their constituents’ trust if they can prove their integrity and meet their expectations.

**Accountability** “implies an obligation to explain to someone else, who has authority to assess the account and allocate praise or blame for what was done or not done” (Jones & Stewart, 2009. p. 59). The concept of accountability is very important in the government-citizen relationship (Bozeman, 2002). Governments can enhance citizen trust online by increasing the level of interaction with citizens and thereby raise perceptions of accountability (Bertot et al., 2010b). Accountability is highly linked to government’s clarity of the justification of its operations (Blagescu & Lloyd, 2006). Thus Gov 2.0 is extremely important in the way government justifies accountability to the public (Sadeghi et al., 2012). For instance, providing access to government data for citizens and the private sector generates a culture of accountability, and is also a factor for innovation and to generate value (Fyfe & Crookall, 2012).
3.2.2 Quality of public services

The quality of public services delivery is one of the key drivers of public value (Kelly et al., 2002; Kears, 2004). This area concerns the public value citizens perceive from the ‘technical functionality’ of the technology used to support and deliver Gov 2.0 services (Meynhardt, 2009). A previous study in public value by Meynhardt (2009) considered the public values related to technical functionality ‘instrumental-utilitarian dimension’ of public services as the main value. From Jørgensen and Bozeman’s (2007) public value inventories, literature suggests there are seven values that can contribute to the quality of public services delivered through Gov 2.0 including adaptability (Delone & Mclean, 2004), reliability (Delone & Mclean, 2004), stability (Berry, 1995), timeliness (Wixom & Todd, 2005), robustness (Zhang & Prybutok, 2005), friendliness (Papadomichelaki & Mentzas, 2009) and user orientation (Misuraca, 2012). In this study’s proposed framework, these values are used as indicators to measure the public value created in quality of public services delivered through Gov 2.0 initiatives as shown in figure 3.3 and discussed below.

Figure 3.3: Evaluation of quality of public service delivered through Gov 2.0

Adaptability refers to how easily technology can be changed to extend its utilisation (Pérez & Murray, 2010). The adaptability of the information system supporting the service contributes to the user’s perception of system quality (Delone & Mclean, 2004). In information systems, conditions such as ease of use, ease of learning, flexibility, and clarity of interfaces are essential for adoption (Gefen & Straub, 2000). One of the main advantages that differentiate Web 2.0 from previous technologies is the simplicity of its use (Cormode & Krishnamurthy, 2008). Web 2.0 also supports the changing of use conditions, such as when a citizen is moving between locations. Web 2.0 social platforms enhance its adaptability and survivability through interacting and integrating...
with other service systems (Vargo, 2008). Gov 2.0 initiatives associated with social media have inherited these features from Web 2.0 technologies. Furthermore, the popularity of using social media tools among citizens can increase their perception of the ease of Gov 2.0 initiatives.

**Reliability** is the level at which public services provided online are available in an accurate and trustworthy manner (Tan et al., 2008). Citizens should have confidence in the technologies and initiatives implemented by their government. Citizens increased confidence in their government can be achieved through reliable online services (Carter & Bélanger, 2005). The reliability of the information system supporting the service contributes to user’s perception of system quality (Delone & Mclean, 2004). Government services on Web 2.0 platforms and social media tools can be accessed at any place that has an Internet connection. Moreover, government services provided through Web 2.0 platforms and social media tools bring together both attributes of centralisation and decentralisation, meaning that citizens who cannot visit council’s offices for any reason (e.g. time poor, elderly, or disabled) are able to obtain the same services online. Simultaneously citizens who are travelling or working away from the council geographic area can access and obtain the same services.

**Stability** is related to continuity (Jørgensen & Bozeman, 2007), in that it is about the stability of social systems in retaining the information on social media sites in order to guarantee that information is available, correct, and up-to-date (Danis et al., 2009). Service continuity contributes to the user’s perception of service quality (Berry, 1995). Most Gov 2.0 initiatives are mainly proactive services, where citizen can get involved and take part in updating, editing and sharing content. This type of engagement from both sides (government and citizens) provides platforms with high interactivity generated by citizens who are interested in a particular topic. Web 2.0 technology features, such as social networking, social bookmarking, reputation supervision, and ratings, offer ways through which content can be easily navigated, shared, and managed by citizens. Thus, on Gov 2.0 platforms citizens use of features, such as content creation, can enhance the stability of social systems through developing a feeling of ownership among users which in turn stimulates ongoing use and growth of content (Danis et al., 2009). Consequently, Gov 2.0 social platforms remain up-to-date and active compared to other static sites that can be updated only by government authorised officials.
**Timeliness** describes the degree to which the information is sufficiently updated and accessible to the user within an adequate timeframe (Aschoff et al., 2007). Because of the active role of citizens in Gov 2.0 services, the value of timeliness can be perceived through many activities. For example, citizens’ support and contribute to information update processes (Bouzeghoub, 2004). Aschoff et al. (2007) propose that citizens can contribute to: (a) the time it takes for information to become available for the user (publication speed), (b) the speed of change of the referred objects in a certain domain (volatility), and (c) the revision cycle. Furthermore, social media tools, such as Twitter and Facebook, have the ability to disseminate information among citizens in a very short time frame, which can contribute to the perception of service timeliness.

**Robustness** Jørgensen and Bozeman (2007) have clarified that the robustness of public value was adopted from Information Technology. Therefore, we will reuse these values to evaluate the technological aspect of public service quality of Gov 2.0 initiatives. Robustness refers to “the ability of a system to maintain function even with changes in internal structure or external environment” (Callaway et al., 2000). Within Gov 2.0 environments, citizens can perceive the robustness of government services when they are confident they can connect to government officials and obtain services 24/7.

**Friendliness** refers to the simplicity with which citizens can access, use, navigate and work on a website and content (Lu et al., 2009). User friendliness is an extremely important measure and good for all online service application design. The main focus of any web page design in general is to be easy to follow, clear, and quick to be loaded by users (Yen, 2007). Simplicity of use is an essential factor to determine user-friendliness. Citizens can perceive value by the ease of accessibility to government services through Gov 2.0 initiatives and through the ease of access to services and information, based on their preferences.

**User orientation** refers to “the user-centricity of e-government information and services that is directly related to the satisfaction of users” (Karunasena & Deng, 2010. p, 289). With the capabilities of Gov 2.0 platforms, governments are aiming towards user-centric and user-driven governance instead of silos and government-centricity. The new platforms and tools equip governments with the ability to provide proactive self-services, service personalisation, and the development of personal service pathways (Osimo et al., 2010). Citizens can perceive the value of citizen-centric services through their direct use of Gov 2.0 initiatives and online tools such as Facebook, Twitter,
Citizens can participate in policy development in areas of personal interest where they may have knowledge to contribute. They can join or setup virtual communities based on their interests and to gather supporters around their ideas about government services and policies. These examples and approaches illustrate how Gov 2.0 can assist public services to provide additional public value by enhancing the quality of services provided through boosting information, choices and customer-oriented services (Kelly et al., 2002).

3.2.3 Achievement of social outcomes

Achievement of social outcomes is another significant driver of public value (Kelly et al., 2002; Kearns, 2004). Within Jørgensen and Bozeman’s (2007) public value inventories, the literature suggests there are five values that contribute to social outcomes including: fairness (Alesina & Angeletos, 2003; Karunasena & Deng, 2012); equity (Kelly et al., 2002); social cohesion (Hariche et al., 2011); public interest (Sreedharan et al., 2011); and common good (Meynhardt, 2009). In this study’s proposed framework, these five values are used as indicators to measure the public value created in the achievement of social outcomes through Gov 2.0 initiatives, as shown in figure 3.4 and discussed below:

![Figure 3.4: Evaluation of the achievement of social outcomes through Gov 2.0](image)

**Fairness** perception in management processes by government officials is an essential aspect when citizens’ evaluate the performance of the governmental system (Erlingsson et al., 2013). The observed fairness associated with citizen interaction with government has a significant effect on citizens’ acceptance of decisions made by government officials (Esaiasson, 2010). Citizens can perceive value from being treated fairly by their government using Gov 2.0 initiatives in different ways; for instance, citizens can perceive the value of fairness through having fair and equal access to government services for all citizens (Accenture, 2008). Citizens can perceive fairness through
participatory activities by feeling they have a fair opportunity to express their own thoughts and to have them heard by others including government. On Gov 2.0 platforms, citizens have the same privileges to create, comment, edit, and share information. Gov 2.0 initiatives can offer equal opportunity for all citizens from different backgrounds to participate and contribute in activities such as submit content, share information, retrieve information, answer enquiries and questions, and become involved in active interaction with other citizens and government.

In the e-government field, the value of fairness is always associated with the service quality (e.g. Kearns 2004) to assess the fairness of the public services provided online. In a Gov 2.0 context, the fairness value can be related to wider areas than service quality. For example, it can also be related to citizens’ perceptions of their ability to interact with public figures using Gov 2.0 initiatives, or to their ability to have their voice and opinion heard by others including the government. Alesina and Angeletos (2003. p, 26) argued that fairness can be defined as “a metaphor for a social norm that supports a socially preferable outcome”. Therefore, this study will relate and use the fairness value as an indicator for the achievement of the social outcomes area.

**Equity** is one of the Western concepts of constitutionalism (Jacucci et al., 2006) where authorities should assure the same treatment of all citizens. Kelly et al. (2002) argue that services provide a vehicle for delivering public value through actual service encounters for users or clients, and the distribution of equity and value for citizens. Some scholars refer to equity as equal and non-discriminatory conduct with citizens. However, for the context of this study, equity refers to the ability of government to customize service provision in order to satisfy the requirements of the various categories of citizens that they serve (Andrews & Van de Walle, 2012). Equality is generally associated with categories such as gender, race, colour, religion or belief, political views, sexual orientation, age, disability or national, social and/or ethnic origin. Governments can enhance public equity through Gov 2.0 initiatives that can be perceived by all citizens as a real value. For instance, in terms of the availability of its applications and services on mobile phones, the ability to ensure that every group in society has the same opportunity to be represented in online debates, and by ensuring that all citizens receive the same information and have the same opportunity for their voice to be heard.
**Social cohesion** consists of a sense of belonging and solidarity for citizens with various backgrounds (Cheong et al., 2007) including features such as trust in others, and willingness to assist other citizens. Social cohesion is linked with community homogeneity and contributes to social outcomes (Stanley, 2003). The Canadian federal government social cohesion board defines social cohesion as “the ongoing process of developing a community of shared values, shared challenges and equal opportunity within Canada, based on a sense of trust, hope and reciprocity among all Canadians” (quoted from Jenson, 1998, P.4). In this sense, Gov 2.0 initiatives can contribute to the community’s social cohesion. Government can create social cohesion utilising social media platforms by offering citizens opportunities to join virtual interest groups via their local government sites (Hariche et al., 2011). Likewise, government can use social media tools to invite citizens to attend and participate in social events within their local community. These types of activities supported by Gov 2.0 initiatives can bring citizens together, open new channels and help breakdown social and cultural barriers.

**Public interest** refers to “those outcomes best serving the long-run survival and wellbeing of a social collective construed as a ‘public’” (Bozeman, 2012, P.7). Government 2.0 initiatives such as social media tools support citizen dialogue and crowdsourcing. Such features allow citizens to express and share their needs, choices, and shape decisions and collective interest, considered as public interest. Citizens’ use of Gov 2.0 initiatives has changed the concept of public interest from the aggregation of individual interests to dialogue about shared values (Kim & Robinson, 2012). Government 2.0 initiatives utilising social media tools support citizen dialogue and crowdsourcing. Such features allow citizens to express and share their needs, choices, and shape decisions and collective interest, considered as public interest. This will yield better policy decisions and thus better outcomes for all society (Irvin & Stansbury, 2004).

**Common good** means the wellbeing, participation and contribution of all citizens in society (Maina, 2011), and government must generate or contribute to the common good (Jørgensen & Bozeman, 2007). In their public value inventories, Jørgensen and Bozeman ignored the criticism about insubstantial and worthless common good and public interest concepts. The authors argue that it does not matter how diffuse these concepts might be, they do include specific characteristic expectations, and governments have to serve society in general, not only groups with particular interests.
The ability of social media tools to facilitate citizens’ dialogue and debate will encourage “individual participants to engage in collective thinking about the common good. Individuals will not stop at stating their preferences, but will go on to re-shape those preferences in terms of consensus values for ecosystem goods and services” (Wilson & Howarth, 2002, p. 439) and this will guarantee socially fair outcomes.

3.2.4 Theoretical framework hypothesis

In addition, as Jørgensen and Bozeman (2007) have concluded, “public value is not governmental” (2007, p. 372). The proposed theoretical framework (see figure 3.5) suggests that in the environment of Gov 2.0 citizens can contribute significantly in public value creation together with their local governments. This contribution is mainly sourced from public value areas identified by Moore (1995), Kelly et al. (2002) and Kearns (2004) (i.e. development of public trust in government, quality of public services delivered, and the achievement of social outcomes), and can be assessed through them. Based on the earlier discussion on how Gov 2.0 can contribute to the development of the three main areas of public value, this study offers the following hypotheses:

**H1:** The public value of Gov 2.0 is reflected by the value of the development of public trust in government through Gov 2.0 services provided.

**H2:** The public value of Gov 2.0 is reflected by the value of the quality of public services provided through Gov 2.0 platforms.

**H3:** The public value of Gov 2.0 is reflected by the value of the social outcomes achieved through Gov 2.0 services provided.
The development of public trust in government will be measured through citizens’ perceptions of responsiveness, user democracy, citizen involvement, self-development, dialogue, listening to public opinion, openness, professionalism, honesty, integrity, and accountability. The quality of public services delivered will be measured through citizens’ perceptions of adaptability, reliability, stability, timeliness, robustness, friendliness, and user orientation. The achievements of social outcomes will be measured through citizens’ perceptions of fairness, equity, social cohesion, public interest, and the common good as shown in figure 3.5. Table 3.1 summarises the theoretical framework dimensions and indicators that lead to the development of the study hypothesis and survey questionnaire.
Table 3.1 A summary of the dimensions and indicators of the theoretical framework

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicator</th>
<th>References</th>
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<tbody>
<tr>
<td><strong>Development of public trust</strong></td>
<td>Responsiveness</td>
<td>(West, 2004; Tolbert &amp; Mossberger, 2006; Decman, 2007; Gauld et al., 2009)</td>
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<td></td>
<td>User democracy</td>
<td>(Goldfinch, 2009)</td>
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<td></td>
<td>Citizen involvement</td>
<td>(Christensen &amp; Lægreid, 2005)</td>
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<td></td>
<td>Self-development</td>
<td>(Roberts, 2002; European Commision, 2006; United Nations, 2010)</td>
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<td></td>
<td>Dialogue</td>
<td>(United Naions, 2005; Grabner-kräuter, 2009; Theunissen &amp; Wan Noordin, 2012)</td>
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<td></td>
<td>Listening to public opinion</td>
<td>(Yang, 2005; Chadwick, 2008)</td>
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<td></td>
<td>Openness</td>
<td>(Persson, 2000; Shim &amp; Eom, 2008; Anderson, 2009)</td>
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<td></td>
<td>Professionalism</td>
<td>(Misuraca, 2012)</td>
</tr>
<tr>
<td></td>
<td>Honesty</td>
<td>(Ulbig, 2004)</td>
</tr>
<tr>
<td></td>
<td>Integrity</td>
<td>(Keele, 2007)</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
<td>(Bozeman, 2002; Bertot et al., 2010b)</td>
</tr>
<tr>
<td><strong>Quality of public services</strong></td>
<td>Adaptability</td>
<td>(Delone &amp; Mclean, 2004)</td>
</tr>
<tr>
<td></td>
<td>Reliability</td>
<td>(Delone &amp; Mclean, 2004)</td>
</tr>
<tr>
<td></td>
<td>Stability</td>
<td>(Berry, 1995; Danis et al., 2009)</td>
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<td></td>
<td>Timeliness</td>
<td>(Bouzeghoub, 2004; Wixom &amp; Todd, 2005; Aschoff et al., 2007)</td>
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<td></td>
<td>Robustness</td>
<td>(Callaway et al., 2000)</td>
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<tr>
<td></td>
<td>Friendliness</td>
<td>(Carrrzales et al., 2008; Papadomichelaki &amp; Mentzas, 2009)</td>
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<td></td>
<td>User orientation</td>
<td>(Misuraca, 2012)</td>
</tr>
<tr>
<td><strong>Achievement of social outcomes</strong></td>
<td>Fairness</td>
<td>(Alesina &amp; Angeletos, 2003; Karunasena &amp; Deng, 2012)</td>
</tr>
<tr>
<td></td>
<td>Equity</td>
<td>(Smith, 2001; Kelly et al., 2002; West, 2004; Karunasena &amp; Deng, 2010)</td>
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<tr>
<td></td>
<td>Social cohesion</td>
<td>(Hariche et al., 2011)</td>
</tr>
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<td></td>
<td>Public interest</td>
<td>(Sreedharan et al., 2011)</td>
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<td></td>
<td>Common good</td>
<td>(Meynhardt, 2009)</td>
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This chapter is designed to develop a theoretical framework for this study. The framework proposed in figure 3.1 resulted from a broad literature review of public value and Gov 2.0. The literature suggests that the use of Gov 2.0 initiatives (mainly social media tools by Victorian local government) can contribute significantly to the main areas of public value: a) development of public trust in government, b) quality of public services delivered, and c) the achievement of social outcomes. The theoretical framework represents a starting point for understanding public value phenomena from the point of view of citizens who use Gov 2.0 initiatives implemented by Victorian local government and for assessing how citizens perceive value from their use of these initiatives. A theoretical framework is developed based on theoretical perspectives of public value areas as determined by Moore (1995), Kelly et al. (2002) and Kearns (2004). These perspectives were matched to applicable public values listed in Jørgensen
and Bozeman’s (2007) public values inventories. The framework sets the basis for planning, and also applying quantitative and qualitative measures for this study. From a quantitative research perspective, the theoretical framework helps select the most appropriate local governments to implement the research and further, to develop a benchmark to base the evaluating process against. At the same time it directs the development of the survey questionnaire. From a qualitative research perspective, the theoretical framework assists to build the interview questionnaire as well as allowing for the undertaking of thematic analysis around the interview data in a constructive way.
Chapter 4: Research Methodology

4.1 INTRODUCTION

The previous chapters aggregated the literature and conceptualised the public value of Gov 2.0 initiatives from the citizens’ point of view. This chapter will explain the methodological approach used for exploring **how Gov 2.0 initiatives contribute towards public value creation**. A sequential multiphase mixed methods strategy was preferred for undertaking this research through a pragmatic philosophical worldview. A pragmatic worldview combined with the theoretical framework detailed in the previous chapter will assist with data collection and analysis, as well as discovering how citizens perceive value from using Gov 2.0 initiatives.

The next section (4.2) presents the research approaches used in this study that provide a discussion on philosophical perspectives adopted by this research and describes the research design. Section 4.3 provides a detailed discussion of the research strategy. Section 4.4 discusses the research context including the development of e-government at Australian government levels: federal, state, and local councils. This section also highlights the current situation of e-government maturity levels in Australia compared with other nations around the globe. In addition, this chapter also explains the sampling selection process in section 4.5. Followed by an explanation of how the sequential multiphase mixed methods strategy is implemented in the study in section 4.6. Section 4.7 presents a summary of the data analysis applied in this study. Reliability and validity are discussed in sections 4.8 and 4.9 respectively. Furthermore, ethical considerations are illustrated in section 4.10, followed by the chapter summary.

4.2 RESEARCH APPROACHES

Creswell (2009) identified three forms of approach that can be used by the researcher that reflect different philosophical worldviews including quantitative, qualitative and mixed methods. The author uses a framework for research design to explain how the researcher’s philosophical worldview assumptions, strategies of inquiry, and research methods intersect (see figure 4.1).
4.2.1 Philosophical perspectives

Defining the appropriate philosophical position for this research is the initial step in determining the relevant research methodology and methods in order to achieve the research aim and to answer the research inquiry. Research philosophy can be defined as the development of the research background, research knowledge and its nature (Saunders et al., 2007). The research philosophy chosen directs the researcher in developing the philosophical assumptions as well as to select appropriate tools, instruments, participants, and methods for implementing the research (Denzin & Lincoln, 2000). Within this perspective, the consideration of epistemological assumptions is most applicable. Epistemology refers to our beliefs regarding knowledge, the way knowledge and understanding are obtained, and challenges the investigator to consider the legitimacy of obtained knowledge is (Klein et al., 1991).

There are different classifications that exist for classifying philosophical positions. However, typically there are four worldview philosophies including post-positivism, social constructivism, advocacy/participatory, and pragmatism which define the usage of quantitative, qualitative and mixed methods (Creswell, 2009).

The post-positivism worldview is also known as positivist research, empirical science, and positivism, and it is related to quantitative research (Creswell, 2009). Furthermore, it is a philosophy in which “causes probably determine effects or outcomes” where the causes that influence the outcome need to be identified and assessed (Creswell, 2009, p.
7). Positivism research represents the traditional form, embedded in Information Systems research (Hirschheim, 1985).

A social construction worldview is related to interpretive research and it is always considered as an approach to qualitative research, and holds the assumption that “individuals seek understanding of the world in which they live and work” (Creswell, 2009, p. 8). Interpretive research assumes that knowledge of reality is socially constructed, interpreted by the researcher rather than discovering it, and thus, it should not be understood separately from the social actors who created that reality (Orlikowski & Baroudi, 1991). Interpretive research, where individual’s views are gathered and tested till a coherent interpretation is reached, often leads to in-depth knowledge about the phenomenon being investigated (Creswell, 2009).

The pragmatic worldview is another research philosophy position that “arises out of actions, situations, and consequences” and opens the door for researchers to use multiple methods, different worldviews, and different assumptions as well as different forms of data collection and analysis (Creswell, 2009, p. 10). Pragmatism philosophy does not limit the researcher to a particular method or worldview. Instead, it focuses on the most effective way to investigate a topic (Arnon & Reichel, 2009). Furthermore, it makes it possible for the investigator to utilise a selection of research techniques to comprehend the issue investigated (Brewer & Hunter, 1989). This flexibility in using different research methods and views provides a richer understanding of a research topic (Mingers, 2001). The use of pragmatism philosophy has been considered an appropriate approach for conducting research within the Information Systems discipline (Klein et al., 1991; Galliers, 1992). Due to the nature of PhD research, it is appropriate to utilise a pragmatism paradigm as a theoretical perspective for this exploratory research.

4.2.2 Research design

Utilising the pragmatism worldview, the researcher uses both quantitative and qualitative approaches to understanding the research problem investigated (Creswell, 2009). Qualitative research “involves an interpretive, naturalistic approach to its subject matter” (Denzin & Lincoln, 1994, p. 2), “attempting to make sense of or to interpret, phenomena in terms of the meaning people bring to them” (Denzin & Lincoln, 1994, p. 4). Domegan and Fleming (2007) state that due to limited knowledge about the investigated topic; qualitative research is usually used where there is uncertainty
regarding dimensions and characteristics of the problem to discover and to explore problems around the issue investigated by utilising ‘soft’ data and obtaining ‘rich’ data (Domegan & Fleming, 2007). Conducting interviews is the most frequently used method within the qualitative approach; interviews are mainly employed to acquire data about how individual experiences are developed (Denzin & Lincoln, 1994). The analysing of data gathered through interviews is to determine themes and patterns to build a comprehensive explanation of the circumstance investigated, in addition to identifying several interpretations of individual experience (Neuman, 2006; Creswell, 2009).

Quantitative methods seek to acquire numeric data of individual perspectives and behaviours about evaluating and validating certain theories in different circumstances (Creswell, 2009). Quantitative data are often used to point out elements where worthwhile to carry out deeper qualitative research (Ulmer & Wilson, 2003). The main objectives of the quantitative approach are: to describe, to compare and to attribute causality (Stainback & Stainback, 1988). Quantitative research often makes use of pre-determined surveys to gather hard data to statistically examined in order to examine the accumulated data to address the study inquiry (Creswell, 2009).

However, both quantitative and qualitative methods have their successes and failures. There are three main distinctions between qualitative and quantitative methods including (a) explanation and understanding as the purpose of the inquiry, (b) the personal and impersonal role of the researcher and, (c) knowledge discovered and knowledge constructed (Stake, 1995, p. 37). Other authors highlight other differences. For example, Lincoln and Guba (1985) state that while a deductive, quantitative study needs a hypothesis before the investigation begins, in a inductive qualitative study, the hypothesis is not required.

Greene et al. (1989) highlight the positive aspects of mixed-method investigation. These include 1) Triangulation: the reliability of results acquired via various investigation methods is enhanced, 2) Complementary: the outcomes of a particular technique inform and improve the outcomes extracted from other techniques and vice versa, 3) Development: additional methods may become recognisable, and 4) Initiation and expansion: a wider selection of queries might be shaped, since both techniques present a different point of view.
A mixed methods strategy integrates the actual strengths associated with both quantitative and qualitative methods (Östlund et al., 2011). It can be used to examine a theory through the process of knowing the diverse elements within the theory and setting up connections amongst variables, as well as to explore the causes associated with these connections (Woolley, 2009). One example is multiphase mixed methods where the researcher can conduct several mixed methods focusing on a collective objective (Creswell, 2013). The multiphase mixed methods approach is useful for evaluation research where “these projects may go back and forth between quantitative, qualitative, and mixed methods studies, but they build on each other to address a common program objective” (Creswell, 2013, p, 228). Due to the capacity of a mixed methods approach and the exploratory nature of this study, this research uses a multiphase mixed methods approach.

There are certain implementation issues related to a mixed methods approach that need to be considered including (Morgan, 1998; Creswell & Plano Clark, 2007) a) sequence of the data collection and analysis, b) weighting choices: the importance or weight given to quantitative and qualitative methods, c) and mixing choices: when and how mixing occurs. The choices associated with these issues are addressed in the next section.
4.3 RESEARCH STRATEGY

A multiphase mixed methods approach as discussed will be employed in this study. This approach is employed in study which is situated in the Victoria, Australia corresponding with Stake's definition of an instrumental case study, “where the focus of the research is upon providing an insight into the issue” (1995, p. 3). Further, a mixed methods approach can be implemented using three types of inquiry strategies including sequential mixed methods, concurrent mixed methods, and transformative mixed methods (Creswell, 2009). This study utilises the sequential mixed methods strategy as detailed in the research methods and procedures in figure 4.2. This allows for in-depth understanding of how Gov 2.0 initiatives contribute to public value creation from a citizen’s perspective.

Initially, the researcher evaluated the maturity of all Victorian local government websites to understand each council’s maturity and implementation level of Gov 2.0 initiatives. This evaluation was conducted to select the most appropriate local governments for data collection.

After the researcher selected four Victorian local governments for inclusion in this study, the research was conducted in three phases following the sequential exploratory strategy (Creswell (2009). Phase One was semi-structured interviews with local government elected officials and administrators to understand government aims toward public value creation. Phase Two was a survey questionnaire with end users (citizens), to identify public values perceived by citizens from their use of Gov 2.0 initiatives, and to understand the relationship between these values and the main components of public value creation (trust, service quality, and social outcomes). Phase Three was semi-structured interviews with citizens to obtain an in-depth understanding of their experience and the value they perceived in using e-government services.
4.3.1 Timing choice

Timing choice is about whether qualitative and quantitative methods are employed in sequence (one after another) or concurrently (parallel) (Tashakkori & Teddlie, 1998; Creswell & Plano Clark, 2007). In the concurrent choice, both qualitative and quantitative data are collected and analysed at the same time. Conversely, in the sequential research, qualitative and quantitative data are collected and analysed in sequence in two phases, where the second phase builds on the result of the previous phase (Creswell & Plano Clark, 2007). Creswell (2009) suggested that the sequential strategy is characterised by the collection and analysis of quantitative data in the first phase to inform the next qualitative phase. This strategy is useful when unpredicted results emerge from the quantitative phase (Morse, 1991; cited in Creswell, 2009).
In this research, a sequential strategy is adopted due to the reason stated earlier: both areas (public value and Gov 2.0) are relatively new, and the data that emerges from the initial stages could not be predicted. Furthermore, the main aim of this research is to investigate and assess the public value of Gov 2.0 initiatives in the Victorian local government. The sequential design uses the results gained from each phase, and also helps the researcher to handle any unexpected results that might emerge from the first phase. After the researcher decided on timing, the second issue is weighting each method.

4.3.2 Weighting choice

Weighting is the second issue influencing design results when priority is given to qualitative or quantities method in a given research study (Creswell, 2009). In the sequential design the weight is typically given to qualitative data.

However, there are two options for weighting, either to give both methods equal weight or unequal weight (Creswell & Plano Clark, 2007). The given priority depends on factors such as researcher interest, research audience, and what the researcher wants to emphasise in the research (Creswell, 2009).

In this study, the emphasis is placed on qualitative methods. This choice is influenced fundamentally by the study aim, which is to investigate and assess the public value of Gov 2.0 initiatives in the Victorian local government from the citizens’ point of view. Furthermore, as discussed in Chapters 2 and 3, the development of assessment frameworks for Gov 2.0 from the public value perspective is limited. This limits our knowledge about the relationship between these values and the main components of public value as defined by the literature. In this particular circumstance, qualitative method is more essential in terms of in-depth understanding of the phenomenon and incorporating knowledge towards theoretical foundations. Thus the weighting choice for this research is to give priority to the qualitative method employed in the third phase where citizens will be interviewed through open-ended interviews.

4.3.3 Mixing choice

Mixing choice is the third issue influencing the study design concerning how the quantitative and qualitative data relate to each other. In other words, when and how the qualitative and quantitative data are mixed using the mixed methods approach (Creswell
& Plano Clark, 2007). Creswell (2009) suggested four types of data mixing: a) **mixing** – the data from both methods possibly combined on one end of the continuum and kept distinct on the other end, or combined in some manner between the two extremes, b) **connected** – the data from the analysis of the first phase is connected to the collection of data in the next phase, c) **integrating** – the data of both methods collected concurrently and combined by transforming the qualitative themes into counts and comparing them with the descriptive quantitative data, and d) **embedding** – the investigator embeds the secondary form of data collected (e.g. quantitative) within the large study method form of data (e.g. qualitative).

In this study, the results analysed from the quantitative data (second phase) need to be connected to the qualitative data (first phase) to assist the researcher in planning the interview questionnaire (third phase). This way of mixing data will assist in answering the research questions outlined in section 1.2.1, and also to build knowledge about the investigated phenomenon, gradually basing each stage of work on the previous stages to cover the breadth of knowledge about the topic. The connected type of data mixing will give the researcher the ability to improve the knowledge about the evaluation indicators used in the quantitative phase. Furthermore, it will allow for deeper investigation in the qualitative phase on how citizens perceive the values that shown to have high contributions to public value creation in the qualitative phase.

In summary, this section has described the researcher’s approach to the research design including timing, weighting, and mixing choices. These choices were informed by the research aim, research questions, and nature of the public value phenomenon in a Gov 2.0 environment. This research is designed to be sequential, connected, qualitative-dominant research where the result of each phase informs the next.

### 4.4 CONTEXT OF THE CASE

The Australian government realised the importance of e-government early on. In December 1997 the Australian Prime Minister, John Howard indicated that by 2001 “all appropriate services would be delivered electronically” (Dunleavy et al., 2006, p. 46). This initiative peaked in 1999 and gained Australia an international reputation as one of the early leaders in the e-government field (Clift, 2002; Accenture, 2003). To sustain its international position, the Australian government released its online strategy in 2000,
followed by its new service agenda ‘2006 e-Government Strategy’ (AGIMO, 2006). The new service agenda has identified four strategic goals: 1) meeting users’ needs, 2) establishing connected service delivery, 3) achieving value for money, and 4) enhancing public sector capability (AGIMO, 2006).

The use of the Internet has become a normal daily activity for many people in developed countries and modern societies (Gibson et al., 2010). According to the Australian Bureau of Statistics (ABS), the percentage of Australian households with access to the Internet at home has continued to increase, from 64% in 2006–07 to 79% in 2010–11. Nearly three-quarters of Australian households now have broadband Internet connection (Australian Bureau of Statistics, 2011). The increase in access to the Internet has created an expectation that more information should be available online. This expectation has been fostered by significant increases in online social network use as reflected in the statistics on social media use. There were more than 845 million monthly active users, for example, on Facebook at the end of December 2011 (Facebook, 2012), about 200 million on Twitter (Twitter blog, 2011), and over 3 billion videos are viewed on YouTube every day (YouTube, 2012). Social media is becoming the main channel for many people to access information.

The AGIMO (2012) report ‘Australians’ use and satisfaction with e-government services’ shows significant increases in the use of a number of communication technologies compared with previous years, including social media and social networking sites (AGIMO, 2012). Australians’ uptake of social media and social networking sites increased across all age groups from 36% in 2009 to 47% in 2011 (AGIMO, 2012).

The increase in use of social media tools by Australians reflects the popularity and significance of social media (Lipowicz, 2011; Social Media News, 2011; AGIMO, 2012; Cowling, 2012). This increased usage provides the Australian government at all levels with an opportunity to utilise and invest in these tools, where not only citizens can create and form social media networks, but government agencies can build their own online communities too.

The capabilities and promises of Web 2.0 technologies, including social media tools, were the main motivation behind the reform of the Australian national innovation system. In order to develop recommendations for improving the innovation system the
Minister for Innovation, Industry, Science and Research released a report on the Review of the National Innovation System, ‘Venturous Australia – Building Strength in Innovation’ in September 2008 (Cutler, 2008). The report discussed areas such as: human capital, innovation in the public sector, government procurement, and governance issues (Gruen, 2009). The recommendations of this review report impacted directly on the work of the Government 2.0 Taskforce later in 2010. The report included recommendations regarding the use of Web 2.0 technologies to improve the innovation system, which has directly enhanced the deliberations of the Government 2.0 Taskforce.

The ‘Venturous Australia – Building Strength in Innovation’ report was followed by Australian government administration reform. The reform began when the Australian Prime Minister, the Hon. Kevin Rudd, announced the formation of an advisory group on Reform of Australian Government Administration in September 2009 (Reform of Australian Government Administration, 2009). On 1 October 2009, the advisory group released a discussion paper entitled ‘Reform of Australian Government Administration: Building the World’s Best Public Service’. The paper provides information on contemporary challenges facing Australia in the 21st century in government administration, information on current government performance, and outlines possible reform directions (Reform of Australian Government Administration, 2009). The advisory group’s paper pointed out that group discussion will be framed by the government’s stated expectations of the public service (Commonwealth of Australia, 2009), as follows:

1. Having a values-driven culture that retains public trust.
2. Providing high-quality, forward-looking and creative policy advice.
3. Delivering high-quality programs and services that put the citizen first.
4. Providing flexible and agile responses to changing realities and government priorities.
5. Being effective and efficient in all operations.

This paper was followed by the Moran review in November 2009, which intended to create the ‘world’s best public service’ mission for the Australian government. According to the AGIMO’s (2009) report, the Internet has become a common means for public service take-up in Australia, and it has even become the channel most often used.
Two in five citizens are contacting the government via the Internet. Furthermore, four in five citizens would choose to contact the government online instead of using the phone, if they were given a choice. This section has provided an overview of the development of e-government in Australia. The following sub-sections will discuss in more detail the development of e-government at federal, state and local government levels.

4.4.1 E-government development at the federal level

Web 2.0 platforms, especially social media tools, are extensively adopted by the public sector around the globe (Noveck, 2009). Not surprisingly Australian federal government agencies have widely embraced these new tools. The AGIMO’s (2012) report shows that the federal government realises the significance of the potential advantages of using such tools. The report also shows that federal government agencies have widely embraced Web 2.0 and social media tools, especially Twitter, Facebook, and RSS. Almost one hundred Australian federal agencies already have official Twitter accounts including the Australian Bureau of Statistics (ABS), around fifty agencies have Facebook pages, and about 364 use news feeds via RSS. Consequently, Australian citizens’ use of social networking sites to contact all tiers of government increased from 36% in 2009 to 47% in 2011. This growth is mainly driven by citizens who are under 55 years of age. More than half of all Australians interact with government using a variety of technologies. Gov 2.0 offer government new opportunities to improve communication between public service delivery agencies and public policy and service planning areas (Commonwealth of Australia, 2009). The Australian government reacted to this increased uptake of new technologies in its Government 2.0 Taskforce report in 2009.

The Australian Government 2.0 Taskforce report by Gruen (2009) distils the key theme of Government 2.0 in one word ‘Engage’, stressing the need and the importance of engagement of public agencies and public servants with citizens using the tools and capabilities of collaborative Web 2.0. As shown in figure 4.3 the Gov 2.0 Taskforce agenda mainly involve three pillars: Leadership, policy and governance to achieve necessary shifts in public sector culture and practice.

1) Leadership, policy and governance to achieve necessary shifts in public sector culture and practice.
2) The application of Web 2.0 collaborative tools and practices to the business of government.

3) Open access to public sector information (PSI).

Figure 4.3: Three aspects of Australian Government 2.0 (Government 2.0 Taskforce)

In its Leadership pillar, the report argued that the public figures need to form or join existing online communities to improve government service delivery, policy, and regulation and help government become more informed, responsive, innovative, and citizen centric. The report also pointed out the need to open public sector information to citizens and businesses as an invitation to Australians to engage with government, innovate, and for generate public value. However, the report also recognises that it is necessary to change current public service principles of hierarchical mechanism and direction in order to take advantage of Gov 2.0.

In the engagement pillar of the use of Web 2.0 as collaborative tools, the Australian Gov 2.0 Taskforce report pointed out that the use of these new technologies and approaches as a new method to serve and interact with citizens can enhance government openness, accountability, responsiveness, and efficiency. Furthermore, it will close the gap between government and citizens through a more collaborative relationship, resulting in social and economic benefits. Government 2.0 provides public servants with a great opportunity to share and develop their expertise through a network of knowledge with other professionals, and engage and respond to the community. Public servants and citizens can work together to solve complex policy and service delivery issues. The taskforce encourages the Australian public sector to allow their public servants and staff to engage with their customers, citizens, and communities of interest using Gov 2.0 platforms (Gruen, 2009).
The third pillar, Open access to public sector information, asserts that Australian public information must be truly open and if not, there are good reasons to the contrary. This means that by default public information should be: a) free, b) based on open standards, c) easily discoverable, d) understandable, e) machine-readable, and f) freely reusable and transformable.

Both the Advisory Group on ‘Reform of Australian Government Administration’ and the Management Advisory Committee project on ‘Advancing Innovation in the public sector’ considered Government 2.0 as a key to the delivery of government reforms such as promoting innovation, and making the Australian government public service world’s best. Also, the Government 2.0 Taskforce report stated that the implementation of government 2.0 in Australian government can: a) enhance democracy, b) improve service quality, responsiveness, agility, and efficiency, c) cultivate and harness the enthusiasm of citizens, d) free the huge social and economic value of information and content held by government, e) become a source of innovation, and f) make government policies and services more responsive to citizens’ needs and concerns.

For the Australian government, Gov 2.0 is the fundamental factor to achieve substantial national aims (Gruen, 2009) in the national innovation agenda, especially towards a more innovative public sector; in the reform of Australian Government Administration to become world’s best public service; and for the service delivery agenda within the Department of Human Services. The taskforce also proposed that its recommendations and principles should be implemented at all levels of Australian government (federal, state, and local) to make the most of its massive National Broadband Network (NBN) investment.

Engaging with citizens using new technologies and approaches leads to new guidelines and regulations. The Australian Public Service Commission is responsible for providing guidance to Australian public sector agencies (employees’ rights and obligations in making public comments). Following the temporary protocols for online media participation released in 2008, in November 2009, the Commission released the Circular 2009/6: Protocols for online media participation. The Circular provided guidance to Australian public sector agencies (for employees participating in online media), recognising opportunities and potential benefits that Web 2.0 offers for public servants to open up government to citizens and communities of interest.
However, in January 2012 the Commission released new guidelines for Australian public sector employees (Circular 2012/1) with significant amendments to Australian Public Sector Values and Code of Conduct in Practice (Australian Public Service Commission, 2012).

### 4.4.2 E-government development at state and local levels in Victoria

At state level, Victoria is a good example of the development of e-government in Australia. The Victorian government was one of the first to adopt e-government alongside federal initiatives in the Australian Tax Office, Centrelink and the Health Insurance Commission (Dunleavy et al., 2008). In Victoria, the responsibility for ICTs was assigned to Multimedia Victoria (MMV). In its report issued by the Department of Innovation, the Victorian government highlighted Web 2.0 as a tool that “gives a 21st century spin on Abraham Lincoln's adage: ‘Government of the people, by the people for the people’” (Department of Innovation, 2009, ph. 26).

Local governments are a vital part of government and their significance is that they are seen as the tier of government that is closest to the people. Governments can use Web 2.0 applications to: enhance democratic processes and strengthen civil society; working from the bottom up via engagement of stakeholders through open consultations; tailoring services to meet their needs; share their interests and experiences; and provide opportunities to engage them in policy design and implementation (VIC eGovernment Resource Centre, 2011). Even though local government is the third tier of government, it is considered to be a separate entity that resembles federal or state government in many ways, with the exception that it carries out government activities applicable to a smaller, ‘local’ area (Department of Transport Planning and Local Infrastructure, 2014). To leverage the opportunities of Web 2.0 in transparent government, strengthen citizen participation, and build capability, the Victorian government introduced its Government 2.0 Action Plan.

The Victorian Government 2.0 Action Plan offers an organised approach to the use of Web 2.0 applications and tools such as wikis, blogs, and social networking sites. The plan focuses on four main areas (VIC eGovernment Resource Centre, 2010): 1) driving adoption of Web 2.0 in the Victorian public sector (leadership), 2) engaging communities and citizens (participation), 3) opening up government (transparency), and 4) building capability (performance). These areas contain 14 initiatives aiming at
engaging and empowering citizens, making government more transparent, and improving government capability.

The first key area (leadership) is about the establishment of a taskforce to guide the implementation process and provide participation and collaboration forums, started with the implementation of a Gov 2.0 projects in every public sector department by the end of June 2011. This area also includes the implementation of new Victorian government privacy legislation and records that address issues related to how public servants interact with social media.

The second key area (participation), seeks to involve citizens and communities to construct more targeted and effective government policies and services by implementing new initiatives using the latest Web 2.0 tools (VIC eGovernment Resource Centre, 2010) including:

- Have Your Say (an online consultation website about government programs and services);
- Public Records 2.0 (an online space to allow community participation access to state public records);
- Regulatory Government Wiki (an online information repository to improve the operational performance of regulators); and
- Citizens Centric Services (involving the community in service delivery and policy development).

The third key area (opening up government) includes three significant initiatives: a) Victorian Public Sector Hack Days (an event where the developers of public sector websites and people with ideas gather to build applications using Victorian public sector data), b) data.vic.au (an online access point for Victorian public sector information) and, c) Information Management Framework (with standards and measures for sharing data). The Victorian government expects that the release of public sector information and primary data to researchers, government website developers and designers, and to creative people for re-use will drive innovation, new services, and bring many significant social and economic benefits.

The fourth main area (building capability) is about managing the risks associated with social media and the development of resources and toolkits to support the uptake of new
technologies in the public sector, by using Web 2.0 tools for consultations and best practice. Following the above discussion of the development of e-government in three tiers of Australian government, the next section will give an overview of the maturity level of these developments.

4.4.3 Current situation of Australian e-government maturity

Several Australian public organisations are already well recognised internationally for their implementation of Gov 2.0 approaches, for example, the Government Information Licensing Framework (GILF) project, a collaborative project between the Queensland Government and Queensland University of Technology Law Faculty (QUT). This project is acknowledged globally as a frontrunner in the area of what suggested and validated the use of Creative Commons (CC) licences to support sharing of Public Sector Information (PSI).

Besides, the Australian Government’s Spatial Data Access and Pricing Policy 2001, the Australian Bureau of Statistics were known for granting permission for others to freely use and remix the data they hold. The National Library of Australia (NLA), National Archives of Australia (NAA), the National Museum of Australia (NMA) and Sydney’s Powerhouse Museum were the first public agencies that engaged with citizens online by allowing them to contribute their time and content (Gruen, 2009). Furthermore, there are some Government 2.0 initiatives at state and local levels such as: smart phone Apps (e.g. Snap Send Solve), comprehensive council social networking strategies (e.g. Mosman Council), crowdsourcing photos and stories (e.g. Mosman Memories of My Street), council online TV (e.g. Frankston City Council TV).

To sum up, the United Nations (2012) E-Government Survey 2012 report ‘E-Government for the People’ reflects and summarises the actual position and situation of the development of e-government in Australia. The report highlighted that the top twenty countries ranked in this report were developed countries with high income economies. The report shows that Australia continues to be the leader in the Oceania region and is considered one of the global leaders in e-government development, ranked 12th globally in the e-government development index. In terms of online service delivery where the report measures how much services government deliver online, ranked Australia 9th globally. The citizen inclusion and e-participation indicator ranked Australia in 8th position. Providing citizens with draft regulations in a downloadable
format and seeking their suggestions and comments was the common public consultation method for the Australian government.

Australia is leading countries that rank high in multichannel service delivery such as Bahrain, Canada, Denmark, France, the Netherlands, Qatar, the Republic of Korea, etc. These countries provide services on numerous channels, for instance traditional ones supported by intermediaries, free access to public services through kiosks or WiFi, and mobile-based channels such as mobile Web or applications.

The United Nations E-Government Survey 2012 shows that the Australian Government has been one of the early adopters of a one-stop portal. The government portal provides citizens various interactive services ranging from birth certificates to registering on the electoral roll. Its services can be accessed in three different ways: service type (paying a bill, applying for a grant); life event (giving birth); or location (of government agency or department). The Australian national portal (http://australia.gov.au) is a good example of Australia e-participation. This portal provides several features that allow citizens to engage and interact with the Commonwealth in the policy making process. The ‘Have Your Say’ section on the main portal home page is linked to different consultation segments where citizens can provide their suggestions and notes to the particular ministry. This public consultation section contains blogs and Twitter pages that provide links to several government blogs, pages and Twitter accounts. Each ministry also provides citizens with feedback and outcomes of previous online consultations (United Nations, 2012).

The recent United Nations e-government 2014 survey report ‘E-Government for the Future We Want’ shows that Australia has developed from 12th to 2nd position in the global E-Government Development Index (United Nations, 2014). This is due to Australia’s international high ranking and its advances in the e-government field, especially in areas such as the maturity of online services delivery, the implementation and use of Web 2.0 technologies, and government intent and efforts to create public value for citizens. The researcher has found that Australia, particularly Victoria, is an appropriate place to conduct such research. All these factors combined can help the researcher conducting the research in suitable environments.
4.5 SAMPLE SELECTION

With respect to the research aim, the researcher needs to ensure that participants are ‘information rich’ (Patton, 2002). Therefore, these participants can provide maximum insights into the research inquiry (Frankel & Devers, 2000) from both local government officials and citizens. As previously stated, the research aim of this study is to investigate and assess the public value of Gov 2.0 initiatives in Victorian local government.

However, there are no available studies or literature about the maturity levels of Victorian local governments that assist the researcher in selecting appropriate local governments for data collection. This research is linked to the selection of ‘information rich’ participants (Patton, 2002) and the triangulation strategy of data collection (Decrop, 1999). The absence of any reliable study about the maturity levels of local government indicates the challenge faced in selecting an adequate sample for this study that effectively represents Gov 2.0 implementers and users in Victoria, Australia. In order to overcome these challenges, the researcher conducted a comprehensive evaluation.

In Australia the Commonwealth has three levels of government: the federal government based in Canberra; six states and territories each with their own parliament; and government agencies and local government (councils). The state of Victoria is divided into metropolitan and rural regions with 5.8 million (Department of Transport Planning and Local Infrastructure, 2014). There are 79 local government areas (councils), and 31 of these areas make up the Melbourne metropolitan region. Melbourne, the capital of Victoria, is home to around 70% of all Victorians (Department of Transport Planning and Local Infrastructure, 2014). The rural region, containing 38 local government areas, hosts around 30% of Victorians. A comprehensive analysis was conducted for all Victorian local government websites to evaluate the presence of social media tools. This process empirically examined the Gov 2.0 maturity level of Victorian local government. The main objective of this process is to provide the researcher with a clear picture of the maturity of Gov 2.0 in Victorian local governments and to select the appropriate Councils based on the maturity level achieved including their implementation level of Gov 2.0 initiatives. The list of Victorian local governments was based on council listings and maps provided by the Department of Planning and Community

A website analysis method is used in this investigation. Such analysis is widely used in e-government research to examine services, features and functions of government websites (West, 2004). Website investigations focused on the availability of social media tools. Evaluations were performed from 1 March 2010 to mid-July 2011 on all Victorian council websites. To evaluate these websites, the researcher compiled a table of social media tools including Twitter, Facebook, RSS, YouTube, Flicker and RSS. These tools scored ‘1’ if they appeared on the local government website and ‘0’ if not.

The evaluation process provided the researcher with a clear picture as to how mature Victorian local councils Gov 2.0 are. This helped the researcher to target local governments that had approved implementation of Gov 2.0 initiatives.

Four local governments were selected from the first six highly ranked councils for data collection.

4.6 IMPLEMENTATION OF SEQUENTIAL MIXED METHODS

After four Victorian local governments were selected for inclusion in this study, the research was conducted in three phases following the sequential exploratory strategy suggested by Creswell (2009) and depicted in figure 4.4.

![Figure 4.4: Sequential multiphase mixed methods design](image)

**Phase 1: Interviews with local government elected officials and administrators**

Interviews were the key source of data collection. Once a full appreciation of Victorian local government websites has been gained, and the researcher had obtained a clear picture about the maturity level of Gov 2.0 initiatives implemented by Victorian local government, Phase 1 began. This phase is qualitative in nature, and the data were collected through face-to-face semi-structured interviews with local government elected
officials and administrators (including mayors, councillors, executives, coordinators, and operators). The aims of this phase were to extend knowledge of local government motivations, visions, and goals to provide a better understanding of government aims toward public value creation.

Data collection involved selecting individual participants from four different local governments. Within each council the researcher selected officials who were involved in e-government adoption processes from different government levels (decisional, managerial, executive, and operational). Twenty participants were interviewed. Data collection from such diverse levels contributed to more knowledgeable conclusions (Scheepers & Scheepers, 2003). The interview questions are attached (see Appendix D).

**Phase 2: Survey questionnaire with end users (citizens)**

Data collection during this phase was conducted by using the online survey questionnaire. The themes suggested by public value literature and those identified from Phase 1 interviews have been used as input for the development of the survey questionnaire. Distribution of the survey questionnaire was through local government websites and social media tools. The surveys were advertised on council websites and through social media to potential participants. The survey questionnaire was used with the sole purpose to gather as much information as possible with regards to citizens’ perceptions about the values they perceive from their use of Gov 2.0 services. Participants are citizens who use targeted local government e-services. Local governments involved in this research agreed to invite end users to participate in surveys using an invitation statement placed on their website home page and sent to their residents using council social media tools linked to the surveys (see Appendix E). However, informed consent to participate further in the interviews (Phase 3) was attached to the survey questionnaire.

**Phase 3: Interviews with end users (citizens)**

The final phase of this study was semi-structured interviews with citizens who use local government Gov 2.0 services. This phase aims to understand in-depth the public value phenomena from the citizens’ point of view, and how they perceive and evaluate Gov 2.0 services. Involving the same participants in both quantitative and qualitative phases is recommended by Creswell and Plano Clark (2011). The participants expressed their interest to participate in further interviews in their survey questionnaire reply. Selecting
participants from the same citizens who participated in the quantitative phase is very beneficial for relating and comparing findings from both phases (Creswell & Plano Clark, 2011). Following the previous procedures helped the researcher to validate quantitative findings and carry out in-depth interviews to explore the public value of Gov 2.0 initiatives.

Initial results obtained from the survey questionnaire were used to develop interview questions (see Appendix H). Semi-structured face-to-face interviews were carried out with informants’ consent. In this phase, individuals were interviewed about their perceptions and experiences of Gov 2.0 usage. In total, 19 participants (citizens who use local government Gov 2.0 initiatives) were interviewed. In general, the interviews took between 45 minutes to an hour and they were recorded with the participants’ permission and anonymity was preserved in publication.

4.7 DATA ANALYSIS

As described in section 4.6, this research was conducted in three phases following the sequential exploratory strategy. The first phase’s data was collected through interviews with local government elected officials and administrators. The second phase’s data was collected using the online survey questionnaire with end users (citizens), and the third phase’s data was collected using interviews with citizens who use local government Gov 2.0 services.

The analysis of the first phase’s data followed the method outlined by Strauss and Corbin (1990) to code the qualitative data including open coding, axial coding, and selective coding. The analysis of the second phase’s quantitative data used Structural Equation Modelling (SEM) to test and validate hypotheses. The SEM analysis was conducted using Statistical Package for Social Sciences (SPSS) software, version 21 and the Analysis of Moment Structures (AMOS). The analysis of the third phase’s interview data used theory-driven analysis to develop the codes and themes from words, meanings, and expressions found in the interviews’ transcripts. Again, the three stages of coding by Strauss and Corbin (1990) was followed.

Each phase’s data analysis procedures will be discussed in detail in chapters 5:7 (Phase 1 in chapter 5 section 5.3, Phase 2 in chapter 6 section 6.4, and Phase 3 chapter 7 in section 7.3).
4.8 RESEARCH RELIABILITY

Research reliability means that other investigators (or even the same study at another time utilising the same methods) can acquire the same results as those from previous research (Johnson et al., 2006). Having the correct identification, and complete explanation of the methods employed to gather and analyse data are important factors for replicating research (LeCompte & Goetz, 1982). As described earlier (see sections 4.2 and 4.3), the research outlined the methods utilised in this study, and how the research developed with regard to timing, weighting, and mixing selections, which are reported and described clearly. Within the quantitative phase, the indicators used to assess the public value and its components were discussed in section 3.2. While the process of sampling selection was discussed in section 4.5, survey development procedures, data collection and analysis utilised in the quantitative phase are explained in more detail in sections 6.2, 6.3, and 6.4 in Chapter 6.

For qualitative phases, the interview strategies and the data analysis procedures are discussed in Chapters 5 and 7. The audio recording of interviews can efficiently enhance the quality of data and thus improve the reliability of the qualitative study (LeCompte & Goetz, 1982). In the qualitative phases, all 39 interviews were audio-recorded by the researcher with the participants’ permission and transcribed. The researcher also paid considerable attention to minimising errors and bias by playing a neutral role (Creswell, 2009) plus employing main questions, followed by sub-questions. Consistent coding is an important and useful factor to enhance reliability in qualitative research (LeCompte & Goetz, 1982; Seale, 1999). Therefore, the researcher utilises a standardised coding technique to add to the reliability of the qualitative phases during the data analysis process, discussed in more detail in section 7.3.
4.9 RESEARCH VALIDITY

Creswell and Clark (2010) define the validity of mixed methods research as the use of suitable strategies to deal with potential issues in data collection and analysis, as well as combining results to draw conclusions. Creswell and Clark (2010) determined some possible threats that can influence validity in mixed methods research: a) bias between one data collection and another, b) acquiring non-comparable results, c) gathering data inappropriately from participants, d) utilising unsuitable techniques to compare findings, e) investigator’s bias for the results of one of the methods, and f) insufficient trustworthiness of data analysis. This study has utilised a considerable number of procedures to handle these types of validity risks.

Firstly, selecting local governments through comprehensive sampling procedures discussed earlier allow the researcher to access the most appropriate individuals for all research phases (Silverman, 2001). For example, the selection of highly ranked local governments in terms of the use of social media tools to implement the study allows for selecting the right sample for interviews in Phase 1. In Phases 2 and 3 sample selection involves the relevant residents who use these particular local government websites and social media, especially given the researcher has distributed online surveys on websites and social media of the four targeted local governments. Secondly, this research was conducted across four different local governments in Victoria. These local governments have similar online services and features, which are helpful in terms of improving generalisability of qualitative studies (Bryman, 2003). Thirdly, the collection of data on the same topic through multiple sources and participants can improve research validity (Parry, 1998).

In this thesis, the researcher attempts to investigate and assess the phenomenon of public value using multiphase and methods, from different locations in Victoria. The research also conducted a comprehensive website and social media use analysis by all Victorian local governments to select the most appropriate local governments for data collection, and then targeted the government officials and administrators within these local governments who are involved in the implementation and daily service delivery. In this research, 39 interviews were conducted and around 213 surveys were completed in total.
4.10 ETHICAL CONSIDERATIONS

Ethics approval for this study was granted by the Swinburne University Higher Research Committee (SUHREC) under the reference number 2011/105 (see appendix I) in three separate phases which began on 22 June 2011 and ended on 31 March 2013. All research activity was undertaken under the auspices of Swinburne University and conformed to Swinburne and external regulatory standards, including the National Statement on Ethical Conduct in Human Research and with respect to secure data use, retention and disposal.

Consent letters were attained from all councils involved in this study, and all individuals interviewed by the researcher. Interviews were carried out at a mutually accepted public location. Ethics related documents (ethics approval, invitation letters, consent forms, and explanatory statements) are attached in the appendixes.

4.11 CHAPTER SUMMARY

This chapter has outlined the research philosophy, approaches, research methodology and methods, and the design used in the study, including procedures of timing, weighting, and mixing choices, data collection and analysis methods, and data validity and reliability issues. The research design for this study was a case study that was analysed largely through adopting a multiphase mixed methods approach. Further, several stages and phases were elaborated in this study. The sampling procedures were also discussed including the justifications of conducting this research in different local governments in Victoria, Australia.
5.1 INTRODUCTION

In Chapters 2 and 3, public values that the government may generate among citizens through the implementation and use of Gov 2.0 initiatives were identified. After identifying potential values to be examined and building the theoretical framework for evaluation, Phase 1 (interviewing local government elected officials and administrators) was implemented. The four selected local governments (councils) provide the most advanced Gov 2.0 services, which are similar across these councils. As previously mentioned, they are among the six highest ranked councils in Victoria (see section 4.5).

The objective of Phase 1 is to extend knowledge about local government missions, visions, and goals to provide the researcher with a better understanding of government aims toward public value creation. Thus, this chapter illustrates the results of qualitative exploration based on interviews with relevant participants who answered the first research question: **What aims do government officials have in implementing Gov 2.0 initiatives to create public value?** In this phase, the researcher investigated the following: (a) What are the main motivations behind the implementation of Gov 2.0 initiatives? (b) Are local governments aiming to create public value as it has been identified in the study framework? (c) If local governments are aiming to create public value, what values do they aim to create? Thus semi-structured interviews were used to discover government objectives in creating public value through employing real-life situations.

While this chapter (Phase 1) investigates government aims toward public value creation, the other later two chapters (Phase 2 in Chapter 6 and Phase 3 in Chapter 7) are examining the citizens’ perceptions of public value created through Gov 2.0 initiatives. Therefore, this chapter is considered an entity in itself by discussing its findings separately. The outcomes of this chapter will be used to inform Phases 2 and 3 in the discussion in Chapter 8.
This chapter is structured as follows: section 5.2 reports on the data collection procedures. This is followed by illustration and discussion of data analysis in section 5.3. Sections 5.4 and 5.5 provide the findings from Phase 1 interviews with public officials and administrators. Section 5.6 discusses the results obtained followed by the chapter summary.

5.2 DATA COLLECTION PROCEDURES

Conducting interviews is one method of data collection (Yin, 2003). Interviews are helpful for in-depth understanding of the meanings that participants attach to their answers (Arksey & Knight, 1999). This phase’s interview questions were designed to be semi-structured interviews. The interview procedures follow the interview instruments recommended by Bryman (2004), as discussed in the following sub-sections.

5.2.1 Targeting potential interviewees

Rubin and Rubin (2005, p. 64) argue “interviewees should be experienced and knowledgeable in the area you are interviewing about”. The researcher considered the importance of choosing the person who is in the relevant position for this research inquiry within the examined organisation. Table 5.1 shows the number of participants within codes assigned to each government level.

<table>
<thead>
<tr>
<th>Participants’ Role</th>
<th>Number of Participants</th>
<th>Participants Code No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decisional level</td>
<td>7</td>
<td>2, 5, 8, 9, 10, 19, 20</td>
</tr>
<tr>
<td>Managerial level</td>
<td>4</td>
<td>1, 12, 14, 16</td>
</tr>
<tr>
<td>Executive level</td>
<td>3</td>
<td>3, 7, and 17</td>
</tr>
<tr>
<td>Operational level</td>
<td>6</td>
<td>4, 6, 11, 13, 15, 18</td>
</tr>
</tbody>
</table>

Data collection from diverse levels contributes to more informed conclusions from the study (Scheepers & Scheepers, 2003). Within each of the four councils involved, the researcher selected officials who were involved in Gov 2.0 implementation plus daily operating processes from different government levels (decisional, managerial, executive, and operational). Twenty participants were interviewed face-to-face as detailed in table 5.2. Interviews were conducted with elected officials and administrators (including mayors, councillors, executives, coordinators, and operators).
Table 5.2: Participants’ codes, characteristics and roles

<table>
<thead>
<tr>
<th>Participant Code</th>
<th>Position</th>
<th>Level</th>
<th>Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manager</td>
<td>Managerial</td>
<td>C</td>
</tr>
<tr>
<td>2</td>
<td>Councillor</td>
<td>Decisional</td>
<td>C</td>
</tr>
<tr>
<td>3</td>
<td>Executive</td>
<td>Executive</td>
<td>C</td>
</tr>
<tr>
<td>4</td>
<td>Web Coordinator</td>
<td>Operational</td>
<td>C</td>
</tr>
<tr>
<td>5</td>
<td>Councillor</td>
<td>Decisional</td>
<td>C</td>
</tr>
<tr>
<td>6</td>
<td>Communications Coordinator</td>
<td>Operational</td>
<td>A</td>
</tr>
<tr>
<td>7</td>
<td>Director Corporate Services</td>
<td>Executive</td>
<td>C</td>
</tr>
<tr>
<td>8</td>
<td>Mayor</td>
<td>Decisional</td>
<td>C</td>
</tr>
<tr>
<td>9</td>
<td>Councillor</td>
<td>Decisional</td>
<td>D</td>
</tr>
<tr>
<td>10</td>
<td>Mayor</td>
<td>Decisional</td>
<td>D</td>
</tr>
<tr>
<td>11</td>
<td>Communications Adviser</td>
<td>Operational</td>
<td>D</td>
</tr>
<tr>
<td>12</td>
<td>Manager</td>
<td>Managerial</td>
<td>D</td>
</tr>
<tr>
<td>13</td>
<td>Information Services</td>
<td>Operational</td>
<td>B</td>
</tr>
<tr>
<td>14</td>
<td>Manager</td>
<td>Managerial</td>
<td>B</td>
</tr>
<tr>
<td>15</td>
<td>Communications Coordinator</td>
<td>Operational</td>
<td>B</td>
</tr>
<tr>
<td>16</td>
<td>Manager Information Technology</td>
<td>Managerial</td>
<td>A</td>
</tr>
<tr>
<td>17</td>
<td>Executive Manager</td>
<td>Executive</td>
<td>A</td>
</tr>
<tr>
<td>18</td>
<td>Team Leader eCommunications</td>
<td>Operational</td>
<td>A</td>
</tr>
<tr>
<td>19</td>
<td>Councillor</td>
<td>Decisional</td>
<td>A</td>
</tr>
<tr>
<td>20</td>
<td>Councillor</td>
<td>Decisional</td>
<td>A</td>
</tr>
</tbody>
</table>

The selected interviewees were considered to be those who have a comprehensive knowledge about council strategies, policies, and online services. They have also been involved in various elements of the implementation and adoption process of Gov 2.0 in their respective councils. Likewise, they are most likely to be involved in strategic decisions on these aspects and can provide the richest and most precise answers to this phase’s inquiry.

5.2.2 Designing interview questionnaire

The interview questionnaire was designed to answer the first research question: What aims do government officials have in implementing Gov 2.0 initiatives to create public value? A semi-structured interview questions was designed to cover all sub-topics proposed in the framework as a potential contributor to public value creation of Gov 2.0. The interview questions functions as a framework to ensure the researcher will gain the most comprehensive and detailed answers from interviewees as proposed by Arksey and Knight (1999).

The interview questions (see Appendix D) was asked for each interviewee, and worked as a reminder of the main research concentration areas, and it was used flexibly. Likewise, it was designed to motivate interviewees to “reconstruct their experience and
to explore their meaning” (Seidman, 1998, p. 76). It is worthwhile to point out that the interview questions included some questions which are not in the focus of this research, but they were included to help the researcher understand the environments surrounding the operational and implementation process in Victorian local government.

5.2.3 Gaining access to interviewees

After the researcher obtained consent from interviewees invited to participate in the study, and received ethics approval from Swinburne University Human Research Ethics Committee (SUHREC) to conduct the study, the researcher began collecting contact details from council websites and contacting potential participants as discussed in section 5.2.1.

These participants were invited to participate in interviews mainly through e-mails with an invitation to participate letter attached (see Appendix A) and explanatory statement (see Appendix B). The attachments included a brief explanation about the researcher’s background, the research project, possible benefits of conducting the study, terms of involvement and participants’ rights and confidentiality. Full contact details for the researcher, the project supervisors and Swinburne’s Human Research Ethics Committee (SUHREC) were also attached to the explanatory statement. Some interviews were arranged through council officials (e.g. Media and Communications Coordinators) after the researcher had provided them with a list of names and positions of targeted interviewees.

Once the researcher received positive feedback from a potential interviewee indicating her/his willingness to be involved in the interviews, the research questions (Appendix A) was sent to them prior to interview. Interviewee personal information confidentiality was reemphasising to the interviewee prior to the interview to encourage the participants to reflect on their knowledge and experience of the Council’s implementation of Gov 2.0. Also, all participants were asked to complete and sign the consent form prior to interview as shown in Appendix C.

5.2.4 Conducting interviews

Twenty face-to-face interviews were conducted in total with elected officials and administrators from local governments at different levels and positions as described earlier in section 5.2. Generally, the interviews took between 45 minutes to an hour and
all were audio recorded with the participant’s permission; the interviews were carried out at mutually accepted locations including Council offices, Council libraries or cafés. The researcher designed and conducted the interviews starting with preparations, an introduction, asking the interview questions, concluding the interview and asking interviewees for any further information they might want to add. This practice helped the researcher to expand questions as suggested by Rubin and Rubin (2005) including main questions, follow-up questions, and probing questions. The semi-structured questions encouraged the interviewees to talk about their experience and views and aims regarding the implementation of Gov 2.0. The main questions were asked with follow-up questions for obtaining in-depth and more detailed answers, elaborating main themes. In some cases, when the researcher felt the participant’s answer was too short or incomplete, probing questions were asked (Rubin and Rubin (2005) to get the full story.

In general, the procedures of data collection were effective as this resulted in a substantial amount of new data about local governments’ views towards public value creation through the implementation of Gov 2.0 initiatives. The next section will address data analyses.

5.3 DATA ANALYSES

In order to ensure familiarity with the data, the researcher began data analysis initially by familiarising himself with the data. The researcher transcribed interviews immediately after they had been conducted. The notes taken were also read many times after each interview. This process helped the researcher to recall the ideas while the interview was still fresh in his mind, revise questionnaire and reformulate follow-up questions, especially in the first interview. After several interviews had been conducted, the researcher reaches the reflection stage including comparing the data, contrasting and linking it with the literature and proposed theoretical framework.

Based on Strauss and Corbin (1998), qualitative data analysis consists of three steps in coding: open coding, axial coding, and selective coding. The early learning process developed through familiarisation and reflection stages helped the researcher to improve ‘constant comparison’ (Glaser, 1992) and subsequently the coding process (Strauss & Corbin, 1998). Likewise, recorded notes from the researcher’s initial thoughts,
similarities and differences, and the theoretical framework were used together throughout the course of data analysis.

In order to achieve the previously stated research objectives, the researcher investigated and read each interview transcript line-by-line. In the open coding process, the key public value areas (public trust, service quality, and social outcomes) and the values identified in the study framework were traced, highlighted, and labelled where located in interview transcripts. Codes were attached to the notes taken during interviewing, familiarization, and reflection stages. In the Axial coding process, the researcher illustrated the participants’ view of relationships between key public value areas and values (Strauss & Corbin, 1998). These values and their relationship suggested by the theoretical framework of this research study were very helpful in the coding process. The following sections of this chapter will present the findings from Phase 1.
5.4 LOCAL GOVERNMENT AIMS TOWARD PUBLIC VALUE CREATION

It is important to understand the full picture on how Victorian local governments think and work towards the creation of public value. Understanding government aims and views will inform and facilitate the later study phases (phase 2 and 3) that evaluate citizens’ perceptions of public values. In order to get a comprehensive answer on whether Victorian local governments are aiming to create public value, the researcher designed the interview questions to include three questions investigating: a) local governments’ motivations behind the implementation of Gov 2.0 initiatives, b) strategies implemented for using Gov 2.0 initiatives, and c) how governments are evaluating their efforts in implementing and using these initiatives. Victorian governments’ views on these areas are illustrated in the next three sub-sections.

5.4.1 Motivations behind the implementation of Gov 2.0 initiatives

Identifying the motivations behind local government implementation of Gov 2.0 initiatives is the first area to be investigated. In their responses to the researcher’s question about whether they think it is important to use social media to communicate and serve their residents, and if so, why it is important, public officials and administrators agreed about the importance of serving and communicating with citizens using Web 2.0 technologies, mainly social media tools.

However, while all participants agreed on the importance of using these new technologies, some of them emphasised the uncertainty of the benefits of using such technologies saying, for example, “the answer is yes, but we’re still in the space at the moment of working out how beneficial it can, or can’t be” (P 3). Moreover, the term ‘value’ was expressed in some conflicting answers when interviewees related it to their realisation of the value of using new technologies. For example, P 5 stated that the value of using these new technologies are realised among council officials, mainly councillors, affirming “a lot of people [council officials and administrators] see the value. Councillors are the ones that are pushing for it” (P 5). Another participant expressed a lack of understanding the value that could be delivered through these tools, saying “we see examples of some businesses getting great value from them, but I do wonder about the cost-benefit trade-off” (P 7).
Furthermore, participants expressed a considerable number of factors motivating them to support the implementation and use of Web 2.0 technologies. However, participants have not mentioned the term ‘public value’ in all interviews conducted. Yet, they have mentioned ‘value’ occasionally. P 4 thought that by communicating and delivering services to residents without requiring them to drive to the council offices is a value in itself, saying “yeah, to not have to come in to see us, or to have to speak to someone. That’s definitely value for them” (P 4). P 7 considers providing citizens with a greater way to access council services by integrating social media tools with existing council e-services is a way of adding value: “Yes. What we’ve learnt is that while we’ve improved the systems, where you really add value is through the integration, and then opening up the accessibility. Accessibility is not just the Web” (P 7). P 8 thinks that by saving council residents time when waiting in a telephone queue (by using e-services including social media tools) is valued by residents because they are not so frustrated. P 8 remarked:

I think they value the fact that they don’t have to get in a telephone queue line. They value the fact that they don’t have to get those answering things while they’re waiting in a queue, those messages about council services… Yes, yes, it’s not as frustrating as the telephone. (P 8)

Participants highlighted a number of motivators that were behind their local governments’ decisions for implementing Gov 2.0 initiatives to serve and communicate with residents. These motivators were grouped into meeting expectations, communication, convenience, engagement, social, usefulness, and openness, as illustrated and summarised in table 5.3.
Table 5.3: Victorian local government motivations behind the implementation of Gov 2.0 initiatives

<table>
<thead>
<tr>
<th>Groups</th>
<th>Motivations</th>
<th>Participants’ views</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Meeting expectations</td>
<td>To meet citizens’ expectations</td>
<td>“It is vital... because it is expected. I think they expect the services to be provided online; they expect their local council to have a website they engage with to access information, and make some transactions; yes, it is a bit about expectation” (P 6)</td>
</tr>
<tr>
<td></td>
<td>As a response to the pressure to follow the other councils who implemented these tools</td>
<td>“I do acknowledge that there is a pressure that people feel to keep up, and I think we probably succumb to that sometimes, and I know our CEO and councillors have mentioned this at times. ‘All the other Councils are doing it so we should too’” (P 15)</td>
</tr>
<tr>
<td>2. Communication</td>
<td>The preferred method of communication between residents</td>
<td>“Well, the answer to that is yes because that’s also the preferred style for a lot of other people. So, therefore, why wouldn’t you?” (P 10)</td>
</tr>
<tr>
<td></td>
<td>Another avenue of communication</td>
<td>“Yes, because it’s another avenue to communicate with residents. Although some people won’t access the website, they will access social media... It’s very important for things like disasters; that’s very, very important, if there’s a major disaster here” (P 13)</td>
</tr>
<tr>
<td></td>
<td>Seen as a quick means of communication, especially during the consultation process</td>
<td>“Yeah, I think it’s a lot quicker, and I think it’s very successful in mobilising people very quickly. I think it would be a successful thing to do in regards to consultations.” (P 2)</td>
</tr>
<tr>
<td>3. Convenience</td>
<td>To provide them with a more convenient means of service</td>
<td>“It is important to understand your community and your residents, and offer them communication and business channels that suit their needs” (P 17)</td>
</tr>
<tr>
<td>4. Engagement</td>
<td>To find out what residents think about their council</td>
<td>“Yeah, I think it is [important]...I think that we need to be aware of what people are saying about us in those places” (P 11)</td>
</tr>
<tr>
<td></td>
<td>To be a part of residents’ engagement in social media, and to obtain residents’ feedback</td>
<td>“Yes, and I think...our residents are already on social media; they are already talking to each other about us on social media, it is important that we become a part of that conversation, and we use it as a way to communicate to our residents and if we can deliver services through that way as well as obtain feedback, all that sort of stuff” (P 12)</td>
</tr>
<tr>
<td></td>
<td>A way of accessing a new proportion of residents, mainly youth</td>
<td>“I do, I do. I think it’s a way of accessing other people that may not otherwise access our services.” (P 8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“It is vital... youth and those people who are moving into the area for the first time need to be able to communicate with them, they are used to electronic communication and e-commerce and therefore if we do not adapt we will not be able to reach those people who are important to our community” (P 20)</td>
</tr>
<tr>
<td>Groups</td>
<td>Motivations</td>
<td>Participants’ views</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5. Social</td>
<td>To humanise the council</td>
<td>“It’s a good opportunity for us to get in touch with people and hear what people are saying about us, but also it’s an opportunity to I guess, humanise us a bit as the organisation or Council or” (P 11)</td>
</tr>
<tr>
<td>6. Usefulness</td>
<td>To be used in disasters</td>
<td>“It’s very important for things like disasters; that’s very, very important, if there’s a major disaster here” (P 13)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It is useful targeting communication tools to target specific groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Yeah, definitely. We’re finding that social media has been great for targeting those specific markets...we can use these social media sites to target the specific groups that that information is actually relevant to, obviously the youth.” (P 4)</td>
</tr>
<tr>
<td></td>
<td>It is a flexible way of communication,</td>
<td>“Yes, it is very important…It is a flexible mode of communication and a very direct mode of communication that also is very adaptable to changing work trends and changing behavioural trends. What social media does is narrow the miles, and allows remote conversations. It also is a lot more “[More] useful than old communications, such as using the telephone for engagement, because it serves as a written record, it provides written records of communication between residents.” (P 9)</td>
</tr>
<tr>
<td>7. Openness</td>
<td>It makes council more transparent</td>
<td>“I think it’s really important. I think good governance is about transparency and so I think it’s important that we have a presence online because that’s how some of our residents, particularly rate payers, communicate with us. I think it’s just an expected extension now of the work that we do. It’s very important that we provide a presence there.” (P 15)</td>
</tr>
</tbody>
</table>

5.4.2 Strategies implemented

Finding out **whether the council has implemented e-service strategy or a social media strategy. And what it contains.** Is the second area investigated to clarify the local governments’ aims toward public value creation? The participants’ responses indicate that none of the councils implemented a clear social media strategy. For instance, one participant indicated that his Council had not implemented a strategy that includes Web 2.0 or social media tools, but a broader ‘IT strategy’, as P 11 explained:

> We have an online communications strategy and I guess the counterpoint to that is also the IT strategy, although the IT strategy is very much infrastructure based…we’ve got a small one, but not necessarily anything large at the moment. (P 11)

However, the council is taking initial steps toward developing new strategies including the use of social media. P 11 also mentioned:

> We’re actually having our first big brainstorming meeting next week so that we can develop a long-term plan for our social media and digital marketing generally, like thinking about things. (P 11)

Other council participants’ answers clearly show that their councils are still not sure about what to include in their development policies and strategies, as P 16 answered: “*We have, but we’re still not sure what we’re going to do. It’s still a little bit grey. We could do better and you talking about it now makes me think I should have gone and done more*” (P 16). Similarly, P 18 answered:

> At the moment we have a policy in development…I think to some degree also organisationally we’ve still got some policies and procedures to build up around it. So until they're in place a bit more, clearly we’re a little bit weary of being too overboard and too directly interacting with community (P 18).

Again, where participants acknowledged the implementation of an e-services approach by council, they linked this approach to broader council services’ strategies that do not cover new technologies. Furthermore, P 13 even highlighted that the aim of implementing this strategy is not clear, as expressed in the answer to the previous question: “*Yes, we’ve got a template from the MAV, Municipal Association of Victoria, which is all local governments and we modified that to suit our needs. So the question*
again, what was the aim of it?” (P 13). P 14 does not consider what they already have as a proper e-service strategy: “As I said, probably our effort’s have been mostly focused on the Web development cycle which is part of the e-services, but I think a little bit more broadly we probably don’t have a strategy as such” (P 14). Similarly, P 15 agreed that the current strategies implemented by council are not sufficient, but they “are however, going to do a proper social media strategy that provides some more strategic direction in the future because it is somewhat ad hoc at times.” (P 15)

Furthermore, participants in the same council have provided conflicting answers to this question. The responses were diverse including (a) positive (yes, the council has implemented a strategy), (b) negative (no, the council has not implemented a strategy yet), and (c) neutral (there is a strategy, but it is not implemented, or this is not my role).

For example, a positive response was forthcoming from P 2 stressing that council had implemented a social media strategy: “We have, there is a social media strategy that we have developed. It was only developed at the end of last year, and it does call upon all of those things, and interaction and opening it up” (P 2).

A negative response was given by P 4:

We haven’t done any [social media strategy] yet, but that will definitely be something we’ll be looking at in the next 12 months I would say…we’re at a point where we’re actually developing those strategies…how we’re going to get there, it’s harder for me to tell you right now because we’re actually developing those strategies at the moment (P 4).

A neutral answer was given by P 7: “We have some years ago, or I should say we’ve drafted one [strategy]. If I recall we actually haven’t had it fully endorsed by council” (P 7).

5.4.3 Evaluation methods in use

The third area explored in order to clarify local governments’ aims toward public value creation is how Victorian local governments are/will evaluate their implementation of online services and their use of social media tools to interact with their constituents. Participants clearly expressed their lack of knowledge about how to realise the benefits of council investments regarding technologies. For example, P 10 answered “I don’t know. My personal evaluation is whether too many people are saying nasty things to
me? No? I don’t know. I might have to leave that one a little bit for the experts. We’re in a growing phase” (P 10). Similarly P 11 answered “I honestly think that evaluation is probably one of the hardest things for us to do because we can’t transfer it into sales...well, I don’t know. Who knows? How do you do that evaluation?” (P 11).

However, while participants acknowledged the difficulty of evaluating Gov 2.0 initiatives implemented, they suggested many evaluation methods, which vary from quantitative to qualitative measures. It is worthwhile mentioning here that some of the proposed factors that need to be evaluated are public values such as responsiveness, citizen-involvement, and trust. Yet, the proposed methods are mainly quantitative and have not been approved by councils to assess their implementation of Gov 2.0 initiatives. All in all, the answers as cited below show that council officials and administrators think that social media tools are the best way to evaluate Gov 2.0 initiatives.

The quantitative measures proposed were mainly about monetary value and the quantity of user actions (e.g. like-minded comments and users redirected to the council web page) or by using KPI report factors or through surveys. For example, when P 16 asked how to measure the value of your services (not in a monetary value), the response was:

I do not believe you get a return on investment at this point; I think if you really look at it, you can probably weigh up the money we spend on face-to-face services compared with the amount of money we spend on e-services, and I would suggest we should probably spend less on online services than we do face to face (P 16).

This type of answer shows that council is concentrating on monetary values, especially given the researcher asked the participant about her view on non-monetary values. Similarly, council’s view on how to evaluate council’s success in using social media tools to communicate with residents also related to quantitative measures, as noted by P 18:

I think it is one of the big and yet completely unresolved challenges for social media that measuring success is quite difficult. There are some fairly naive measures that can be used which are the number of followers we’ve got on Facebook and Twitter. I would be looking at the amount of interaction that we
have on both those platforms. So the number of comments, the number of interactions we’re having with that and perhaps some sentiment analysis of those responses and those interactions…within the organisation as far as who’s responding and how quickly they’re responding and things like that. (P 18)

Furthermore, P 18 is not sure how to quantify the measures he suggests, saying “I think the difficulty is that the quantitative measures are still difficult and difficult to develop” (P 18).

P13 appears to be interested in evaluating factors related to the council daily activity quantitatively without linking these factors to any of the factors identified as the councils’ motivations. P 13 suggests assessing the number of residents attending events who have been invited through social media tools, the number of user posts and likes on Facebook, and the number of users redirected to council web pages and other e-services. This participant brought all these factors together:

For example, promoting events, you could say if more people came to events because you advertised events on Facebook, for the Arts Centre, promoting events, people reviewing events, liking events. The number of items actually posted on Facebook, the number of responses you get to items. If you set it up to redirect to council pages, how many hits you get to go from there. Is there an increase in hits on certain areas of the website? There’s other areas we could do. (P13)

Similarly, P 4 concentrated on how to improve the effectiveness of new technologies to justify council’s need to implement these new technologies, questioning quantitative measures (e.g. the number of ‘likes’ that council’s Facebook page received). P 4 began by saying “that’s probably one of the hardest things with social media, is to evaluate exactly how effective it is, and to get people to see the value in it” (P 4), and followed up by combining the monitoring process with evaluation, as follows:

I definitely think that we’re going to have to go down the line of looking at some of the monitoring tools and things that are out there, because otherwise we won’t be able to say to our councillors…what benefit there has been. To say that we’ve had this many likes doesn’t really evaluate how successful your social media is. (P 4)
The qualitative measures suggested were mainly about closing the social divide gap, service provision, citizen participation, citizen trust, engagement, and council responsiveness. For instance, P 2 thinks residents in some council areas are more involved in using these tools and services, and thus, closing the social divide gap between council areas and level of service provision:

I would say that a critical thing to look at is how we have broken down the social divide that exists around media...Have we enabled this service provision to a greater number of people, that wouldn’t have it otherwise? So I think it’s how we bridge that divide which is the real critical factor that should be assessed (P 2).

P 9 and 10 suggested factors such as citizen participation, engagement, service provision, and their responses indicated: “We would hopefully have had more citizens engaged with our social media platforms, and we would have more services to be utilised through social media.” (P 9), and

Well, I’m not sure…I reckon that we’ll be able to evaluate this is just simply because of people’s participation, just coming online, having the conversations and tumbling to things, and also how well we respond to other ideas or needs that pop up. (P 10)

P 15 highlighted the importance of evaluating some values indirectly (e.g. citizen participation and trust):

Yeah, are more people choosing to participate and communicate with us in that way, or are they purely just getting the information, and that’s it, but not providing feedback? So that would be the key one and then trust after that. They’re the two things (P 15).

5.5 LOCAL GOVERNMENT VIEWS TOWARD EXAMINED PUBLIC VALUES

Despite the fact that creating public value was not articulated as a motivator for Victorian local governments to implement Gov 2.0 initiatives; most of the values identified in this study framework as indicators have been articulated by interviewees. Expressing these values is a significant and clear indication that councils are attempting
to create many values. Some values have been expressed exactly as in the study framework, while others have been referred to with different expressions. For example, values expressed indirectly include: citizen involvement (expressed as citizen participation, communicate with residents, and engagement), friendliness (expressed as humanise and preferred means of communication), listening to public opinion (expressed as to find out what residents think), and user democracy (expressed as to obtain residents’ feedback).

Thus values emphasised by interviewees directly and indirectly are: responsiveness, user democracy, citizen involvement, self-development, dialogue, listening to public opinion, openness, professionalism, accountability, adaptability, reliability, timeliness, friendliness, user orientation, equity, and social cohesion. Yet, interviewees have not expressed any clear statements about honesty, integrity, stability, robustness, fairness, public interest, and common good. Tables 5.4, 5.5, and 5.6 provide examples of participants’ views related to the values proposed in the study framework (i.e. development of public trust, quality of public services delivered, and social outcomes respectively).
Table 5.4: Examples of local government officials and administrators’ views toward development of public trust

<table>
<thead>
<tr>
<th>Area of public value</th>
<th>Public value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of public trust</td>
<td><strong>Responsiveness:</strong> 1. “It does give people a very quick and very immediate response which I think helps them no end.” (P 18) 2. “For emergency management and for event updates and things like that, the online social media engagement provides us with an immediately that we don’t have in any other platform.” (P 15)</td>
</tr>
<tr>
<td></td>
<td><strong>User democracy:</strong> 1. “I really appreciate it when I do get that feedback because that helps me…It’s helpful to have an outsider’s perspective and to get that feedback and then work out is it possible for a start” (P 11)</td>
</tr>
<tr>
<td></td>
<td><strong>Citizen involvement:</strong> 1. “Yeah, definitely. I think that it’s a great tool to be able to give some of those people who might be less likely to voice their opinion, an opportunity to.” (P 4) 2. “Certainly engagement, because people are familiar—a lot of people use Facebook so they know how to use it. They can access Like pages, make comments, that sort of stuff, set up events or come to events.” (P 13)</td>
</tr>
<tr>
<td></td>
<td><strong>Self-development:</strong> “In going back to we’re here to keep our residents informed, and well informed…I think just providing people with more information, I think it’s creating a more informed community, a more educated community, educated about local issues.” (P 5)</td>
</tr>
<tr>
<td></td>
<td><strong>Dialogue:</strong> 1. “Yeah, look, the goal is greater interaction. Being able to have greater interaction means greater information is shared, that develops greater trust amongst the community” (P 2) 2. “Social media opens up this whole other avenue for communication…so it also adds you into that sort of conversation in that realm.” (P 17)</td>
</tr>
<tr>
<td></td>
<td><strong>Listening to public:</strong> “Because I think it helps a conversation to happen and social media is all about you know being able to say something can be heard, and to have council being in mix of all of that, I think is really good. I think that improves trust and yeah I think it does just for the fact people can be open and once, and know what they say has being heard, because it is on the wall or it is actually a part of the consultation process” (P 12)</td>
</tr>
<tr>
<td></td>
<td><strong>Openness:</strong> 1. “Yeah, I think if you have that ability for people to go there and talk to you online, and then you respond online, it creates the whole thing about transparency. I think it’s a good thing. Having stuff online can only help.” (P 5)</td>
</tr>
<tr>
<td></td>
<td><strong>Professionalism:</strong> “Enhancing the trust – well I talked about trust before and I also think its confidence. I don’t necessarily have to trust my local councillor/council or anything like that, but I have to have confidence that they are going to do the right thing and that confidence may grow into a trust, and I think they are all valuable things.” (P 10)</td>
</tr>
<tr>
<td></td>
<td><strong>Honesty</strong> (not mentioned) <strong>Integrity</strong> (not mentioned)</td>
</tr>
<tr>
<td></td>
<td><strong>Accountability:</strong> “They might be more informed and feels though their views are been heard, because they visible…this way the whole world can see their comments, its open, it is transparent, people are open to criticise Council or criticise something council’s doing and everybody can see it, not just me…so I think it is much more open and transparent, it keeps us more accountable, and it also means to be very responsive to those people and not just ignore them or just go ohhh that is too hard.” (P 12)</td>
</tr>
</tbody>
</table>
Table 5.5: Examples of local government officials and administrators’ views toward quality of public services delivered

<table>
<thead>
<tr>
<th>Area of public value</th>
<th>Public value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of public services delivered</td>
<td>1. “Yeah I think the things that I have said before about it saves people’s time, makes things easier, faster, yeah and the fact that people know that they being heard and listened to, yeah absolutely contributes to the overall performance of council” (P 12)</td>
</tr>
<tr>
<td></td>
<td>2. “The mechanism to feed that feedback back into the organisation and respond and rapidly respond, then yeah, definitely the service level will improve” (P 18)</td>
</tr>
<tr>
<td>Adaptability:</td>
<td>1. “I think, to our mind, customer service is about providing services that are simple and easy for people to access, giving them options. Delivering things online gives them two key options. One is out-of-hours service, 24 hour self-help; and not being location based, so you can do it from anywhere. I think those in particular can be very beneficial.” (P 7)</td>
</tr>
<tr>
<td></td>
<td>2. “I think the nature of the format of social media between being somewhat part way between a personal conversation and written communication actually provides a good space where people can interact quite rapidly, which I think is one of the problems with formal communication structures” (P 18)</td>
</tr>
<tr>
<td>Reliability:</td>
<td>1. “providing really good and adequate tools for our community, to be able to get things done that they want to do. I’m sure that the number of people who are using our services are growing all the time. The popularity of activities and things is, I think, a testament to it.” (P 10)</td>
</tr>
<tr>
<td></td>
<td>2. “We want to be able to give the right information. We want to make sure that it’s up to date. We want to make sure that people do not go away from it.” (P 11)</td>
</tr>
<tr>
<td>Stability: (not mentioned)</td>
<td></td>
</tr>
<tr>
<td>Timeliness:</td>
<td>1. “We can’t actually help you very quickly,” rather than waiting for two weeks for a letter or an email reply…able to reply to that again in fairly immediate time.” (P 18)</td>
</tr>
<tr>
<td></td>
<td>2. “Main factor, convenience, and timeliness….You could definitely achieve better and more timely information.” (P 5)</td>
</tr>
<tr>
<td>Robustness: (not mentioned)</td>
<td></td>
</tr>
<tr>
<td>Friendliness:</td>
<td>1. “What effectively we’re trying to do is make our online services as user friendly and interactive so that if you’re that way inclined you can do that, you can go online” (P 3)</td>
</tr>
<tr>
<td></td>
<td>2. “We’re trying out these things and we want to make sure that people are actually enjoying them and actually engage and actually find it useful” (P 11)</td>
</tr>
<tr>
<td>User orientation:</td>
<td>1. “Whereas online provides you with the opportunity to send everything you think you should send, to a receiver that hopefully is happy to receive it and then in their own time could digest the information and then get back to them with questions or follow-up. So it’s offering another way to service a client if you like, or service a rate payer in a way that best suits their needs.” (P 15)</td>
</tr>
<tr>
<td></td>
<td>2. “So they key their address and our GIS system works behind the scenes and checks what’s around that address and provides information in terms of key child care, libraries – whatever the key interest to the residents. So we’re using information that we’ve already got, like in our GIS system, and enhancing that experience for our residents, providing better value.” (P 14)</td>
</tr>
</tbody>
</table>
Table 5.6: Examples of local government officials and administrators’ views toward achievements of social outcomes

<table>
<thead>
<tr>
<th>Area of public value</th>
<th>Public value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Outcomes</strong></td>
<td><strong>Fairness</strong>: (not mentioned)</td>
</tr>
<tr>
<td>1. “So it’s not just about the utilitarian stuff. It’s about how I live my life and if we add something to people’s capacity to have an easy life that might be the big one. But I think residents are gradually more and more finding out that they can access things through council, online and make things easier for themselves” (P 10)</td>
<td><strong>Equity</strong>: 1. “That’s why online services are so beneficial, because you actually can provide a more equitable service out to a lot of people, than just if you just have little newsletters or whatever.” (P 3)</td>
</tr>
<tr>
<td>2. “I’d like to think that if we offered the ‘Have your say’ function for example on the website, people feel like they’ve got the opportunity to contribute to a master plan of their local park for example, and if they come back and they see their input integrated within the ideal solution that’s implemented, yes, it’s a positive outcome for everybody and the outcome is achieved, that our e-services have contributed to that partnership and that contribution which is ultimately what we should be seeking on most things we do. So, I guess I would say yes, that I would think overall our e-services do contribute to changes in the community” (P 15)</td>
<td>2. “I think the issue is that a lot of them are also convenient for people who maybe have some sort of motor disability that makes it hard for them to leave the home, and other factors that make transport difficult for people, that social media can actually overcome that” (P 18)</td>
</tr>
<tr>
<td>3. “But I think it’s definitely an opportunity to get more feedback from people and a broader range of feedback, which makes the position councils take more informed and better able to argue, and better able to indicate community support, in that if there are decisions we’re making that are not popular with one group.” (P 18)</td>
<td>3. “Whereas I think the Facebook type thing, the Twitter, all that sort of stuff, I think especially the younger generation increasingly uses it as a mode of finding out everything.” (P 16)</td>
</tr>
<tr>
<td>4. “Ultimately I would quite like the council to be helping community groups build online communities through council” (P 18)</td>
<td>2. “Ultimately I would quite like the council to be helping community groups build online communities through council” (P 18)</td>
</tr>
<tr>
<td>5. “We are looking to improve community engagement opportunities online” (P 6)</td>
<td>3. “We are looking to improve community engagement opportunities online” (P 6)</td>
</tr>
<tr>
<td>6. “There’s that, but also closing the gap between actual citizens… In the sense that you can get a whole community of 2,000 people who live in separate houses, and not see each other, but through a social media platform they become connected.” (P 9)</td>
<td>4. “There’s that, but also closing the gap between actual citizens… In the sense that you can get a whole community of 2,000 people who live in separate houses, and not see each other, but through a social media platform they become connected.” (P 9)</td>
</tr>
<tr>
<td><strong>Social cohesion:</strong></td>
<td><strong>Public interest</strong>: (not mentioned)</td>
</tr>
<tr>
<td><strong>Common Good:</strong></td>
<td><strong>Common Good</strong>: (not mentioned)</td>
</tr>
</tbody>
</table>
5.6 DISCUSSION

Phase 1 interviews produced a number of findings which clarified the aims government officials have in implementing Gov 2.0 initiatives to enforce public value. Based on interview analysis, it was found that the creation of public value as identified in the study framework was not a motivator for Victorian local governments to implement Gov 2.0 initiatives, and they are not aiming to create it as such. However, the analysis also found that many of the values included in the study framework are in the focus of daily activities of Victorian local governments. These findings are categorised and discussed in the following sub-sections.

5.6.1 Local government aim towards public value creation

This section discusses the findings from three questions used by the researcher (see section 5.4) to ascertain whether Victorian local governments are aiming to create public value. These questions investigated a) local governments’ motivations behind the implementation of Gov 2.0 initiatives, b) strategies implemented for using Gov 2.0 initiatives, and c) how governments evaluate their efforts in implementing and using these initiatives. The conclusion, articulated from participants’ responses, indicate that Victorian local governments do not have a direct aim to create public value, which has been identified in the study framework.

In their answers to the first question, none of the participants mentioned the creation of public value as a motivator behind the implementation of Gov 2.0 initiatives. Moreover, participants have not linked the importance of implementing Gov 2.0 initiatives in their councils to public value creation. This clearly indicates that participants do not have knowledge about the topic (public value), and therefore do not work towards creating it. This interpretation was sustained by interviewees’ answers to the second question concerning the strategies implemented for using Gov 2.0 initiatives. Participants’ responses show that none of the councils implemented a strategy that included the use of Web 2.0 technologies, or any of its platforms (e.g. social media tools). Participants provided conflicting answers regarding the strategy implemented. These answers are clearly reflecting councils’ vagueness, not only towards the creation of public value, but also the creation and implementation of any value in a planned way using Web 2.0 technologies.
Interviewees’ answers to the third question were similar concerning how governments evaluate their efforts in implementing and using Gov 2.0 initiatives. Despite the fact that some participants realised and highlighted the need for new methods to evaluate intangible benefits of the implementation of these new technologies, most of the answers appear as a consequence of improper implementation of the e-service strategy. This indicates that Victorian local governments are totally unclear as to how to evaluate these initiatives.

Building on what can be understood from participants about why it is important for their local governments to implement and use Web 2.0 technologies, the type and level of e-service strategies implemented, and how they proposed evaluating their councils’ implementation of Gov 2.0 initiatives, it can be concluded that Victorian local governments are not creating public value as indicated in the study framework.

However, there are signs that suggest Victorian local governments are trying to get intangible values from their implementation of Gov 2.0 initiatives, which might create unintentional public value for council residents who use these initiatives. These signs include (a) the realisation of the importance of assessing intangible benefits, (b) the suggestion of some public values as areas worthy of evaluation, and (c) stating and emphasising most public values identified in the study framework during interviews.

Overall, the findings show a number of motivations behind local governments’ adoption and implementation of Gov 2.0 initiatives that can be directly linked to the public values proposed in the study framework. From the 23 examined values in the framework, 10 were indicated by participants as motivators for the implementation of Gov 2.0 initiatives. These values include professionalism, adaptability, responsiveness, citizen involvement, dialogue, listening to public opinion, social cohesion, openness, friendliness, and reliability (see table 5.7). Six relate to the development of public trust (professionalism, dialogue, citizen involvement, listening to public opinion, responsiveness, and openness), three values relate to quality of public services provided (friendliness, adaptability, and reliability), and only one value relates to achievement of social outcomes (social cohesion).
Table 5.7: Public values behind the implementation of Gov 2.0 initiatives

<table>
<thead>
<tr>
<th>Motivations</th>
<th>Relation to public value</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) meet citizens’ expectations</td>
<td>Professionalism</td>
</tr>
<tr>
<td>b) preferred method of communication between residents</td>
<td>Friendliness</td>
</tr>
<tr>
<td>c) provide them with a more convenient means of service</td>
<td>Adaptability</td>
</tr>
<tr>
<td>d) another avenue of communication</td>
<td>Professionalism</td>
</tr>
<tr>
<td>e) a quick means of communication, especially during the consultation process</td>
<td>Responsiveness, citizen involvement, dialogue</td>
</tr>
<tr>
<td>f) to find out what residents think about the council</td>
<td>Listening to public</td>
</tr>
<tr>
<td>g) to humanise the council</td>
<td>Social cohesion</td>
</tr>
<tr>
<td>h) useful in disasters</td>
<td>Responsiveness, professionalism</td>
</tr>
<tr>
<td>i) a useful communication tool to target specific groups</td>
<td>Citizen involvement</td>
</tr>
<tr>
<td>j) a part of residents’ engagement in social media</td>
<td>Citizen involvement, dialogue</td>
</tr>
<tr>
<td>k) to obtain residents’ feedback</td>
<td>Listening to public</td>
</tr>
<tr>
<td>l) makes council more transparent</td>
<td>Openness</td>
</tr>
<tr>
<td>m) a flexible way of communication with residents</td>
<td>Friendliness</td>
</tr>
<tr>
<td>n) direct</td>
<td>Adaptability</td>
</tr>
<tr>
<td>o) adaptable</td>
<td>Adaptability</td>
</tr>
<tr>
<td>p) allows for remote communication</td>
<td>Reliability</td>
</tr>
<tr>
<td>q) useful instead of the traditional means of communication</td>
<td>Professionalism</td>
</tr>
<tr>
<td>r) a written way of communicating</td>
<td>Reliability</td>
</tr>
<tr>
<td>s) accessing new residents, mainly youth</td>
<td>Citizen involvement</td>
</tr>
<tr>
<td>t) a response to the pressure to follow other councils who implemented these tools</td>
<td>Not related</td>
</tr>
</tbody>
</table>

Victorian local governments’ lack of clear e-service strategies that include Web 2.0 technologies, their uncertainty on the usefulness of these tools and, how to measure the value of implementation and use is not unanticipated. These findings concur with the literature where the use of these tools is considered a new wave of service delivery within government (Mergel, 2012). And local governments are still at the stage where they need to measure outcomes from these engagement methods (Svara & Denhardt, 2010).

5.6.2 Values in line with local government activities

The previous section suggested Victorian local governments are not working towards creating public value as identified in the study framework. The findings also suggest that they are working towards the creation of many public values included in the evaluation framework without directly aiming to do so. This suggestion is supported by participants’ views including a) the realisation of the importance of evaluating
intangible benefits of Gov 2.0 initiatives, and b) most values identified in the study framework have been mentioned and stressed by participants.

As previously mentioned, many of these public values were articulated either directly or indirectly by interviewees. From the 23 examined values, 17 were found to be in line with local governments to be developed comprising dialogue, responsiveness, citizen involvement, openness, listening to public opinion, adaptability, timeliness, friendliness, accountability, professionalism, reliability, user democracy, user orientation, equity, social cohesion, self-development, and stability. Yet, six values were not including honesty, integrity, robustness, fairness, common good, and public interest. The values mentioned are related to the three main areas of public value creation, as articulated in the study framework (see section 3.2) and include development of public trust in government, quality of public services delivered, and achievement of social outcomes. How participants think the implemented Gov 2.0 initiatives can contribute to creating these values is discussed in the following minor sub-sections.

5.6.2.1 Development of public trust in government

Development of public trust in government is one of the main sources of public value (Moore, 1995; Kelly et al., 2002; Kearns, 2004). This area includes a number of values including responsiveness (Tolbert & Mossberger, 2006; Gauld et al., 2009), user democracy (Goldfinch, 2009), citizen involvement (Christensen & Lægreid, 2005), self-development (Roberts, 2002), dialogue (Grabner-Kräuter, 2009; Theunissen & Wan Noordin, 2012), listening to public opinion (Yang, 2005), openness (Persson, 2000), professionalism (Misuraca, 2012), honesty (Ulbig, 2004), integrity (Keele, 2007), and accountability (Bozeman, 2002).

The findings indicate the development of public trust in government was not a motivator for implementing Gov 2.0 initiatives by Victorian local governments. Though participants stressed the importance of using Gov 2.0 platforms to increase government professionalism, dialogue, citizen involvement, listening to public opinion, responsiveness, and openness, none of the participants mentioned public trust as a motivator or linked it to any of the motivations articulated. However, improving public trust in government was mentioned by interviewees a few times on different occasions during interviews. Participants were of the view that providing citizens with more information and facilitating their participation in public life using these new initiatives would help their council improve citizens’ trust. These views show how local
governments do not realize the potential offered to them by these tools, which contribute directly to council development of citizens’ trust. Interestingly, honesty and integrity were the only two values not mentioned by participants.

Local government officials realised the importance of implementing Gov 2.0 initiatives to become more responsive. They articulated this as one of the motivators for such implementation. Participants have clearly highlighted that their use of these initiatives offered the ability to provide citizens with immediate and rapid response (Boyd & Ellison, 2007; Joinson, 2008), especially during emergencies and disasters. Local governments also recognised that these tools can be used to improve user democracy by obtaining feedback. However, this view does not include the use of Gov 2.0 initiatives as a tool to empower citizens and provide them with an innovative role in public service delivery and governance activities, as argued by (Osimo, 2008).

The usefulness of citizens’ involvement was acknowledged by interviewees. The findings show that local governments are aiming to use Gov 2.0 initiatives to engage their citizens in both online and council activities. Governments know that by implementing these initiatives they are providing their citizens with a great opportunity to voice their opinion online, especially those who might be less likely to do so. They also expect that the use of social media tools such as the Facebook will help their citizens to engage more through commenting on council posts, setting up events and, inviting other citizens to attend. These views correspond with Cresswell et al. (2006) view that citizen involvement is for better participation in the democratic practice of government. Local governments’ intent to use Gov 2.0 initiatives to improve their citizens’ self-development is evident by keeping citizens well informed. By doing so, local governments think they will create a more informed community, and consequently a more educated one, especially regarding local issues.

Victorian local governments are of the view that Gov 2.0 initiatives, mainly social media tools, are great platforms for interaction (dialogue) where information can be shared easily, as noted by Grabner-Kräuter (2009). The potential utilisation of Gov 2.0 initiatives as a platform for listening to public opinion is one of the Victorian local government motivators to implement these tools. The local governments think these platforms facilitate a conversation. Thus it is a useful tool for citizens who can easily realise what they have said on these tools is being heard, because it is on the wall or it is a part of the consultation process where everyone can see and become involved.
Citizens’ ability to interact with council officials and to see the whole conversation taking place by everyone on social media is how Victorian local governments are improving their councils’ openness using Gov 2.0 tools.

Victorian local governments see professionalism as confidence their citizens have in their council officials to do the right thing, and they believe councils’ implementation and use of Gov 2.0 initiatives will facilitate professionalism (Misuraca, 2012).

The findings also revealed that Victorian local governments expect their implementation of Gov 2.0 initiatives will keep them more accountable. Participants have highlighted a number of ways that these initiatives can contribute to improving such accountability: these platforms will help citizens to become more informed, more heard, and enable them to criticise council via open platforms where other citizens can contribute to making local government more accountable. They also acknowledge that these initiatives are providing them with tools for a quick response to their citizens’ criticisms and concerns to support justifications and accountability (Sadeghi et al., 2012).

5.6.2.2 Improving the quality of public services

The quality of public service delivery is one of the key drivers of public value (Kelly et al., 2002; Kearns, 2004). This area concerns public value citizens perceive from ‘technical functionality’ to support and deliver Gov 2.0 services (Meynhardt (2009). In this framework, values that contribute to the delivery of quality public services through Gov 2.0 include adaptability (Delone & Mclean, 2004), reliability (Delone & Mclean, 2004), stability (Berry, 1995), timeliness (Wixom & Todd, 2005), robustness (Zhang & Prybutok, 2005), friendliness (Papadomichelaki & Mentzas, 2009) and user orientation (Misuraca, 2012).

The findings indicate that the quality of public services delivered was not a motivator for implementing Gov 2.0 initiatives by Victorian local governments. And though participants have expressed three values related to quality public service (adaptability, friendliness, and reliability), they have not readily related the implementation of Gov 2.0 initiatives to improving such quality of public services. However, this aspect was mentioned by interviewees occasionally during interviews. Participants are of the view that council implementation of Gov 2.0 initiatives will contribute overall performance. And further, these initiatives will help citizens obtain council services easier and faster.
Stability and robustness, as previously mentioned, were the only two values not mentioned. This indicates that local governments do not realise the potential of Gov 2.0 in improving stability and robustness. Participants have highlighted the usefulness of these initiatives in terms of improving councils’ service adaptability. They are of the view that providing their citizens with services through these initiatives will ease access to such services (Cormode & Krishnamurthy, 2008) with 24/7 self-help without being location based. Local governments also think these initiatives offer reliable platforms to serve their communities where citizens will be able to access correct and updated information. Participants have highlighted the timeliness factor of services provided by being able to reply to their citizens’ inquiries using these tools “in fairly immediate time” (P 18).

Victorian local governments attempt to provide their citizens with user-friendly services, and believe that Gov 2.0 initiatives will enhance the friendliness of their online services. This is another way of serving their citizens that best suits their needs (Osimo et al., 2010). Thus citizens who access these initiatives have more options to choose from and services are customised to suit their preferences.

### 5.6.2.3 Achievement of social outcomes

Social outcomes is another significant driver of public value (Kelly et al., 2002; Kearns, 2004). There are five values that contribute to the achievement of social outcomes via Gov 2.0 including fairness (Karunasena & Deng, 2012), equity (Kelly et al., 2002), social cohesion (Hariche et al., 2011), public interest (Sreedharan et al., 2011), and common good (Meynhardt, 2009).

Achievement of social outcomes was not identified as the main motivator for the implementation of Gov 2.0 initiatives. And yet participants have stressed ‘social cohesion’, related to social outcomes.

However, the achievement of social outcomes was mentioned by interviewees on different occasions. Participants perceive that implementation of Gov 2.0 initiatives by councils will contribute to social outcomes.

From the five aforementioned values, participants have offered their views on how councils’ uptake of Gov 2.0 initiatives can contribute to equity and social cohesion. Fairness, public interest and, common good are values that have not been mentioned by participants.
Local government officials have realised the importance of implementing Gov 2.0 initiatives to provide more equitable services to citizens. Participants have clearly highlighted that these initiatives have provide citizens with convenient services. This convenience will help citizens who maybe have some sort of motor disability or other factors related to transport difficulties they need to overcome. These initiatives will allow diverse community groups to participate and this means councils’ decisions will not necessarily be popular with any one group. Social cohesion offers greater opportunities to engage with youths who increasingly use social media tools. Thus these initiatives can help community groups build online communities through councils to bring citizens together and keep them connected, as stressed by Hariche et al. (2011).
5.7 CHAPTER SUMMARY

Phase 1 concluded that Victorian local governments are not aiming to create public value as indicated in the study framework. This is about the ways in which Public officials and elected councillors think about the main motivators to implement and utilise Web 2.0 technologies, the type and level of e-service strategies implemented, and the way they evaluate their councils’ implementation and use of Gov 2.0 initiatives.

However, this phase suggests clear signs that Victorian local governments create unintentional public value for those who use Gov 2.0. These signs include (a) realisation of the importance of assessing intangible benefits, (b) the suggestion that some public values are worth evaluating, and (c) stating and emphasising most public values identified in the study framework by interviewees.

The findings also suggest that local governments are working towards the creation of many public values (development of public trust in government, quality of public services delivered, and achievement of social outcomes) without directly aiming to do so. From the 23 examined values, 17 included dialogue, responsiveness, citizen involvement, openness, listening to public, adaptability, timeliness, friendliness, accountability, professionalism, reliability, user democracy, user orientation, equity, social cohesion, self-development, and stability. Six values included honesty, integrity, robustness, fairness, common good, and public interest. The latter values were of less concern to local governments.
6.1 INTRODUCTION

This chapter presents findings from the online survey questionnaire (Phase 2) on citizens’ perceptions of their local government use of Gov 2.0 initiatives. This phase of data collection began after the researcher gained full knowledge about public value creation. Both results gained from interviews and themes suggested by the literature review and articulated in the study framework have been used as input for the development of the survey questionnaire.

The objective of this phase is to answer the second question: What public values do citizens perceive from using Gov 2.0 initiatives? Structural Equation Modelling (SEM) was used to analysis the sample data collected through an online survey. The Confirmatory Factor Analyse (CFA) was used to validate the fitness of the hypothesised research framework into the sample data (Byrne, 2010).

This chapter is structured as follows: section (6.2) reports on the survey development procedures, followed by a discussion of the data collection method used (section 6.3). This is followed by illustration and discussion of data analysis in section 6.4. Section 6.5 describes the development and analysis of the measurement model. The final section (6.6) provides the findings of this phase’s survey questionnaire with end users (citizens), followed by the chapter summary.

6.2 SURVEY DEVELOPMENT PROCEDURES

The results obtained from this research phase will inform both the second research sub-question and Phase 3 of the study. A web-based survey was applied to collect the quantitative data. Using an online survey over a paper-based survey was influenced by many factors (Evans & Mathur, 2005): it is easier to deliver, cheaper, response rates are faster, and data can be handled and analysed quicker. These features can save the researcher considerable time and effort that can be invested for further investigation.
Furthermore, using an online survey is more appropriate and easier to target potential participants who are supposedly online users for their council’s Gov 2.0 initiatives. Online surveys can be very effective if the main procedures for the paper-based survey are followed such as: pre-testing the questions before running the survey, attaching a clear introduction, separating extended surveys into sections, and encouraging participation by offering incentives (Dillman et al., 1998; Gaddis, 1998).

Closed-ended questions were chosen over open-ended questions to be implemented within the survey for the following reasons: participants answer the questions more reliably compared to being provided with open-ended questions (Malhotra et al., 1996), and it is easier and quicker for participants to answer (de Vaus, 2002).

To make it easier for participants to indicate their level of agreement, Likert scales were used. Academics highlighted many advantages for using the Likert scale in surveys including: ease of use by the researcher, simple to complete by the participant (Neuman, 1997), and its ability to generate reliable and valid results (Spector, 1992). Finn (1972) and Nunnally (1978) advised that reliability and validity of the Likert scale can be enhanced by increasing the scale points; however, they found that the seven point scale is most suitable for achieving reliability and validity. Thus, the seven point scale was used as follows:

- Strongly agree = 1
- Agree = 2
- Slightly agree = 3
- Neutral = 4
- Slightly disagree = 5
- Disagree = 6
- Strongly disagree = 7

Following the theoretical framework guiding this study, the survey was designed to contain four main sections (see Appendix E). The first section was designed to gather some related demographic data about the participants and their use of Gov 2.0 initiatives. The next three sections were designed to investigate participants’ perceptions of Council use of Gov 2.0 initiatives within the three main source areas of public value (public trust in government, quality of public services, social outcomes). Table 6.1 depicts the question numbers linked to each examined value in the survey.
Table 6.1: Survey questions linked to the values and areas investigated

<table>
<thead>
<tr>
<th>Area</th>
<th>Values</th>
<th>Question sentence:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>As a resident, I think the use of social media by council officials and councillors…</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q5. makes the council respond quicker.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q6. offers me with a new channel to have my opinion taken into account.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q7. encourages me to get involved in council matters.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q8. helps me to form a consensus of opinion.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q9. enhances the dialogue between me and the council.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q10. helps me to have my opinion heard by the council.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q11. makes the council more open and transparent.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q12. helps the council to provide services in a more professional way.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q13. can make them more honest.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q14. enhances the integrity of the council.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q15. can make them more accountable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q17. As a resident, I think social media tools are an easy way to communicate with the council officials and councillors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q18. As a resident, I think the social media tools used by the council officials and Councillors are reliable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q19. As a resident, I think the social media tools used by the council officials and councillors are stable tools.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q20. As a resident, I think the social media tools used by the council officials and councillors provide me with very quick means to communicate with them.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q21. As a resident, I think the social media tools used by the council officials and councillors are robust tools.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q22. As a resident, I think the social media tools used by the council officials and councillors are user-friendly tools.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q23. As a resident, I think the social media tools used by the council officials and councillors can be easily customised to suit my preferences.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q25. offers a good platform for fair treatment of residents.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q26. enhances the equity between residents to access information and services.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q27. provides me with a sense of community.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q28. makes it possible for council residents to promote the public interest.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q29. helps both the council and residents to work together for the common good.</td>
</tr>
</tbody>
</table>

* The question sentence attached above does not apply to the question.

The survey questions were also pre-tested before final implementation. This helped the researcher to gain clear observations about the reliability and validity of the data (Saunders et al., 2000). The survey questions were pre-tested by a group of experts as recommended by Saunders et al. (2000). The researcher amended the survey questions based on comments and suggestions from 11 pre-test survey participants.
6.3 DATA COLLECTION

This section discusses the process to select the study sample, size of the sample, and survey distribution.

6.3.1 Sample selection

This study aimed to examine the public value of Gov 2.0 at the local government level in Victoria, Australia and to approach those citizens who are using Gov 2.0 services. As discussed earlier in Chapter 4, the researcher targeted participants from local governments who provided the most advanced and similar Gov 2.0 services. In this phase, the researcher targeted Gov 2.0 users from the same four local governments that participated in the first phase. The survey questionnaire was distributed widely among a number of these local governments to potential participants of Gov 2.0 users via local government social media tools. The survey was advertised through each council’s social media platform and took less than twenty minutes to complete. The four local governments invited their Gov 2.0 users to participate in the study survey via an invitation sent to their residents using council social media tools. The invitation included a linked to the survey. The survey invited participants to take part in the interviewing phase (Phase 3). The results gained from both previous investigations (A website analysis for study sample selection and phase 1 interviews with government officials) show that Victorian local governments are barely using social media tools to communicate and serve local businesses. Therefore, it is less likely to have respondents who might represent businesses instead of their personal experiences in their survey answers.

6.3.2 Sample size

How to determine an adequate sample size has been discussed in many studies where certain formulas were proposed (Creswell & Plano Clark, 2011). However, the researcher found it difficult to employ any of the proposed formulas to determine the sample size. This difficulty was due to the nature of this research, which targeted only those citizens who used Victorian Gov 2.0 services, where there was a lack of reliable published statistics on actual users of these initiatives.

According to the Australian Bureau of Statistics (2012), a quarter of Australia’s population (22,683.6) is located in Victoria (5,623.5). At the time date of conducting
this study, there was a lack of published statistics about the level of Victorian local
government level of adoption of Gov 2.0 and social media, and the actual percentage of
users of these initiatives. A study conducted by the researcher (Omar et al., 2012),
however, shows that Facebook is the most used tool by Victorian local governments
with 50 out of 79 councils (63%), 35 local governments (44 %) use Twitter, while 26%
have a presence on YouTube and 24% use RSS. Flickr, with 11% adoption rate, is
shown to be the least used tool by governments. In addition, the AGIMO report
(AGIMO, 2012) indicates that Australian citizens’ use of social networking sites to
contact all tiers of government increased from 36% in 2009 to 47% in 2011. This
growth is mainly driven by those citizens who are under 55.

The discussion above indicates the challenge in determining an adequate sample size for
this study. Two main issues needed to be considered when determining an adequate
sample size including a sufficient sample (Hair et al., 2006; Kaplan, 2009; Byrne,
2010), and an appropriate sample size for factor analysis (Netemeyer et al., 2003; Hair
et al., 2006).

Sufficient sample size is considered a very important factor for analysis using structural
equation modelling (Hair et al., 2006; Kaplan, 2009; Byrne, 2010) and the sample size
should be adequate to estimate the parameters and determine model fit. Structural
equation modelling analysis in general requires a large sample size to obtain stable
parameter estimates and standard errors (Schumacker & Lomax, 2004). A general rule
is that a sample size of 100–200 is considered sufficient (Lewis et al., 2005) and any
sample size within the range of 150–400 is recommended (Hair et al., 2006). Kline
(2005) suggested that, for structural equation modelling analysis, over 200 responses
can be considered a large sample. For this research study, a total of 213 surveys were
completed and submitted. This number of responses meets both, a ‘sufficiently large’
sample size and the figure required for structural equation modelling factor analysis.

6.3.3 Survey respondents’ profile

The first part of the survey gathers respondents’ demographic data and the purpose of
using local government social media tools. The profiles of respondents (gender, age,
education and motivations) are presented in tables 6.2, 6.3, 6.4, and 6.5. Though, the
total number of respondents was 213, only 206 responses were found to be valid for
analyses, as will be discussed in the data screening section (6.4.1). As shown in table
6.2, the gender distribution of respondents was 66% females and 34% males. The largest age group was ‘31–50’ (47%), followed by ‘16–30’ (33%), and ‘51–70’ (13%). While respondents aged 16 years old and under made up the smallest group, representing only 7%, none of the respondents was over 70 years old, as can be seen in table 6.3.

In terms of respondents’ education level, most (49%) respondents held a university degree, followed by those who finished high school (31%). The lowest educational level group was postgraduate level education with only 3 % as presented in table 6.4.

Table 6.2: Survey participants’ gender

<table>
<thead>
<tr>
<th>Q1. My gender is</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>34%</td>
<td>70</td>
</tr>
<tr>
<td>Female</td>
<td>66%</td>
<td>136</td>
</tr>
</tbody>
</table>

Table 6.3: Survey participants’ age group

<table>
<thead>
<tr>
<th>Q2. My age group is</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 16</td>
<td>7%</td>
<td>14</td>
</tr>
<tr>
<td>16-30</td>
<td>33%</td>
<td>68</td>
</tr>
<tr>
<td>31-50</td>
<td>47%</td>
<td>97</td>
</tr>
<tr>
<td>51-70</td>
<td>13%</td>
<td>27</td>
</tr>
<tr>
<td>70+</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 6.4: Survey participants’ education level

<table>
<thead>
<tr>
<th>Q3. My highest education qualification is</th>
<th>Response (Percent)</th>
<th>Response (Count)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At high school</td>
<td>14%</td>
<td>29</td>
</tr>
<tr>
<td>Finished high school</td>
<td>31%</td>
<td>64</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>49%</td>
<td>101</td>
</tr>
<tr>
<td>Master's degree</td>
<td>3%</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>6</td>
</tr>
</tbody>
</table>

The following table (6.5) details participants’ motivations behind their use of council websites. While the council Facebook pages are the preferred social media platform for
participants (95%), RSS is indicated as the least used by only 10% of respondents. YouTube platform is used by more than half of respondents (58%) followed by Twitter, used by 38% of respondents. Flicker (32%) and SMS (15%) social media tools were relatively evenly distributed.

### Table 6.5: Survey participants’ motivations behind their use of council websites

<table>
<thead>
<tr>
<th>Social Media Tool</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>95%</td>
<td>196</td>
</tr>
<tr>
<td>Twitter</td>
<td>38%</td>
<td>78</td>
</tr>
<tr>
<td>YouTube</td>
<td>58%</td>
<td>119</td>
</tr>
<tr>
<td>Flicker</td>
<td>32%</td>
<td>66</td>
</tr>
<tr>
<td>RSS</td>
<td>10%</td>
<td>21</td>
</tr>
<tr>
<td>SMS</td>
<td>15%</td>
<td>31</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>2</td>
</tr>
</tbody>
</table>

### 6.4 DATA ANALYSIS

In order to answer the second research question, Structural Equation Modelling (SEM) is used to test and validate this hypothesised theoretical model using the data collected from local governments in Victoria, Australia. SEM has many features that allow the research to conduct Confirmatory Factor Analysis (CFA) tests where relationships between observed variables and latent variables are defined by the measurement model (Brown, 2006; Hair et al., 2006). CFA is mainly used to examine the validity and internal reliability of a theoretical model that is pre-defined and hypothesised by the researcher (Hair et al., 2006). To measure and validate the level of support of the sample data to the hypothesised theoretical model several Goodness of Fit (GOF) calculation indices are used (Schumacker & Lomax, 2004; Byrne, 2010). The IBM Statistical Package for Social Sciences (SPSS) software application, version 21 and the Analysis of Moment Structures (AMOS) was chosen for conducting the SEM analysis.

#### 6.4.1 Data screening

In order to obtain precise results from the SEM analysis, the researcher needs to apply specific data screening techniques (Cruz, 2009). These techniques include dealing with missing data (Kaplan, 2009), normal distribution of the dataset (Byrne, 2010), and
managing outliers, kurtosis, and skewness (Schumacker & Lomax, 2004). Besides its ability to perform complex SEM analysis, this version of SPSS software combined with AMOS allows the researcher to conduct the dataset normality test, detect outliers, kurtosis and skewness, and generate descriptive statistics (Arbuckle, 2009). The next subsections (6.4.2 and 6.4.3) discuss the data screening techniques performed to ensure the hypotheses directing SEM analysis are met.

Checking for missing data is the first step in the data preparation stage. This includes checking the datasets for any errors or omissions that could disturb the GOF measurements in SEM analysis (Kaplan, 2009). Even though, the data were downloaded directly from the online database, the researcher needs to perform the necessary checks to ensure all datasets are complete and accurate. The results show that out of 213 surveys, seven were partially completed. The detected incomplete surveys had been deleted from the dataset. The distribution frequency results show there were no errors in the datasets. There were 206 valid surveys that were complete, accurate and ready for SEM analysis.

6.4.2 Assessment for normality

Evaluation of dataset normality is necessarily for the application of SEM analysis. The maximum likelihood (ML) parameter valuation assumes the data is continuous and normally distributed (Joreskog & Sorbom, 1986). Before the normality analysis is performed, it is necessary to address the potential problem of outliers, as they may have an undesirable effect on dataset normality distribution results (Schumacker & Lomax, 2004). Outliers have extreme values compared to the rest of the dataset (Hair et al., 2006). The distribution of dataset skewness and kurtosis are also influenced by the existence of outliers in the dataset (Cruz, 2009). The perfect value for skewness and kurtosis that reflect the best normal distribution is zero (0). However, skewness and kurtosis scores are considered acceptable within the range -2 and +2 (Illinois State University, 2012). On the other hand, Pallant (2007) suggests that skewness and kurtosis are considered acceptable if lower than three (<3).

Therefore, the data were checked prior to further analysis. The descriptive statistics were calculated including minimum value, maximum value, mean, standard deviation, skewness and kurtosis. The frequency distribution tests including graphical histograms normality and boxplot methods were performed. The results showed there were few
outliers and those detected were deleted. Both skewness and kurtosis were weighed. The statistics show that most variables are within the acceptable range.

In SPSS, data normality can be evaluated through the Kolmogorov-Smirnov (K-S) (Hair et al., 2006), and the Shapiro-Wilk tests (D'agostino et al., 1990). In this study, both tests were performed on the datasets. The results revealed show that the datasets depart from normality. All variables significance value returned 0.000. These results reflect the abnormal distribution of data in datasets (Hair et al., 2006). Hence, bootstrapping technique supported by SPSS was used as suggested by Byrne (2010) and Kline (2005). This technique allows the researcher to generate subsamples of data within the original data sample to obtain accurate results by testing the model using multivariate normal distribution (Kline, 2005). For this test model, the researcher used the maximum likelihood (ML) estimation bootstrapping technique to handle data abnormality.

6.4.3 Reliability of the questionnaire

There are several methods available to assess the reliability of the model construct (Malhotra & Birks, 2007). One is Cronbach’s alpha (α) indicator, used to evaluate the questionnaire’s internal consistency based on the average inter-item correlation (Coakes et al., 2006). In Cronbach’s alpha model, the closer results to 1.0 are the greater reliability of variables tested, and values higher than 0.7 are considered acceptable (Hair et al., 1998). For the purpose of this study, the researcher performed Cronbach’s alpha test on survey latent variables and those associated with them before the whole study model was assessed. Cronbach’s alpha test results are presented in table 6.6 show that the values for all latent variables in the survey are above the suggested value of 0.7. These results indicated internal consistency of the model.
### Table 6.6: Reliability of the Questionnaire

<table>
<thead>
<tr>
<th>latent variable</th>
<th>Questionnaire items</th>
<th>Cronbach’s α value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Trust</td>
<td>Q5. Responsiveness</td>
<td>0.864</td>
</tr>
<tr>
<td></td>
<td>Q6. User democracy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q7. Citizen involvement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q8. Self-development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q9. Dialogue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q10. Listening to public</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q11. Openness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q12. Professionalism</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q13. Honesty</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q14. Integrity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q15. Accountability</td>
<td></td>
</tr>
<tr>
<td>Service Quality</td>
<td>Q17. Adaptability</td>
<td>0.816</td>
</tr>
<tr>
<td></td>
<td>Q18. Reliability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q19. Stability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q20. Timeliness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q21. Robustness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q22. Friendliness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q23. User orientation</td>
<td></td>
</tr>
<tr>
<td>Social Outcomes</td>
<td>Q25. Fairness</td>
<td>0.883</td>
</tr>
<tr>
<td></td>
<td>Q26. Equity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q27. Social cohesion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q28. Public interest</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q29. Common good</td>
<td></td>
</tr>
</tbody>
</table>

### 6.5 MEASUREMENT MODEL

The first stage, defining the individual constructs, was conducted earlier during development of the research model discussed in Chapter 3. This research study developed a measurement model based on the theoretical framework plus the hypothesis developed and discussed in Chapter 3 (see section 3.2.4). The measurement model illustrated in figure 6.1 includes two levels of latent variables and one level of observed variable. The first level of the model includes the following observed variables: responsiveness, user democracy, citizen involvement, self-development, dialogue, listening to public opinion, openness, professionalism, honesty, integrity, accountability, adaptability, reliability, stability, timeliness, robustness, friendliness, user orientation, fairness, equity, social cohesion, public interest, and common good. The latent variables development of public trust in government (public trust), delivery of quality public services (service quality), and the achievements of social outcomes (social outcomes) are illustrated in the second level of the model. The latent variable public value of Gov 2.0 (Gov 2.0 PV) is illustrated in the third level of the model.
In CFA the latent variables (Gov 2.0 PV, public trust, service quality, and social outcomes) are measured indirectly through observed variables in the model (Kline, 2005; Byrne, 2010). These latent variables are ‘case’ or ‘reflect’ the observed variables as illustrated using the arrows from the latent variables to observed variables (Hair et al., 2006) (see figure 6.1). The 23 observed variables are loaded on latent variables. The first 11 observed variables (presented in rectangles) hypothesised to load on the latent variable ‘public trust’. The second group including seven observed variables are hypothesised to load on the latent variable ‘service quality’. The last group of five observed variables hypothesised to load on the latent variable ‘social outcomes’.

All the observed variables are linked with a measurement error (e1 to e23). This indicates to what extent observed variable measures do not accurately reflect the latent variable they are loaded on (Hair et al., 2006; Holmes-Smith, 2006). The measurement model regression path is illustrated by unidirectional arrows from the ‘Gov 2.0 PV’ latent variable to public trust, service quality, and social outcomes (Byrne, 2010).
Figure 6.1: Initial measurement model

The inter-correlation between variables needs to be examined to ensure correlation levels between examined variables are within the recommended figures (Field, 2009). There are two statistical methods used to assess internal reliability of the model (Pallant, 2007): Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA).

EFA is statistically driven and loads all variables onto all latent variables, CFA is theoretically based (Cunningham, 2008). CFA evaluates variable loadings for those directly associated with that specific variable. In this research study, CFA is used to answer the confirmatory research question: **What values do citizens perceive from using Gov 2.0 initiatives?**
6.5.1 CFA of the full measurement model assessment of fit

After the measurement model has been fit to the dataset, the CFA was executed in IBM-SPSS-AMOS 22.0.0 to determine whether the hypothesised measurement fits the actual model. This step is very important in the data analysis process, since the precision of the structural model is reliant on correctly specified measurement models (Anderson & Gerbing, 1982). The Goodness-of-fit (GOF) “indicates how well the specified model reproduces the covariance matrix among the indicator items” (Hair et al., 2006, p. 745). A number of fit indices can be used to measure the validity of the whole model and its paths (Tanaka, 1993; Maruyama, 1997):

a) **Absolute fit indices** show how good the estimated model replicates the collected data (Hair et al., 2006). They include: Chi-square ($\chi^2$) which is a hypothesis assessment centred on a comparison of the proposed and alternate model; goodness of fit index (GFI) which assesses the ratio of variance and covariance of the projected model; the root mean square error of approximation (RMSEA) which assesses the error between the original and reproduced matrices (Hair et al., 2006; Reisinger & Mavondo, 2007); the root mean square residual (RMSR) and standardised root mean residual (SRMR) which assesses the average difference between the dataset and indirect correlations (Hair et al., 2006); and the normed Chi-square ($\chi^2$/df) (Cunningham, 2008).

b) **Incremental fit indices** “assess how well a specified model fits relative to some alternative baseline model” (Hair et al., 2006, p. 749) where observed variables are uncorrelated. The incremental fit indices include: normal fit index (NFI) which represents the ratio of the difference in the $\chi^2$ value for the fit model and a null model divided by the $\chi^2$ value for the null model; comparative fit index (CFI) which is an enhanced version of the NFI (Schumacker & Lomax, 2004; Brown, 2006); Tucker-Lewis index (TLI) which predates the CFI; and relative non-centrality index (RNI) which compares the observed fit resulting from testing a specific model to that of a null model (Hair et al., 2006).

c) **Parsimony fit indices** show if the model can be enhanced by identifying fewer estimated parameter paths including the parsimony goodness-of-fit (PGFI) which adjusts the GFI using the parsimony ratio (PR), and the parsimony normed fit index (PNFI) which adjusts the normed fit index of NFI (Hair et al., 2006).
Hair et al. (2006) affirmed that there is no agreement to which indices should be used or what are the acceptable cut-off values for fit indices. However, the authors recommended general guidelines to assist the researcher determining the acceptability of fit for the examined model such as use multiple indices from different types, and adjust the index cut-off values based on model characteristics (Hair et al., 2006). Therefore, the fit indices presented in table 6.7 (present cut-off values for different rules recommended through different sources) will be used as cut-off values to assess the model fit for this study.

Table 6.7: Goodness-of-fit cut-off values

<table>
<thead>
<tr>
<th>Index Type</th>
<th>GOF Index</th>
<th>Recommended Value</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute fit indices</td>
<td>χ² (p Value)</td>
<td>P value higher than 0.05</td>
<td>(Hair et al., 2006)</td>
</tr>
<tr>
<td></td>
<td>χ²/df</td>
<td>&lt; 2.0</td>
<td>(Hair et al., 2010)</td>
</tr>
<tr>
<td></td>
<td>RMSEA</td>
<td>&lt; 0.08</td>
<td>(Hair et al., 2006; Reisinger &amp; Mavondo 2006)</td>
</tr>
<tr>
<td></td>
<td>SRMR</td>
<td>Close to 0.08 or below</td>
<td>(Hair et al., 2006)</td>
</tr>
<tr>
<td></td>
<td>GFI</td>
<td>&gt; 0.90</td>
<td>(Reisinger &amp; Mavondo, 2006)</td>
</tr>
<tr>
<td></td>
<td>RMR</td>
<td>&lt; 0.10</td>
<td>(Reisinger &amp; Mavondo, 2006; Hair et al., 2006)</td>
</tr>
<tr>
<td>Incremental fit indices</td>
<td>CFI</td>
<td>&gt; 0.90</td>
<td>(Reisinger &amp; Mavondo, 2006)</td>
</tr>
<tr>
<td></td>
<td>TLI</td>
<td>Close to 0.95</td>
<td>(Reisinger &amp; Mavondo, 2006; Hair et al. 2006)</td>
</tr>
<tr>
<td>Parsimony fit indices</td>
<td>AGFI</td>
<td>Close to 0.95</td>
<td>(Schumacker and Lomax, 2004)</td>
</tr>
</tbody>
</table>

The bootstrap ML estimation technique was used to estimate the whole measurement model in IBM-SPSS-AMOS 22.0.0 to determine whether the hypothesised measurement fits the actual model. The statistics resulting from the GOF test shows the full measurement model does not meet acceptable levels of validity presented in table 6.7. The test results show that the χ² value was 1003.190 with a P value of 0.000 and χ²/df value 4.419 does not fit with acceptable figures (p= <0.05, χ²/df = <2.0) recommended by Hair et al. (2006) for sufficient fit. The other absolute fit indices of GOF results also indicated that the model does not fit the data. The model RMSEA value result 0.129 with a PCLOSE value of 0.000 do not fit the recommended level (RMSEA < 0.08 with a PCLOSE value > 0.05) (Hair et al., 2006; Reisinger & Mavondo, 2007). Similarly, the value of 0.687 of GFI is far from the acceptable level (greater than 0.90) recommended by Reisinger and Mavondo (2007).

All results shown for the incremental and parsimony fit indices confirm that the model does not adequately fit the data. The CFI (being at 0.661) is well below the
recommended figure (CFI >0.90) (Reisinger & Mavondo, 2007), and the TLI value (being at 0.662) should be close to 0.95 (the acceptable level) (Hair et al., 2006; Reisinger & Mavondo, 2007). Likewise, the parsimony fit indices AGFI value 0.619 is far below the value (close to 0.95) recommended by Schumacker and Lomax (2004). The insufficient validity revealed results suggests that the model must be modified to meet the acceptable level of GOF indices. Each of the public value main constructs (public value areas) including public trust, service quality, social outcomes, and their associated observed variables were in turn validated and modified separately using CFA. The modification process follows Hair et al. (2006) suggested stages, starting with conducting the validity assessment for each one-factor congeneric measurement model, including convergent, discriminant, and factorial validity assessment, as detailed in the following sections.

6.5.2 Analysis of one-factor congeneric measurement models

The following sub-section presents the steps and stages of analysis of one-factor congeneric measurement models used to test, modify and confirm each of the public value main constructs (public trust, service quality, and social outcomes) in order to modify the overall measurement model.

6.5.2.1 Public trust construct congeneric analysis

As shown in figure 6.2, the one-factor congeneric model was developed for public trust. Initially, 11 observed variables (presented in rectangles) are loading on the reflective latent variable (public trust). These observed variables are responsiveness, user democracy, citizen involvement, self-development, dialogue, listening to public opinion, openness, professionalism, honesty, integrity, and accountability. Each variable is linked with a measurement error labelled from e1 to e11. In order to obtain the GOF statistics, the estimation for the initial one-factor congeneric measurement model for public trust was generated (figure 6.2).
The validity of the public trust one-factor congeneric model was assessed using the ML estimation technique. The results obtained from the GOF test show that the one-factor congeneric model does not fit the dataset. The test results show that the $\chi^2$ value was 118.453 with a Bollen-Stine $P$ value of 0.000 and $\chi^2/df$ value 2.692 does not fit the acceptable figures ($p= <0.05$, $\chi^2/df = <2.0$) recommended by Hair et al. (2006) for sufficient fit. The other absolute fit indices of GOF results also indicated that the model does not fit the data. The RMSEA value result of 0.091 with a PCLOSE value of 0.001 does not fall within the recommended levels (RMSEA $< 0.08$ with a PCLOSE value $> 0.05$) (Hair et al., 2006; Reisinger & Mavondo, 2007). The TLI value of 0.881 is lower than the acceptable level (close to 0.95) recommended (Hair et al., 2006; Reisinger & Mavondo, 2007). Likewise, the parsimony fit indices AGFI value with 0.849 is far below the recommended value (close to 0.95) (Schumacker & Lomax, 2004).

However, the results for incremental fit indices CFI at 0.905 is within the recommended range (CFI greater than 0.90) (Reisinger & Mavondo, 2007). Also, the absolute fit indices GFI value of 0.899 is very close to the acceptable level (greater than 0.90) recommended by Reisinger and Mavondo (2007). Though, the incremental fit indices CFI is at an acceptable level and the absolute fit indices GFI is very close to recommended levels, the results obtained for other indices indicate that the model does not adequately fit the data and needs to be modified and retested.

In order to re-examine and modify the model, the researcher followed the following diagnostic and modification procedures suggested by Hair et al. (2006) including:
Firstly, examine the standardised factor loading (SFL) of each observed variable to get rid of those irrelevant variables. To improve the model GOF, the variable that has a value of SFL less than 0.5 indicates that the variable does not explain the factor well and should be deleted (Hair et al., 2006).

Secondly, examine the standardised residuals (SR) values. Standardised residuals are the difference between the observed and the estimated covariance terms (Kline, 2005). The SR value greater than |±2.58| represents a poor relationship affecting the overall model fit and the value greater than |±4.0| represents an improper degree of error that requires the deletion of the variable (Hair et al., 2006).

Thirdly, conduct some modifications on the model based on the modification indices (MI). The MI values generated by AMOS are figures demonstrating the extent to which the model’s $\chi^2$ can be reduced if a single parameter is freely estimated (Hair et al., 2006). The authors suggest that GOF for the measurement model can be significantly increased by freeing the corresponding paths between parameters that have a value greater than 4.0. The modification indices (MI) values are helpful to investigate issues with specific variables in the model (Byrne, 2010; Hair et al., 2006).

The examination and modification procedure for one-factor congeneric for public trust model starts with examining the SFLs as suggested by Hair et al. (2006). As shown in figure 6.2 and table 6.8, SFLs for indicator variables responsiveness (0.69), user democracy (0.68), citizen involvement (0.53), self-development (0.54), dialogue (0.70), listening to public opinion (0.77), openness (0.74), professionalism (0.61), honesty (0.37), integrity (0.38), and accountability (0.69). The obtained figures shows the SFLs values for honesty (0.37) and integrity (0.38) are below the recommend cut-off value (0.5) which indicates an issue in these indicator variables’ loading on latent factor Public Trust.
<table>
<thead>
<tr>
<th>Indicator variable</th>
<th>Latent factor</th>
<th>SFL estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsiveness</td>
<td>← Public Trust</td>
<td>.69</td>
</tr>
<tr>
<td>User Democracy</td>
<td>← Public Trust</td>
<td>.68</td>
</tr>
<tr>
<td>Citizen Involvement</td>
<td>← Public Trust</td>
<td>.53</td>
</tr>
<tr>
<td>Self-Development</td>
<td>← Public Trust</td>
<td>.54</td>
</tr>
<tr>
<td>Dialogue</td>
<td>← Public Trust</td>
<td>.70</td>
</tr>
<tr>
<td>Listening to Public Opinion</td>
<td>← Public Trust</td>
<td>.77</td>
</tr>
<tr>
<td>Openness</td>
<td>← Public Trust</td>
<td>.74</td>
</tr>
<tr>
<td>Professionalism</td>
<td>← Public Trust</td>
<td>.61</td>
</tr>
<tr>
<td>Honesty</td>
<td>← Public Trust</td>
<td>.37</td>
</tr>
<tr>
<td>Integrity</td>
<td>← Public Trust</td>
<td>.38</td>
</tr>
<tr>
<td>Accountability</td>
<td>← Public Trust</td>
<td>.69</td>
</tr>
</tbody>
</table>

MI values are obtained to confirm the deletion of the suspect variables (honesty and integrity). MI values suggest correlations between the errors e2 and e9, e3 and e8. Some authors suggest that GOF for the measurement model can be significantly increased by freeing the corresponding paths between parameters that have a value greater than 4.0. However, Hair et al. (2010) recommended that it should not always modify the model by depicting the correlation between errors. Therefore, the Standardised Residual (SR) diagnostic measure should be performed.

The figures obtained show that the SR among indicator variables integrity and citizen involvement is (-3.318) and the indicator variables honesty and self-development is (-3.147) is higher than the recommended SR value |±2.58| (Hair et al., 2006). Given that a higher SR is associated with both indicator variables honesty and integrity and their SFLs are below 0.5, both these indicator variables become candidates for deletion. Therefore, both identified variables were deleted from the model.

After honesty and integrity were both deleted, all SR values resulting from the model re-estimation were within the acceptable range as shown in table 6.9 and the model achieved acceptable figures of GOF. The obtained statistics of GOF show that the modified one-factor congeneric measurement model (public trust) satisfactorily fits the dataset where all of the indices were either within or close to cut-off values.
Table 6.9: Standardised residual among public trust construct observed variables

<table>
<thead>
<tr>
<th></th>
<th>Responsiveness</th>
<th>User democracy</th>
<th>Citizen involvement</th>
<th>Self-Development</th>
<th>Dialogue</th>
<th>Listening to Public</th>
<th>Openness</th>
<th>Professionalism</th>
<th>Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsiveness</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User democracy</td>
<td>-.267</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citizen involvement</td>
<td>-.984</td>
<td>1.086</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-development</td>
<td>.241</td>
<td>-.745</td>
<td>1.496</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dialogue</td>
<td>.651</td>
<td>.203</td>
<td>-.681</td>
<td>-.495</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listening to public</td>
<td>.619</td>
<td>-.346</td>
<td>.516</td>
<td>-.524</td>
<td>-.324</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>-.842</td>
<td>.753</td>
<td>-.385</td>
<td>.854</td>
<td>.598</td>
<td>-.276</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professionalism</td>
<td>-.312</td>
<td>1.058</td>
<td>.026</td>
<td>.651</td>
<td>-.094</td>
<td>-.048</td>
<td>-.141</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Accountability</td>
<td>.085</td>
<td>-.862</td>
<td>-.558</td>
<td>1.352</td>
<td>-.601</td>
<td>.527</td>
<td>-.118</td>
<td>-.125</td>
<td>.000</td>
</tr>
</tbody>
</table>

The test results show that the $\chi^2$ value was 2.249 with a Bollen-Stine P value of 0.003 and $\chi^2$/df value 2.056, which is very close to acceptable figures ($p= <0.05$, $\chi^2$/df = <2.0) for sufficient fit (Hair et al., 2006). The authors, however, stressed that when the dataset observation is under 250, and the model has from 12 to 30 observed variables “the significant p value can result even with good fit” (Hair et al., 2006, p. 753). The other absolute fit indices of GOF results also indicated that the model fit the data well. The model RMSEA value result of 0.077 with a PCLOSE value of 0.082 are at recommended levels (RMSEA < 0.08 with a PCLOSE value > 0.05) (Hair et al., 2006; Reisinger & Mavondo, 2007). The results for the incremental fit indices CFI at 0.968 is within the recommended range (CFI greater than 0.90) (Reisinger & Mavondo, 2007). Also, the absolute fit indices GFI value of 0.948 is very close to the acceptable level (greater than 0.90) recommended by Reisinger and Mavondo (2007). The TLI value at 0.940 is at an acceptable level (close to 0.95) (Hair et al., 2006; Reisinger & Mavondo, 2007). Likewise, the parsimony fit indices AGFI value with 0.908 is not far below the value (close to 0.95) recommended by Schumacker and Lomax (2004). Figure 6.3 illustrates the re-specified measurement model. The re-specified model of public trust is summarised in table 6.14.
6.5.2.2 Service quality construct congeneric analysis

The one-factor congeneric model was developed for service quality. Initially, 7 observed variables (presented in rectangles) are loading on the reflective latent variable (service quality). These observed variables are adaptability, reliability, stability, timeliness, robustness, friendliness, and user orientation. Each variable is linked with a measurement error as shown in figure 6.4. In order to obtain the GOF statistics, the estimation for the initial one-factor congeneric measurement model for service quality was generated.

The validity of the service quality one-factor congeneric model was assessed using the ML estimation technique. The results obtained from the GOF test show that the one-factor congeneric model does not fit the dataset.
Figure 6.4: Initial one-factor congeneric measurement model of service quality

The test results show that the $\chi^2$ value was 52.090 with a Bollen-Stine $P$ value of 0.000 and $\chi^2/df$ value 3.721 does not fit the acceptable figures ($p = <0.05$, $\chi^2/df = <2.0$) recommended by Hair et al. (2006) for sufficient fit. The results for incremental fit indices CFI at 0.921 is within the recommended range (CFI greater than 0.90) (Reisinger & Mavondo, 2007), and the absolute fit indices GFI value of 0.931 is very close to the acceptable level (greater than 0.90) recommended by Reisinger and Mavondo (2007). The RMSEA value result of 0.115 with a PCLOSE value of 0.001 does not fall within the recommended levels (RMSEA < 0.08 with a PCLOSE value > 0.05) (Hair et al., 2006; Reisinger & Mavondo, 2007). The TLI value of 0.882 is lower than the acceptable level (close to 0.95) recommended (Hair et al., 2006; Reisinger & Mavondo, 2007). Likewise, the parsimony fit indices AGFI value with 0.861 is far below the recommended value (close to 0.95) (Schumacker & Lomax, 2004).

Though, the incremental fit indices CFI is at an acceptable level and the absolute fit indices GFI is very close to recommended levels, the results obtained for other indices indicate that the model does not adequately fit the data and needs to be modified and retested.

The same procedures suggested by Hair et al. (2006) and followed earlier to examine the public trust congeneric model were employed to examine the validity of one-factor congeneric model for the latent factor service quality. The diagnosing and modification procedure for one-factor congeneric for service quality model starts with examining the SFLs. As shown in table 6.10, while the SFLs for all model indicator variables are over
the recommend cut-off value (0.5), the initial MI values resulting from the AMOS output show that the parameters (e5 <--> e14) have the highest value at 11.663. However, it is not recommended to modify the model by depicting the correlation between errors to improve the model validity (Hair et al., 2010).

Table 6.10: The standardised factor loadings for the service quality

<table>
<thead>
<tr>
<th>Indicator variable</th>
<th>Latent factor</th>
<th>SFL estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptability</td>
<td>← Service Quality</td>
<td>.72</td>
</tr>
<tr>
<td>Reliability</td>
<td>← Service Quality</td>
<td>.73</td>
</tr>
<tr>
<td>Stability</td>
<td>← Service Quality</td>
<td>.51</td>
</tr>
<tr>
<td>Timeliness</td>
<td>← Service Quality</td>
<td>.54</td>
</tr>
<tr>
<td>Robustness</td>
<td>← Service Quality</td>
<td>.76</td>
</tr>
<tr>
<td>Friendliness</td>
<td>← Service Quality</td>
<td>.76</td>
</tr>
<tr>
<td>User Orientation</td>
<td>← Service Quality</td>
<td>.53</td>
</tr>
</tbody>
</table>

The figures obtained shows that the SR among indicator variables stability and user orientation is (4.046) which is higher than the recommended SR value |±2.58| by Hair et al. (2006). Given that a higher SR is associated with indicators variables stability and user orientation, the indicator variable stability becomes a candidate for deletion since it has the lowest loading (0.51). Therefore, the stability variable was deleted from the model.

After the stability variable was deleted, the model was re-estimated again to examine GOF improvements. The results obtained from the GOF test show that the model does not achieve acceptable figures of GOF as shown in table 6.7. The results obtained for other indices indicate that the model does not adequately fit the data and needs to be modified and retested. The new MI values show that the parameters (e6 <--> e7) are at 14.527 with SR among indicator variables reliability and adaptability is (-3.947) which is lower than the recommended SR value |±2.58| by Hair et al. (2006). These results indicate the need to delete the adaptability indicator variable which has the lowest SFL (0.62) compared to the reliability indicator variable (0.68). Therefore, the adaptability variable was deleted from the model as well.
After stability and adaptability variables were both deleted, the SR values resulting from the re-specified model was within the acceptable range |±2.58| recommended by Hair et al. (2006) as shown in table 6.11 and the model achieved acceptable figures of GOF. The GOF statistics obtained show that the modified one-factor congeneric measurement model of service quality satisfactorily fit the dataset. Figure 6.5 illustrates the re-specified measurement model.

Table 6.11: Standardised residual among service quality construct observed variables

<table>
<thead>
<tr>
<th>User orientation</th>
<th>Friendliness</th>
<th>Robustness</th>
<th>Reliability</th>
<th>Timeliness</th>
</tr>
</thead>
<tbody>
<tr>
<td>User orientation</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friendliness</td>
<td>1.467</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robustness</td>
<td>-.683</td>
<td>.071</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Reliability</td>
<td>.380</td>
<td>1.004</td>
<td>.792</td>
<td>.000</td>
</tr>
<tr>
<td>Timeliness</td>
<td>1.059</td>
<td>.824</td>
<td>-.257</td>
<td>-1.645</td>
</tr>
</tbody>
</table>

Figure 6.5: Re-specified one-factor congeneric measurement model of service quality

The re-specified model results indicate that the $\chi^2$ value was 15.687 and Bollen-Stine $P$ value of 0.074 and $\chi^2$/df value 1.425 is within the acceptable figure ($\chi^2$/df = <2.0) recommended for sufficient fit by Hair et al. (2006). The other absolute fit indices of GOF results also indicated that the model is a good fit. The model RMSEA value resulted 0.054 with a PCLOSE value of 0.276 are within the recommended levels (RMSEA < 0.08 with a PCLOSE value > 0.05) (Hair et al., 2006; Reisinger & Mavondo, 2007). The results for the incremental fit indices CFI at 0.948 is within the recommended range (CFI greater than 0.90) (Reisinger & Mavondo, 2007). Also, the absolute fit indices GFI value of 0.952 is at an acceptable level (close to 0.95) recommended by Reisinger and Mavondo (2007). The TLI value at 0.952 is very close
to the recommended value (close to 0.95) by Hair et al. (2006) and Reisinger and Mavondo (2007). Likewise, the parsimony fit indices AGFI value with 0.947 is very close to the value 0.95 recommended by Schumacker and Lomax (2004). Table 6.14 includes the GOF results for both initial and re-specified measurement models of service quality.

6.5.2.3 Social outcomes construct congeneric analysis

The one-factor congeneric model was developed for social outcome. Initially, 5 observed variables are loading on the reflective latent variable (social outcome). These observed variables are fairness, equity, social cohesion, public interest, and common good. Each variable is linked with a measurement error as shown in figure 6.6. In order to obtain the GOF statistics, the estimation for the initial one-factor congeneric measurement model for social outcome was generated.

![Figure 6.6: Initial one-factor congeneric measurement model of social outcomes](image)

The one-factor congeneric model for social outcomes examination procedures followed those of public trust and service quality constructs. The examination procedures for social outcomes involved a termination of the original observed variable common good. As shown in figure 6.7 and table 6.12, the variable common good SFL value 0.39 is far below the recommended level (>0.5) recommended by Hair et al. (2006), indicating the latent factor is not well explained. Therefore, the variable common good was terminated to improve the GOF.
Table 6.12: The standardised factor loadings for the Social Outcome

<table>
<thead>
<tr>
<th>Indicator variable</th>
<th>Latent factor</th>
<th>SFL estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairness</td>
<td>← Social Outcome</td>
<td>.69</td>
</tr>
<tr>
<td>Equity</td>
<td>← Social Outcome</td>
<td>.53</td>
</tr>
<tr>
<td>Social cohesion</td>
<td>← Social Outcome</td>
<td>.57</td>
</tr>
<tr>
<td>Public interest</td>
<td>← Social Outcome</td>
<td>.75</td>
</tr>
<tr>
<td>Common good</td>
<td>← Social Outcome</td>
<td>.39</td>
</tr>
</tbody>
</table>

After the termination of common good, the model has achieved acceptable GOF levels as shown in table 6.7. The GOF statistics obtained show that the modified one-factor congeneric measurement model of social outcomes adequately fits the dataset. Figure 6.7 illustrates the re-specified measurement model.

Figure 6.7: Re-specified one-factor congeneric measurement model of social outcomes

The re-specified results show that the $\chi^2$ value was 1.383 with a degree of freedom 2 and Bollen-Stine $P$ value of 0.112 is above the recommended figure ($p= <0.05$) and $\chi^2$/df value 1.191 is very close to the acceptable figure ($\chi^2$/df = <2.0) recommended for sufficient fit by Hair et al. (2006). The other absolute fit indices of GOF results also indicated the model fits well with the data. The RMSEA value resulted in 0.076 with a PCLOSE value of 0.238, within the recommended levels (RMSEA < 0.08 with a PCLOSE value > 0.05) (Hair et al., 2006; Reisinger & Mavondo, 2007). The results for the incremental fit indices CFI at 0.989 is within the recommended range (CFI >0.90) (Reisinger & Mavondo, 2007). Also, the absolute fit indices GFI value of 0.989 is at an acceptable level (greater than 0.90) recommended by Reisinger and Mavondo (2007). The TLI value at 0.956 meets the acceptable level (close to 0.95) recommended (Hair et al., 2006; Reisinger & Mavondo, 2007). Likewise, the parsimony fit indices AGFI value
with 0.946 is very close to the value (close to 0.95) recommended by Schumacker and Lomax (2004). Table 6.14 includes GOF results for both initial and re-specified measurement models of the social outcome construct. The SR values resulting from the re-specified model were within the acceptable range \[\pm 2.58\] recommended by Hair et al. (2006) as shown in table 6.13.

Table 6.13: Standardised residual among social outcomes construct observed variables

<table>
<thead>
<tr>
<th></th>
<th>Fairness</th>
<th>Equity</th>
<th>Social cohesion</th>
<th>Public interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairness</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity</td>
<td>-.166</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social cohesion</td>
<td>-.462</td>
<td>1.223</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Public interest</td>
<td>.202</td>
<td>-.309</td>
<td>-.096</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 6.14: Initial and re-specified congeneric measurement models of GOF results

<table>
<thead>
<tr>
<th>GOF index and accepted value</th>
<th>X2 / df &lt; 2.0</th>
<th>X2 / df &lt; .05</th>
<th>P &gt;</th>
<th>GFI Close to .95</th>
<th>CFI Close to .90</th>
<th>TLI close to .95</th>
<th>AGFI Close to .95</th>
<th>RMSEA &lt; .08</th>
<th>PCLOSE &gt; .05</th>
<th>SRMR &lt; .08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public trust</td>
<td>In- 118.453</td>
<td>2.692</td>
<td>0.000</td>
<td>.899</td>
<td>.905</td>
<td>.881</td>
<td>.849</td>
<td>.091</td>
<td>.001</td>
<td>.061</td>
</tr>
<tr>
<td></td>
<td>Re- 2.249</td>
<td>2.056</td>
<td>0.003</td>
<td>.948</td>
<td>.968</td>
<td>.940</td>
<td>.908</td>
<td>.077</td>
<td>.082</td>
<td>.051</td>
</tr>
<tr>
<td>Service quality</td>
<td>In- 52.090</td>
<td>3.721</td>
<td>0.000</td>
<td>.931</td>
<td>.921</td>
<td>.882</td>
<td>.861</td>
<td>.115</td>
<td>.001</td>
<td>.058</td>
</tr>
<tr>
<td></td>
<td>Re- 15.687</td>
<td>1.425</td>
<td>0.074</td>
<td>.952</td>
<td>.948</td>
<td>.952</td>
<td>.947</td>
<td>.054</td>
<td>.027</td>
<td>.068</td>
</tr>
<tr>
<td>Social outcomes</td>
<td>In- 3.457</td>
<td>3.457</td>
<td>0.004</td>
<td>.966</td>
<td>.937</td>
<td>.874</td>
<td>.898</td>
<td>.109</td>
<td>.036</td>
<td>.051</td>
</tr>
<tr>
<td></td>
<td>Re- 1.383</td>
<td>1.191</td>
<td>.112</td>
<td>.989</td>
<td>.989</td>
<td>.956</td>
<td>.946</td>
<td>.076</td>
<td>.238</td>
<td>.031</td>
</tr>
</tbody>
</table>

6.5.3 Construct validity and reliability

To ensure validity of model constructs, Bagozzi et al. (1991) recommend the use of multimethods to evaluate the constructs validity. This requires assessment of convergent and discriminant validity. Convergent assessment involves evaluating the correlations between variables within the same construct (Kline, 2005). Convergent validity can be assessed by considering the loading value of each variable to the latent factor (Nunnally, 1978) and reliability of construct (Hair et al., 2006). For the construct to be valid, the loading values should be at least 0.4 (Nunnally, 1978).

The re-specified convergent validity has been established for the three model constructs (public trust, service quality, and social outcomes) since all loadings for each observed
variable onto its relevant construct (latent variable) is over the suggested value (0.4) (Nunnally, 1978). All observed variable loadings were illustrated in previous sections. Figures 6.3, 6.5, and 6.7 are summarised in table 6.15.

<table>
<thead>
<tr>
<th>Construct (latent variable)</th>
<th>Observed variable</th>
<th>SFL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public trust</td>
<td>Responsiveness</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>User democracy</td>
<td>0.59</td>
</tr>
<tr>
<td></td>
<td>Citizen involvement</td>
<td>0.54</td>
</tr>
<tr>
<td></td>
<td>Self-development</td>
<td>0.62</td>
</tr>
<tr>
<td></td>
<td>Dialogue</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>Listening to public</td>
<td>0.76</td>
</tr>
<tr>
<td></td>
<td>Openness</td>
<td>0.73</td>
</tr>
<tr>
<td></td>
<td>Professionalism</td>
<td>0.59</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
<td>0.67</td>
</tr>
<tr>
<td>Service quality</td>
<td>Reliability</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>Timeliness</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>Robustness</td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>Friendliness</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td>User orientation</td>
<td>0.61</td>
</tr>
<tr>
<td>Social outcomes</td>
<td>Fairness</td>
<td>0.69</td>
</tr>
<tr>
<td></td>
<td>Equity</td>
<td>0.51</td>
</tr>
<tr>
<td></td>
<td>Social cohesion</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>Public interest</td>
<td>0.79</td>
</tr>
</tbody>
</table>

Discriminant validity is used to measure the extent to which the constructs within the model truly differ by assessing the correlation between latent variables (Hair et al., 2006; Malhotra & Birks, 2007). These highly correlated variables seem to measure the same rather than different constructs (Hair et al., 2006). There are several methods to assess discriminant validity. According to Reisinger and Mavondo (2007), discriminant validity can be assessed by comparing inter-construct and intra-construct relationships. The construct is considered valid if its internal consistency exceeds its correlations with all other independent constructs (Hulland, 1999).

The assessment resulting from employing this method on re-specified constructs shows that the internal consistency (Cronbach’s alpha) is greater than the correlation between constructs as shown in table 6.16. The results obtained provide evidence of the discriminant validity of the re-specified constructs (public trust, service quality, and social outcomes).
Table 6.16: Discriminant validity

<table>
<thead>
<tr>
<th>Construct</th>
<th>Public Trust</th>
<th>Service Quality</th>
<th>Social Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Trust</td>
<td>0.860</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Quality</td>
<td>0.682</td>
<td>0.857</td>
<td></td>
</tr>
<tr>
<td>Social Outcomes</td>
<td>0.442</td>
<td>0.629</td>
<td>0.733</td>
</tr>
</tbody>
</table>

Cronbach’s alpha is a commonly used measure for reliability (Coakes & Steed, 2007). Cronbach’s alpha measure is based on the average correlation between variables, and the value above 0.7 is considered acceptable in confirmatory research (Hair et al., 1998).

The assessment of the re-specified constructs reliability values were above the suggested level of Cronbach’s alpha (0.7) (Hair et al., 2006). Cronbach’s alpha values for the re-specified constructs were 0.860 for public trust, 0.857 for service quality, and 0.733 for social outcomes. Reliability assessment results for all re-specified constructs are included in table 6.14 above.

6.5.4 Final measurement for model validity

After validating public trust, service quality, and social outcomes, the results show that these constructs are not identical and can be explained by retreating them in a higher-order factor level (public value of Gov 2.0) (Byrne, 2010).

As depicted in figure 6.8 the estimation results show that the final model has achieved an acceptable level of validity. The statistics obtained show that the final measurement model adequately fits the dataset. The results show that the $\chi^2$ value was 21.564 with Bollen-Stine $P$ value of 0.0458 is above the recommended figure ($p= <0.05$) and $\chi^2/df$ value 1.986 is less than the acceptable figure ($\chi^2/df = <2.0$) recommended for sufficient fit by Hair et al. (2006). The other absolute fit indices of GOF results also indicated that the model was a good fit with the data. The model RMSEA value result 0.032 with a PCLOSE value of 0.07 are within recommended levels (RMSEA < 0.08 with a PCLOSE value > 0.05) (Hair et al., 2006; Reisinger & Mavondo, 2007). The results for the incremental fit indices CFI at 0.963 is within the recommended range (CFI >0.90) (Reisinger & Mavondo, 2007). Also, the absolute fit indices GFI value of 0.959 is at an acceptable recommended level (greater than 0.90) (Reisinger & Mavondo, 2007). The TLI value at 0.952 meets the acceptable level (close to 0.95) recommended by Hair et
al. (2006) and Reisinger and Mavondo (2007). Likewise, the parsimony fit indices AGFI value with 0.947 is not far from the value (close to 0.95) recommended by Schumacker and Lomax (2004). The results of the final measurement model are shown to be much closer to the recommended values of GOF indices, concluding that the final measurement model of public value of Government 2.0 adequately fits the dataset.

Figure 6.8: Final measurement model of public value of Government 2.0
6.6 PHASE 2 FINDINGS OF THE SURVEY QUESTIONNAIRE WITH END USERS (CITIZENS)

The quantitative findings of this phase resulting from hypotheses examinations are summarised in table 6.17. Initially, there were three hypotheses to be examined. The final measurement was confirmed, supported by examining them using the significant test critical ratio (CR). CR represents the parameter estimate divided by its standard error (SE). The factor estimate is significant at \( p < .05 \) if \( CR > \pm 1.96 \) (Byrne, 2010).

Results in table 6.17 indicate that the loading for all latent variables was significant and supported the final paths, and it should be persisted in the model (Byrne, 2010). All CR values for regression coefficient paths between variables are within acceptable \( p \) values close to zero (***), demonstrating sufficient validity. The results prove the hypotheses proposed in Chapter 3 are supported. However, the observed variables including honesty, integrity, and common good have been terminated in the GOF process due to their lack of convergent validity.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Structural relationship</th>
<th>SRW</th>
<th>URW</th>
<th>SE</th>
<th>CR</th>
<th>P</th>
<th>Hypothesis test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Public trust ( &lt;--- ) Gov 2.0 PV</td>
<td>.677</td>
<td>.963</td>
<td>.125</td>
<td>8.973</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>Service quality ( &lt;--- ) Gov 2.0 PV</td>
<td>.984</td>
<td>.945</td>
<td>.145</td>
<td>8.735</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>Social outcomes ( &lt;--- ) Gov 2.0 PV</td>
<td>.638</td>
<td>.708</td>
<td>.106</td>
<td>7.267</td>
<td>***</td>
<td>Supported</td>
</tr>
</tbody>
</table>

The model includes three main areas of public value presented as latent variables including trust in government (public trust), quality of public services delivered (service quality), and the achievement of social outcomes (social outcomes). The results obtained from the structural model analysis clearly show that service quality is the latent variable that contributes most towards public value of Gov 2.0, accounting for 98% (9.8) of variance. This is followed by public trust, which contributes to the public value of Gov 2.0 by 67% (6.7) of variance. Social outcomes is the least contributing variable, accounting for only 63% (6.3) of variance.
6.7 CHAPTER SUMMARY

The quantitative phase discussed in this chapter is designed to answer the second research question: **What values do citizens perceive from using Gov 2.0 initiatives?** CFA was employed by the researcher to answer this question using qualitative data gathered from Victorian local governments. The data was used to validate and test the theoretical framework and hypotheses developed in the early stages of this research and discussed in Chapter 3. The findings of this research phase show that the quality of public services delivered to citizens on Gov 2.0 platforms is the most critical area for evaluating the public value of Gov 2.0 compared to the other two areas (public trust and social outcomes). Furthermore, listening to public opinion, openness, robustness, friendliness, reliability, and public interest are the public values most perceived and valued by citizens from their use of Gov 2.0 platforms. Citizen involvement, social cohesion and equity are the least perceived public values. Honesty, integrity, adaptability, stability, and common good were not important in evaluating the public value Gov 2.0 due to their lack of validity.

In the next chapter, the qualitative phase will be investigated in more detail to explore the main factors behind citizens’ perceptions of public values and their interactions with local governments via Gov 2.0 platforms.
Chapter 7: FINDINGS OF CITIZENS’ INTERVIEWS (Phase 3)

7.1 INTRODUCTION

In the previous chapter, this research study identified the public values that citizens perceive from their use of Gov 2.0 initiatives implemented by their local governments. Public values have been identified in the study’s theoretical framework (Chapter 3), reviewed against government’s views (Chapter 5), and validated using SEM (Chapter 5). The final research phase will illustrate the findings of citizens’ interviews in this chapter. This phase’s data were collected from citizens from the same local governments in Victoria, Australia.

The objective of this qualitative phase is to develop an in-depth understanding of how citizens perceive the values identified in the previous chapter. Understanding why and how these values are perceived is vital to comprehensively understand the creation of public value through Gov 2.0 initiatives at the local government level. In order to complete this picture, the researcher used semi-structured interviews to answer the third research question of this study: How do citizens’ perceive public value from their use of Gov 2.0 initiatives?

In this phase, the researcher investigated the following areas: (a) citizens’ motivations behind their use of Gov 2.0 initiatives and (b) how citizens’ perceive public value from the use of Gov 2.0 services. The next section (7.2) reports on the procedures of data collection. Section 7.3 illustrates the data analysis procedures used. This is followed by the findings of citizens’ perceptions of the main area of public value creation (public trust in government, quality of public services, and social outcomes) in sections 7.4, 7.5, 7.6. Finally, section 7.7 summarises the chapter.

7.2 DATA COLLECTION PROCEDURES

Similar to the qualitative data collected in the first phase, interviews with semi-structured questions were used to investigate how citizens perceive the public values of
Gov 2.0. The following sections outline the procedures undertaken by the researcher to implement the interview instrument as recommended by Bryman (2004).

7.2.1 Targeting potential interviewees

It is important to interview those citizens who utilise Gov 2.0 services to achieve this phase’s objective (Rubin & Rubin, 2005) and avoid any bias when selecting participants. To meet these conditions, the researcher has undertaken the following steps (see section 6.3.1). Firstly, inviting Phase 2 participants using council social media tools, granted that all participants have used their local governments’ Gov 2.0 services, mainly social media tools. Secondly, attaching the informed consent form to participate further in this phase’s interviews to Phase 2 surveys, granted that participants in this phase also participated in the earlier quantitative phase.

7.2.2 Designing interview questionnaire

The interview questionnaire for this phase was designed to answer the third research question: **How do citizens’ perceive public value from their use of Gov 2.0?** Semi-structured interview questions was designed to include all the values proposed and included in the theoretical framework. The researcher used the interview questions (see Appendix H) to collect comprehensive and detailed answers from interviewees. The researcher used open-ended interview questions to understand citizens’ views toward the usefulness of their local government Gov 2.0 services by motivating them to “reconstruct their experience and exploring their meaning” (Seidman, 1998. p. 76).

7.2.3 Conducting interviews

Interested citizens were contacted using the contact details they provided when they submitted their second phase survey. An invitation to participate (see Appendix F) and explanatory statement (see Appendix G) were sent in advance to participants. Also, all the interviewees were asked to complete and sign an informed consent form prior to interview (see Appendix C).

Nineteen face-to-face interviews were conducted in total with local government Gov 2.0 services and end users. The interviewees’ demographic is presented in table 7.1. Overall, interviews took between 45 minutes to an hour, and all were tape recorded with
participants’ permission. Interview locations included work offices, council libraries and cafés.

Table 7.1: Interviewees’ demographic

<table>
<thead>
<tr>
<th>Participant no.</th>
<th>Participant code</th>
<th>Age group</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A21</td>
<td>16-30</td>
<td>F</td>
</tr>
<tr>
<td>2</td>
<td>A22</td>
<td>51-70</td>
<td>M</td>
</tr>
<tr>
<td>3</td>
<td>A23</td>
<td>31-50</td>
<td>F</td>
</tr>
<tr>
<td>4</td>
<td>A24</td>
<td>31-50</td>
<td>F</td>
</tr>
<tr>
<td>5</td>
<td>B25</td>
<td>16-30</td>
<td>F</td>
</tr>
<tr>
<td>6</td>
<td>B26</td>
<td>16-30</td>
<td>F</td>
</tr>
<tr>
<td>7</td>
<td>B27</td>
<td>51-70</td>
<td>F</td>
</tr>
<tr>
<td>8</td>
<td>B28</td>
<td>51-70</td>
<td>M</td>
</tr>
<tr>
<td>9</td>
<td>B29</td>
<td>31-50</td>
<td>M</td>
</tr>
<tr>
<td>10</td>
<td>C30</td>
<td>16-30</td>
<td>F</td>
</tr>
<tr>
<td>11</td>
<td>C31</td>
<td>31-50</td>
<td>F</td>
</tr>
<tr>
<td>12</td>
<td>C32</td>
<td>51-70</td>
<td>M</td>
</tr>
<tr>
<td>13</td>
<td>C33</td>
<td>31-50</td>
<td>F</td>
</tr>
<tr>
<td>14</td>
<td>C34</td>
<td>31-50</td>
<td>F</td>
</tr>
<tr>
<td>15</td>
<td>D35</td>
<td>51-70</td>
<td>F</td>
</tr>
<tr>
<td>16</td>
<td>D36</td>
<td>16-30</td>
<td>M</td>
</tr>
<tr>
<td>17</td>
<td>D37</td>
<td>31-50</td>
<td>F</td>
</tr>
<tr>
<td>18</td>
<td>D38</td>
<td>31-50</td>
<td>M</td>
</tr>
<tr>
<td>19</td>
<td>D39</td>
<td>31-50</td>
<td>F</td>
</tr>
</tbody>
</table>

The researcher applied the same interview techniques to invest in the experience and knowledge gained from conducting Phase 1 interviews. The interview technique includes main questions, follow-up questions, and probing questions as recommended by Rubin and Rubin (2005). Interviews starting with preparation, introduction, asking interview questions, concluding the interview and asking the interviewee for any further information they might want to add. The broad semi-structured main questions were used by the researcher to encourage citizens to talk about their experience and views of the Gov 2.0 council services they used. Follow-up questions obtained in-depth answers and elaborated on main themes. In some cases, where the participant’s answer is too short or incomplete, the researcher asks probing questions (Rubin and Rubin (2005)) to get clear answers or the full story.

Generally, the procedures for data collection were effective as it resulted in a substantial amount of new data from citizens about the usefulness of Gov 2.0 services provided by their local government. The data collected in this phase was analysed following the same procedures employed to analyse Phase 1 data (see section 5.3). The findings obtained for this phase are presented in the following section.
7.3 DATA ANALYSIS

Qualitative research is used where there is uncertainty regarding dimensions and characteristics of the problem to discover, and to explore problems around the issue investigated by utilising ‘soft’ data and obtaining ‘rich’ data (Domegan & Fleming, 2007). This qualitative research phase is implemented to understand more fully how citizens perceive the values identified in the previous quantitative phase (Ulmer & Wilson, 2003). Understanding the ways citizens perceive these values will contribute to limited knowledge about the value of implementing Gov 2.0 initiatives within the public sector (Domegan & Fleming, 2007). The data is gathered through interviews and analysed to determine themes and patterns, to build a comprehensive explanation of how citizens perceive values through individual’s experience (Neuman, 2006; Creswell, 2009).

Thematic analysis is used in this phase and is one of the preferred ways for analysing qualitative data (Braun & Clarke, 2006). The main advantage of thematic analysis is that it allows for summarising complex data (Howitt, 2010). Analysis of interpretive data requires consideration of the breadth of the data collected and the need to identify themes, which might be uncovered through an inductive and iterative approach. The data collected from Phase 3 interviews is systematically analysed by carrying out theory-driven thematic analysis. The researcher used theory-driven analysis to develop the codes and themes from words, meanings, and expressions found in the interviews’ transcripts where three stages of coding follow iterations of reflection and review (Boyatzis, 1998). The three iterations broadly follow Strauss and Corbin (1990) coding stages (open coding, axial coding, and selective coding) where data analysis involved iterative cycles of open coding, and refining themes to determine a valid interpretation from the data. This analysis was undertaken to overcome the high level of anecdotal studies that surround the topic of Gov 2.0 and social media, and to allow for evolution of themes from this exploratory area of public value creation.

Before the implementation of this three code process, the researcher firstly became familiarised with the data to gain a better understanding. In this phase, the researcher conducted 19 face-to-face interviews with citizens who use Victorian local government Gov 2.0 initiatives. Additionally, the familiarisation process was enhanced by taking notes on initial ideas and themes, and data transcription.
Firstly, the interview data in this phase was openly coded into wide-ranging sets (identified in the study framework in Chapter 3). Open coding provided the researcher with a good starting point to generate a list of themes that were significant to interviewees. Codes were assigned to interviewee’s words and statements to develop concepts, which formed the beginning of analytic development (Charmaz, 2006). In the second iteration, the coding was refined to make connections between categories before a final iteration of selective coding.

Secondly, after the initial coding was conducted, the researcher started searching for themes and arranging them in meaningful groups using visual maps and axial coding. Axial coding is defined by Strauss and Corbin as “the act of relating categories to subcategories along the lines of their properties and dimensions” (Strauss & Corbin, 1998, p. 123). This process clarified the relationships between categories and subcategories, and between codes to make sense of the interview (Braun & Clarke, 2006).

The third iteration is selective coding. Selective coding requires a more in-depth examination of the categories by “refining their meanings, and articulating relationships among them” (Jin & Robey, 2008, p. 183) to enable theoretical categories that inform the findings from the research and contribute to outcomes. In this stage, themes were refined again to reinvestigate each theme (Braun & Clarke, 2006). This stage is more abstract and allows for selecting the most expressive codes to represent the participant’s view, and helped the researcher to define and label themes. This stage of data analysis focused on how value is perceived by participants and how their experiences of using Gov 2.0 initiatives have shaped their opinions.

The adoption of Strauss and Corbin (1990) three iterations coding strategy helped the researcher to develop thematic networks that display significant themes at different levels and their relationships. Furthermore, this multiple processes of analysis provided the researcher with more insight and understanding about the phenomena being investigated.

### 7.4 CITIZENS’ PERCEPTIONS OF TRUST IN GOVERNMENT

Participants have provided conflicting and differing perceptions about the development of trust in their local governments through Gov 2.0 initiatives. These vary from negative to positive perceptions. For example, while participant A 21 expressed a positive view,
saying “because we can find out more about each other. If you want to access it [Gov 2.0] as a resident then, you can find out more, so it would strengthen the relationship of trust and understanding” (P A21). A similar view was also expressed by P B27:

I think it's thrown council in a whole new light. I think it's become – council has lost that, I guess – for a lot of people who may not have approached council or used their services before, by going online, it just takes away some of the myths that council's something that could be scary or not helpful. Whereas really council's there to serve its citizens. (P B27)

P C32 expressed an opposite view, saying “I like and use them, not because it increases my trust in them, but because it helps me be less trusting of them I can understand all of the games that they’re playing, and I can be very vigilant in holding them to account.” (P C32)

Some other participants were ambivalent, for instance:

Why would it make me trust the Council more, just because they have an online website? Because they’re sharing more information?...I think it shows they’re trying to move with the future and what the demands are of the residents. I guess there is some trust there. The information they provide, I’ve found, has been accurate, so I guess that does increase the trustworthiness I have with them. (P B23)

Overall, most participants’ answers were natural, as participants think that their use of council’s Gov 2.0 initiatives has not changed their trust in their local governments. Participants have stated this view in their answers using different expressions. For example, P C31 said: “The trustworthiness hasn’t really changed. I know what council do. I’m aware of their functions, but it hasn’t, in my mind, altered that I don’t think” (P C31). Similarly P D37 answered “I don’t think it’s improved my trust, but it hasn’t decreased my trust either” (P D37), and P D35 state “No, I don't think so. I think they've always been pretty trustworthy, and I don't feel any different. You might know more, but I don't think it would be more trustworthy.” (P D35)

The findings also show that the negative perceptions of trust answers were linked to political and cultural backgrounds. These political and cultural influences can be clearly noted in P C32’s response:
Don’t think we should be trusting of our government. I don’t think in any democracy ever; we should be trusting of our government. We should be the opposite. We should always be very vigilant and never trusting… In our local government here, nominated by the Labor Party and the unions, they tell us many lies, as any government does, as many governments do, and they tell fibs, and I don’t think we should be trusting of them. (P C32)

The development of public trust in government is concerned with the extent to which council residents perceive public values that contribute to the development of their trust in government, as identified in the theoretical framework in Chapter 3 (see section 3.2.1). The development of public trust in government includes 11 public values. How the interviewees perceive these values is presented separately in the following subsections:

7.4.1 Responsiveness

The interview data revealed that participants are highly appreciative of the quick response they get using Gov 2.0 services, mainly social media platforms. Participants expressed their positive experiences in different ways. For example, P B27 stated “Yeah, I think it [social media] does encourage a quick response” (P B27). Participants also stated that the level of council response on Gov 2.0 platforms meets their expectations as acknowledged by P B 28: “I’ve got response, yeah…within my expectation…Yeah, it’s pretty reasonable” (P B28).

However, interviewees have also related this high level of council response to the nature of the openness of these platforms where everyone can see and judge the response time. For instance, P B25 believed:

They always respond, like it’s always the next business day that they seem to respond. So I don’t know as I say I’m happy with the responses…Yeah, more people see it, and if they don’t respond right away, someone will go you haven’t responded, you’re obviously hiding something. So yeah they’ve got to…Whereas beforehand I’ll probably just go, you know, wouldn’t have known it, wouldn’t have cared, wouldn’t have had feedback. (P B25)
Participants also have expressed their reliance on council social media tools to get government response with critically needed information during emergencies as highlighted by P C31:

The most important thing for me would be to stay on top of any pressing issues or emergencies, so I would trust council to provide that information via social media. So I think it’s important to me, depending on what you’re looking for. (P C31)

It is worthwhile mentioning here that interviewees have stated that responsiveness on Gov 2.0 platforms can be generated by other residents, as P A23 stated “I think it can be an easy way of gaining, quickly, quite a lot of comments.” (P A23)

7.4.2 User democracy

Participants feel that their opinions are important, if and when they are invited to have their say on council matters. They clearly stated they felt their opinions and complaints on social media tools are much more than a simple online inquiry. They believe that council social media tools are providing them with a very powerful avenue to have their voice not only heard, but taken into account. For example, P D37 said:

A feeling that your opinion is more important, because they have got a ‘have your say,’ like it’s not just that they’re putting up the studies and hiding them away somewhere. When they have that ‘have your say’ column down the left-hand side, it really does project an idea that your opinion is being sought and is going to be important. (P D37)

P C31 also emphasised these views:

Absolutely, I think that’s the perfect platform [to have a resident’s opinion taken into account]. Again, because you can voice your opinion, someone has to hear you, someone should reply to give you information especially if you’re ill informed, so yeah, absolutely. (P C31)

Noticeably, participants have indicated on many occasions that they are taking advantage of the open nature of these tools to hold their local government accountable as P C33 summarised:
Yes. Definitely [can hold the Council accountable] because if I Tweet something, or if I make a Facebook comment, or like or unlike, – it’s for everybody to see. It’s not just putting it in an envelope, and putting it through the mail slot, it is for everyone to see, and then other people can say, yes I agree, no I don’t think that’s a good idea. So it’s a public open conversation for everyone… they are too loud. (P C33)

A real-life example of how residents take advantage of the power of social media to put pressure on council to change their decisions is expressed by P C34:

There are certainly social media campaigns that have happened in the last 12 months in [council X] that if they didn’t happen we would have had a very different result and that those campaigns sway – they put pressure on council to make different decisions. (P C34)

7.4.3 Citizens’ involvement

How residents perceive their involvement in council consultations and events was expressed and emphasised several times by most participants. Firstly, participants indicate their awareness of the importance of their involvement in the council debates to enhance democracy and opportunities offered by Gov 2.0 initiatives. This consciousness was evident in P C32’s answer:

The key service is, let’s get people involved with council, let’s get people active and participating in our democracy. I think the biggest fear that I have for our democracy here, is that people are apathetic and don’t participate in it, and social media’s a great way for dragging them in, and getting them involved in these debates. (P C32)

P C30 has emphasised the opportunities offered by Gov 2.0 initiatives to enhance citizen involvement in council debates:

I think it [social media] has the potential to engage a far wider section of the community… more people can get involved on one particular topic, yeah. It maybe encourage people to get more active or more involved because the information's right there on their Facebook which is like their personal life…You could potentially have more of the community input to come up with solutions. (P C30)
Participants think that social media platforms have features that can significantly enhance citizens’ involvement in Council matters, including the ease of use of these tools and its conveniences, compared with traditional council meetings as described by P C33:

It would probably be a lot easier for them to go to a council meeting; maybe they’re not that mobile, they get tired easily, they’re elderly, it would be a lot easier for them to go online and actually type what they want, when they want. If they want to do it at 4 o’clock in the afternoon, or 11 o’clock at night, it would be a lot easier, rather than having to go on a Wednesday night, 7 o’clock, in their car, find parking. (P C33)

The data from these interviews also shows that participants are noticing that their use of Gov 2.0 services has encouraged and motivated them to be more involved in council events and activities, including meetings. The interviewees have stated that their use of council social media tools was the main factor behind their involvement in council events where they met other residents face-to-face and developed relationships. For instance, PD37 noted that interaction on social media can lead to attending council events:

Facebook lead me to the meeting. It was the main motivator… I wouldn’t have gone to the council meeting if it hadn’t been for having the Mayor’s Facebook page, using the web page, getting the alerts from the council, that sense that I felt I had almost like a duty to go. But I wouldn’t have gone without that Facebook interaction. (P D37)

Overall, participants feel that the use of Gov 2.0 initiatives has involved them in more council activities, as concluded by P D35: “it's getting people more involved” (P D35). Furthermore, this involvement has enhanced the perceptions of connectivity with their local government and the wider community. These feelings were expressed by P D37:

Well I suppose I’m beginning to feel more that it’s the only level of government that you can connect with, and so really all my efforts I suppose in a way would be directed to living more in this community and trying to improve this community and connect with the people in this community (P D37).
7.4.4 Self-development

Participants believe their use of council social media platforms has significantly contributed to developing their knowledge about many aspects around council and community. They have related this self-development to the high number of residents and diversity of community who provide input on social media platforms compared to face-to-face meetings. P C31 summarised this by saying “I suppose you have a lot of other people’s input as well in other parts of community members contributing to it [social media]. So you’re not only depending on [one source].” (P C31)

These answers also show that they prefer to develop their knowledge about council matters by accessing related information online rather than attending council meetings in person as expressed by PD37: “I don’t want to go and sit through council meetings and community meetings, spend hours and hours a week doing that to get that breadth of knowledge.” (P D37)

Participants are of the view that their use of council social media tools has helped them develop knowledge about council and community because it enables them to: a) access other residents’ opinions and comments, b) develop an opinion about other residents in the community, c) influences them to attend council events and meet new people, and d) discover other residents’ ideas and adopt what they think is useful as detailed by P D37:

Because you can access and see other people’s opinions and comments, you get a sense more of the people about you. It [Facebook] attracts you to go to events that – I went to a concert, I went to a lecture, I went to a garden demonstration all last year, which I wouldn’t have gone to otherwise, and met people from the community that I wouldn’t have met otherwise, and we exchanged information about things. Yeah, but again it’s a means of putting you in touch with people face to face, personalising the community a bit more for you… I’ve been interested in some of the comments on Facebook, because people are doing things that you – they’re just useful ideas, themes that you can adopt yourself. (P D37)

P D35 added: e) the use of council online services can lead to discovering more services provided by council:

More services as well because before you mightn't know what – it sounds silly, but you mightn't know what you wanted to know. So, online you can hunt
around and look at everything, and you might find 50 different things that you can find the answers to that you mightn't have even known existed with the council… So, with online you can be aware of more things than you would have been before… I often didn't know things were on, or I missed out on them. This way it [Facebook] creates more awareness. (P D35)

P C34 also highlighted another aspect of self-development: f) the use of Gov 2.0 initiatives to communicate and interact with councillors help residents to develop their view about the people they have elected: “You can learn about the people you’re voting for, you can learn about the people who are actually making decisions about your life.” (P C34)

7.4.5 Dialogue

Participants recognise dialogue opportunities offered by social media to talk and connect with council officials and residents. Residents consider council Facebook pages as the most suitable and preferred platform to interact. The interviewees related their preference for Facebook over other tools to its ease of use, immediacy, and the feeling of staying connected with the community. P D35 summarised: “I love Facebook and it's so easy and immediate and you feel like you're keeping in contact with people. I like it. It's great.” (P D35)

Participants also highlighted the factor of informality of dialogue with council officials on social media platforms. This informality encourages residents as stated by P C30:

I suppose as well because [in social media] you can hear the information coming from them in a more informal way, I think it does kind of open it more for discussion and because it's casual you can just ask a question, ‘Hey why are you doing that?’ Whereas if it's just an information page on the Internet, it's not. (P C30)

Interviewees also indicated they enjoy conversing with council officials on social media and this is the preferred way of communication with them over face-to-face conversation as indicated by P D37:

Yes, and I would make that a regular kind of appointment [the past Mayor was up on Facebook]. A couple of times I put up comments or responded to comments, and I was interested in the exchange, in reading it. So I would read it
like I would read a local newspaper. I’d check it out. The current Mayor is going around different places to meet people face to face. Now I’m not going to go around to those places. (P D37)

The features of the dialogue on social media, such as informality that encourages more discussion, appear to lead to creating or enhancing other public values. For instance, the conversations that take place on council social media between council officials and residents inform residents about a wider range of issues, which is a public value in itself (self-development). This self-development value developed through social media tools was highlighted by P D37:

Well, you can be more informed about the range of opinions, whether it necessarily leads to a consensus in terms of agreement. But you can see other people’s issues and sides of things more easily, because in public meetings and things people just tend to get up and just sound off and then it’s a bit like a Parliament, like it’s an oppositional kind of thing. Whereas with the social media, you can have more of an exchange of opinion… you can take on board a wider range of opinions. (P D37)

Nevertheless, participants have mentioned two factors that appear to distract from the dialogue on council social media tools. Firstly, participants think Council can create more dialogue on social media than the current dialogue level. Participants are also of the view that council use these tools to promote council rather than to create a healthy dialogue with them. These views were expressed by P C32:

It’s just ads, so it doesn’t encourage people to be involved; it’s just another ad from council. It could be used to do that. They could be opening it up to debates, and listening and being interested in what people have to say, but I don’t think that’s what they’re interested in and how it’s used currently. (P C32)

The second factor is they are more likely not to be willing to use social media platforms to provide negative feedback or complaints if they are not satisfied with council services. P B27 related this to community culture which can be changed with the use of social media:

I wouldn’t [provide negative feedback on the council's social platforms] personally, no... Yes, and I have done that [provide positive feedback] before, several times…I think sometimes having quiet [negative feedback] isn't a good
thing and you do have to question ‘Right, we might need to get out there and seek some feedback,’ proactive seeking of feedback and I don't see that happening on the page. I think it's a culture that's developing in Australia that it's okay to actually complain. It’s okay to say ‘This isn't good enough,’ and I don’t know that a lot of people feel comfortable with complaining. I do see that Facebook is a platform for it to be a bit easier for people to do. (P B27)

7.4.6 Listening to public opinion

Interviewees’ answers show they have perceived the value of being listened to by their local governments. These answers indicate they are using government response speed as an indicator to assess whether their opinions and comments are heard by council or not. Government responsiveness on Gov 2.0 initiatives, as discussed earlier, is improved by the open nature of these platforms which will be discussed in the next section. Again participants think that the open nature of social media platforms is a significant factor for having their opinions and comments heard as P A21 said: “It should be [respond] because it’s there for everyone to see, so you’d want them to reply pretty quickly otherwise they look bad.” (P A21)

Interviewees also indicated the ability of residents to work collectively on social media platforms to have their opinions heard and taken into account by council. P D37 addressed this view:

Now you can say ‘Well really this is important for these reasons and I’ve spoken to my neighbours,’ or ‘the people in my group think this, that and the other.’ So it does enable them to perhaps re-prioritise things if they understand reasons for things. Well, I think that’s the aim [having residents’ opinions taken into account]…Yeah, more than I would have in a face-to-face [situation]. (P D37)

By listening to public opinions and comments on social media platforms, councils can understand the way their community is thinking as P D35 stated:

It may be more of a distraction but it may in fact enable them [the council] to kind of put their finger on the pulse a bit more and see what’s important to people…and get a feel of what people in the community are thinking (P D35).

It also can contribute to improving community services as P A24 stated:
If Facebook is used the right way it’s a very powerful tool and if people use it correctly they’ll get that instant feedback, straight away. My power’s out on blah blah street so there’s all that instant feedback that this is happening right here, right now so then council would be able to be more flexible and respond to that…Yes, that’s what social media is about, community definitely. (P A24)

7.4.7 Openness

Local government openness and transparency are perceived by interviewees. Participants are of the view that council’s online services are increasing council openness and transparency by allowing residents to access accurate and updated information about council any time. P C31 said:

I think it [Council transparency] does come across in the online services. Obviously, as I said before, I expect their information to be current, and for everything to be online for me to access, so I know what’s going on with them…definitely [social media platforms make the council] more open and transparent. (P C31)

Participants have related increased levels of openness and transparency by council to a number of factors including: a) in written form, b) recorded, c) the ability for different people to provide feedback, and d) a public space for everyone to see the enquiries and comments as summarised by the P C33:

Because it’s been noted and it’s been recorded, what time residents have made a comment or a question, or just made some kind of statement that requires the councillor to provide them with feedback, or just kind of reply to. So if they leave that sitting there for two months, it’s for everybody to see. If you’re on vacation, that’s a different story, but again, it is completely transparent. (P C33)

This level of local government openness perceived by participants made them feel empowered. Participants think they are empowered because they can find out much more information about the council on these platforms where it is not easy for officials to hide information as P D35 expressed: “You can access more information. In some ways, it will be harder for them to hide things from you or not tell you about things. I think it empowers the user more because you can find out more.” (P D35)
7.4.8 Professionalism

These responses show that participants perceive government professionalism on Gov 2.0 services in two different ways. Interviewees agreed that council online services are professional. P A21 said:

I guess it’s more efficient online. I say yeah; more people can be serviced at the same time, and face-to-face isn’t. It’s more access, so it’s like 24/7 whereas you can only go in when the council’s open really...Yeah, I think it is professional. (P A21)

They have stressed that social media platforms should be ‘lighthearted’ and should not be too professional. Participants agreed that council social media platforms should follow the informal nature of social media as participant A24 expressed:

I expect social media to be lighthearted, so not too professional otherwise I don’t want to – go away, don’t be on my Facebook page, too boring, I get rules as it is I don’t want to know you. So yes it is professional, but it doesn’t need to be too professional, I wouldn’t want it any more professional. (P A24)

However, they highlighted that this professionalism on social media is highly linked to the quality of information provided through council, especially in terms of response time and accuracy as P C30 said:

I think [social media] is a different form of professional because it's so informal, that it can come across a bit casual which makes you think it's not professional, but in general I suppose the information being provided is quite high quality...Yes. I think it's a professional service provided to me...It's probably quicker and maybe more likely to be accurate in a way because it's public. (P C30)

7.4.9 Honesty

Participants have not mentioned council honesty on social media platforms extensively. However, some of them think that social media tools might improve such transparency because it serves as a written platform as P A21 mentioned:

I suppose they have to be honest online; they can’t really lie about the stuff, it all has to be there because it's in writing. So yeah, in that instance I think it
This potential improvement in council honesty relates to the willingness of council officials to be open on these platforms as participant A23 indicated: “Yes, I do [think that social media enhance the honesty of the council] if they’re being open and they’re happy to talk online.” (P A23)

7.4.10 Integrity

Participants’ answers on council integrity from their use of council social media platforms show that they do not perceive it. Despite the positive answer by P C31 who said that the written form of government communication on social media tools is a slight improvement, they added:

I suppose that’s [council integrity] been improved a little bit as well because they need to be on their feet again about what information they put online and the accuracy of it, etcetera. Yeah, so the integrity has definitely improved only because I’m aware of other functions or services. (P C31)

P A24 was not sure whether council use of Gov 2.0 initiatives has improved its integrity saying: “It [integrity] goes back to that trustworthiness, I don’t know if it’s more or less” (P A24). Similarly, the integrity of council on social media is negatively perceived because the council’s services are more like private businesses as it clearly indicated by P D38: “feeling of integrity negatively. I think the council services are business-like, and they reflect well on the council.” (P D38)

7.4.11 Accountability

The data revealed from interviews show that participants not only perceive the improvement of council accountability, but they believe that social media have empowered them to hold council officials accountable. For example, one of the youth participants (P A21) thinks that because of the use of new technologies her generation become more empowered to hold the government accountable compared to previous generations, saying “yeah, with the current generation I think they can become more accountable. I mean with my generation I guess, because that’s how we communicate and access information.” (P A21)
Participants again think that the open nature of social media tools is the main factor that empowers them to hold local government accountable. Participants are of the view that their comments, inquiries, and conversations are much louder on social media platforms than traditional avenues they once used as P C33 explained:

Yes. Definitely [can hold the council accountable], because if I Tweet something, or if I make a Facebook comment, or like or unlike, or – it’s for everybody to see. It’s not just putting it in an envelope, and putting it through the mail slot, it is for everyone to see, and then other people can say, yes I agree, no I don’t think that’s a good idea. So it’s a public open conversation for everyone… they are too loud. (P C33)

Likewise, P D35 expressed:

It's good for accountability. Okay, someone makes a promise ‘We're going to do this,’ and that would be in the minutes anyway… it can be recorded. People can go back and look at it… Nowadays it's like living in a small town in the '50s because you say one thing that's a bit amusing, a bit different, unusual, it's going to be picked up and it's around the world. (P D35)

Interestingly, participants also highlighted that while their use of social media provided them with the ability to make council officials accountable, they also emphasised the use of these platforms can improve understanding. They understood that these platforms also give council officials the opportunity to justify their actions to their constituents as expressed by P D37:

I think they can be held to account more, you can point things out to them, like policy statements that they’ve made one year and their voting behaviours, promise for a service that hasn’t been fulfilled… yes, this councillor was elected on the promise of doing X and now they’re doing Y, and point that out to people. It also gives them a chance to perhaps say why they’re behaving like that. (P D37)

7.5 CITIZENS’ PERCEPTIONS OF QUALITY OF PUBLIC SERVICES

This area concerns the public value that citizens perceived from the ‘technical functionality’ used to support and deliver Gov 2.0 services (Meynhardt, 2009). Participants believe that social media tools offer them more ways to access council
services via a wide age range of community groups as stressed by P A21: “Yeah [social media use improved council service quality], there’s more ways to access their information. They’re also hitting different age groups having that as well” (P A21). Similarly P D35 emphasised his appreciation of council online services pointing out opportunities to improve and provide more new services online: “I think the quality is very good and it's up to date, easy to navigate, so no, I find it quite good...It could help the council to provide more services” (P D35).

The critical role that social media plays in improving the quality of public services was summarised in a car accident story, which happened in P D37’s street where the stop sign was damaged. This participant explained:

They cleaned up the accident but no one seemed to be worried about the stop sign, and I noticed it on my way home and I went on the council [Facebook page] – and I noticed that they were within kind of like an hour with it. So for things like that it can be very critical. Yeah. I was surprised that no one else had done it. I wouldn’t have necessarily gone home and rung up about it, but I had my computer on so you can do it. (P D37)

However, the findings show that while participants showed their satisfaction with council online service quality, they also highlighted some areas where they thought the council could maximise the quality of these services. P D38 thought that while these services were highly usable, they are still not fully integrated:

I think their website is as good as most in regard to usability. I think there’s a lot of services available there, the electronic services. I would like to see it better integrated, perhaps, with other library catalogues and that sort of thing, so that if I can’t get a book here maybe I can get it somewhere else. I think in general I’m pleased with using it. (P D38)

The quality of public services delivered is concerned with the extent to which council residents feel they perceive public values that contribute to the quality of public services delivered, as identified in the theoretical framework in Chapter 3 (see sub-section 3.2.2). The quality of public services delivered includes seven public values. How the interviewees perceive these values is presented separately in the following sub-sections:
7.5.1 Adaptability

The participants showed their high appreciation of the adaptability of Gov 2.0 initiatives. Participants emphasised that these initiatives are very adaptable, especially for residents who are time poor because they can: a) use it easily, b) find almost anything they want to know about council at any time. P B25 said of these initiatives:

Extremely, extremely important, as I said I work, and I’m a single parent to a four-year-old, and I don’t get time to make calls for everything that I need to know, and it’s just so easy to check the Internet. It’s all there, I can communicate with the council online, it’s just easier for me. I can do it at midnight, and it doesn’t matter. (P B25)

P C31 expressed the adaptability factor of Gov 2.0 initiatives as a critical factor:

Often I don’t get a chance to go into the offices to speak to someone face to face or on the phone it’s difficult, I have children and I think after hours it’s convenient for me to jump online and find what I need or do what I need to do online. I don’t have time during the day, so I think for me to access the services it’s critical. (P C31)

The other factor is: c) it can be accessed and used at different locations and from different devices as P C33 stated:

Yes, definitely [social media are an easy way of communication]. I can do it on the train on the way into work, I can do it on my phone, I can do it on my laptop, I can do it from work, I can do it any time of the day, yes, very easy. (P C33)

The same participant also stated that the adaptability of Gov 2.0 services saves residents a lot of time and money since they do not need to drive to the post office and send letters:

I actually don’t have to mail something in, it doesn’t cost me anything, I don’t have to go to the post office and buy a stamp, and then find a mailbox, I can just do it online or on my phone, I can just send a Tweet or an SMS, yeah (P C33).

P D38 went further and said that residents can have more services on Gov 2.0 compared to face-to-face services, referring to library services as an example of extra services they can get online:
The library these days does have more services available online than we used to have, databases, electronic books, to be able to search for journal articles and things like that. You couldn’t get that, really, without the Web. (P D38)

7.5.2 Reliability

The reliability of Gov 2.0 services perceived by residents seems to be inherited from their experience of obtaining online services from the private sector as P A21 said “if you’re already trusting in doing online search engines and shop, I don’t know, paying for things online then yeah, I think it’s reliable. I didn’t have a problem with it” (P A21). However, participants have emphasised that some elements enhanced their perceptions of Gov 2.0 services reliability over face-to-face services, for example:

a) The information available online is more comprehensive than the information that they are going to get when they visit the council information desk and talk to one of the staff as P D39 explained:

The information you get, if you call up or you go in somewhere, is only as good as the person that you’re talking to. Whereas, you have got all the resources online, there’s actually much more information online than any one person can know… You can get, well specific information, and there are links to other sections whereas if you're doing it face-to-face you have to ask exactly what you want and then they often have to send you to someone else. Sometimes those people can't be seen face-to-face and so you have to ring them, whereas online you can just [follow links]. Yeah, it's like talking to 10 different people. (P D39)

b) The online information could not be misinterpreted as P B25 noted “when you’re talking to someone you can misinterpret what they’re saying. Whereas online it’s in writing, it's clear” (P B25).

c) It is less likely to get different answers online as P C34 mentioned:

Well, when you’re dealing with a human you’ll get different answers. From different ones, yeah. So the information that you see on the website is what it should be, it’s gone through a process, it should be approved, it should be an agreement. (P C34)
d) It is more accurate as expressed by P D38: “I also trust the computer to be emotionless [sic] and accurate. Perhaps sometimes people might make mistakes or not know things and the computer is better there.” (P D38)

e) The availability of services. Through council Gov 2.0 services participants have developed perceptions that council services are available whenever they need them. For example, P D37 said “Well I have never found it [council online services] unavailable.” (P D37)

7.5.3 Stability

Though participants have not mentioned that much about the stability of Gov 2.0 services as such, they linked their answers to the reliability of these services instead, using the terms ‘never crash’ and ‘no issues’. Participants have clearly indicated their satisfaction on Gov 2.0 services. For example, P A24 remarked:

I’ve had no issues. No issues with the council website, it’s been there when I’ve tried to access it and wanted to access it, which you can’t always say about face-to-face or even phone contact… I think the online service is reliable. (P A24)

P D35 expressed her perception of council Gov 2.0 services stability:

I think it's reliable. I've never seen it crash or anything and the information is reliable because it's been put there by council employees from those departments that it's relative too and yes, I find it very reliable. (P D35)

7.5.4 Timeliness

Participants have clearly expressed their perceptions of the timeliness value of Gov 2.0 services. In addition to the term ‘timeliness’, participants have expressed this value in many terms including quicker response, immediate, and on the spot. For example, p A23 said: “I think the accuracy, the timeliness and the ease of navigation...From the quicker responses and reliability, yes, I do [think social media improves service quality].” (P A23)

P C31 described council social media platforms as “Yes, because it’s [social media platforms] immediate, it’s on the spot.” (P C31)

P D35 expressed the timeliness of these services in many ways, saying “I find it a lot quicker online” and “Yes, I think it is. It's quick and immediate.” (P D35)
P D35 also thinks that the timeliness value of Gov 2.0 services can benefit council too since council officials can obtain immediate feedback from residents as well: “I think so [social media can help the Council], yes, because you can do an immediate response.” (P D35)

7.5.5 Robustness

Participants’ answers about the robustness of Gov 2.0 services were associated with the reliability of these services by all respondents. For example, P A22 remarks “I suppose it’s reliable” (P A22). Similarly, P D38 said “Yeah. I don’t remember it not being available. I think it’s quite reliable.” (P D38)

7.5.6 Friendliness

Compared to face-to-face services, participants believe they are provided with better service quality through council Gov 2.0 services. They think it is much easier and ‘hassle’ free. For instance, P A21 said:

Social media is a pretty easy way to deal with them [the council], so yeah, in that way it would improve the quality because you’re hassle-free I guess…it’s so easy just to go on there and post something, or just like something they’ve said, rather than writing a formal email or something like that (P A21).

P C32 has expressed annoyance at council answers: that the use of Gov 2.0 initiatives helped them overcome it, saying:

But online, all of the departments have to have all of the information there. They can’t tell me I don’t know, come back later, sorry he’s on holidays, or whatever it is. It’s got to be all there, and I can find it, and I don’t have to waste my time ringing around, or visiting the council to find out what I want to know. (P C32)

Participants have highlighted a number of factors that contribute to the friendliness value of Gov 2.0 services including:

a) They do not need to be concerned about emotions when they use online services as P D38 highlighted: “The electronic service is neutral so you can trust it because it has no emotions. You don’t need to be concerned about what it feels about you.” (P D38)

b) They have the option to decide when to use it. This saves them a lot of time and effort as P C30 stated:
It's definitely saving time and effort and I think too, I'm always hesitant to call someone because you know you're going to be on hold for so long and all of that, but online you just do it when you can do it. (P C30)

c) More convenient, especially for parents with children related P C31: “I don’t have the time being stay at home mum without dragging my kids out, so I’d rather be online, it’s just easier” (P C31). And for residents who have health issues: “Although I've got multiple sclerosis and standing in a queue for a long time is quite difficult. So, I've found that even when I go to pay the rates, it is more convenient.” (P D35)

d) Obtaining online services and conducting transactions do not require paperwork as expressed by P C31: “I remember it used to be hard copies of this and that but paying bills now it’s just a reference number so it’s just easier.” (P C31)

7.5.7 User orientation

The data retrieved from interviews indicate that Gov 2.0 services provided by council to residents have created the value of user orientation among council residents who use these services. Participants think that the council’s Gov 2.0 services provide them with many advantages including:

a) council ‘bureaucrats’ will not be able to stop them to ask whatever they are interested to know about the council anymore as P C32 said: “I don’t have to go up to council and deal with some bureaucrat that wants to stop me from finding something out.” (P C32)

b) they can set and decide the time to access services and conduct transactions as P C32 expressed: “It’s great, yeah, yeah. I can look at things up on the weekend or whenever I want. I get better access to the information, yes... You can just pay whenever you want.” (P C32)

c) they can set alerts to remind them about some important council events or services as P A23 said “being alerted to what’s coming up. Yeah. Whereas face to face, I don’t have my diary handy” (P A23). These alerts can be set for a range of services such as job alerts or to return borrowed books as P D39 said:

Yeah, I’ve been really impressed, in particular, with the library, the way they notify you a couple of days before your books are due. You can click on the link and go and renew it, which makes it really easy to use. You just need to click on it; there’s no way you can end up with overdue books. (P D39)
d) residents can manage and control their service bookings as P D23 stated: “It is good. Back to that booking service, I tried to use it through my iPhone when I was out and about, to make a booking. It looks like you can scan that – what’s it called, that Q Code thing?” (P A23)

7.6 CITIZENS’ PERCEPTIONS OF SOCIAL OUTCOMES

When participants were asked about their views on social outcomes achieved through council Gov 2.0 initiatives, most of their answers were not about outcomes as such. However, most of the participants preferred to refer to social outcomes as the outcome of using Gov 2.0 initiatives that benefits the community as all. P D37’s answer is a good example of how participants view social outcomes:

I mean there’s always the issue of getting information overload, but in a way you feel more connected to the community because it’s there...Well I suppose I’m beginning to feel more that it’s the only level of government that you can connect with, and so really all my efforts I suppose in a way would be directed to living more in this community and trying to improve this community and connect with the people in this community... Because you can access and see other people’s opinions and comments, you get a sense more of the people about you. It [Facebook] attracts you to go to events that – I went to a concert, I went to a lecture, I went to a garden demonstration all last year, which I wouldn’t have gone to otherwise, and met people from the community that I wouldn’t have met otherwise, and we exchanged information about things. Yeah, but again it’s a means of putting you in touch with people face to face, personalising the community a bit more for you. (P D37)

The achievements of social outcomes is concerned with the extent to which council residents feel they perceive public values that contribute to the achievements of social outcomes as identified in the theoretical framework (see section 3.2.3). The achievements of social outcomes include five public values. How the interviewees perceive these values is presented separately in the following sub-sections:
7.6.1 Fairness

The data from participants’ answers show that they think they receive fair treatment when they are using Gov 2.0 services. However, participants have linked these perceptions of fairness to the situation where the comparison is only between council online services users, but do not include users who are not utilising council online services. Participants have expressed these perceptions and how they perceive fairness in different ways, for example, P C30 related it to the accessibility factor: “I think it is fair in that people like me probably access it more than we would, only the people online, then yes, I think it does” (P C30).

P C31 related it to the openness of these platforms where all users can view the same information:

It’s fair across the board because being transparent you have information that caters to everyone and whatever they’re after they should be able to find so treatment should be the same, ideally, it should be the same. (P C31)

Another participant (D39) thinks that the limitation of the human factor in online services makes it fairer: “Everybody has access to the same information. You’re not dependent on somebody giving you information. Somebody can discriminate, but the computer can’t.” (P D39)

7.6.2 Equity

The value of equitable treatment for Gov 2.0 services has been perceived by participants, who are of the view they have more equitable treatment online compared to face-to-face services, where information and services are accessible and available for all online users equitably as P D38 acknowledged: “I think it’s more likely that you would get equitable treatment on a website, if you go to the website you’ll get the same as everybody else” (P D38). Similarly, P A23 stated “I think it does allow more residents to have access to council information. Yes, I do think that it increases the equality for residents.” (P A23)

P D35 added the absence of the human factor as a contributory factor to service equity, saying “No one's getting different information from a different person behind the counter.” (P D35)
Gov 2.0 services equitability was also perceived by participants in terms of accessibility to Council dialogue and having equal opportunity for their voices to be heard as P D37 explained:

Well it’s much more equitable, because I used to – I mean I’m a small, middle-aged woman, so in a community event, or if you have the meet the councillors in [X] street or go to the [X] festival, I’m not going to get a say because I’m small, middle-aged and I’m female, and their attention is going to be focused on males, younger people, people with louder voices. I just know what happens. So I’ve got more equitable access in terms of having a conversation or having my input, which I wouldn’t have face to face. (P D37)

7.6.3 Social cohesion

The data analysis shows that the contribution of Gov 2.0 services towards improving the participants’ sense of belonging and community solidarity were highly perceived. The value social cohesion is one that participants have reflected on significantly in the interviews. Firstly, participants have expressed their awareness of the role that social media platforms can play to make their local communities “sustainable, active and healthy” (P C30). Participants believe that social media can promote understanding which can lead to a healthier community as P C30 said:

A healthy community as being a community that's happy and harmonious. I think social media and online services can promote that sense of understanding for one another which makes the community healthier. (P C30)

Participants also stressed that council should invest in these platforms for a better community as P A24 highlighted:

Social media should be lighthearted and as a council it is all about community, bringing community together so if you can get the community to provide feedback on stuff within their community in a positive manner, I think that is the best way to use social media from a council (P A24).

When participants were asked about what makes them feel that sense of community ‘social cohesion’ from their use of Gov 2.0 services, they highlighted a number of ways including:
a) feeling they are a part of the community, especially when they are invited to attend community events online as expressed by P D35:

You can be made to feel like you're part of a community with being on Facebook and you feel like you're being invited to things whereas if it's in the paper or something that's sent out you might miss it, whereas on Facebook you actually feel like ‘Oh, they're asking if I want to go.’ (P D35)

b) bringing different parts of the community together as P C30 stressed:

So there's a possibility of more of a forum, more of a community, whereas face-to-face it's just you and them, unless you're at the council meeting. I think it [social media] can, and I think it can probably in a way bring certain parts of the community together because they don't know each other in the street, but online there is a chance to gather community. (P C30)

c) Gathering different parts of the community can improve council residents’ lives as explained by P C34:

I cross promote local activities whether they’re our events or other people’s events because – and that’s what community is about, that’s what they’re about. They’re there as a representative of the whole community and for them to improve people’s lives it’s not just about the absolute core information that people need to know. (P C34)

d) Providing residents with various types of activity to join within the community as P A21 said: “Yeah, for your active life, yeah, you can because there’s a lot more opportunities than you think...once you look it up you realise how many more things there are that you can join.” (P A21)

f) having a sense that you are part of a certain group that has the same views about community matters as P A21 acknowledged:

Because more people can agree with that or disagree with that. If you’re all agreeing on one thing, then you’re all kind of combining your views, and that is a sense of community I guess, when everyone feels in a group. (P A21)

g) closing the gap between citizens and council as P A21 believed:

Because they can – I mean they’ve obviously had to understand their community by getting a Facebook page, understanding that that’s the way the world’s
moving. And then we understand them because they’re giving us more information, kind of closing that gap a little bit more. (P A21)

h) feeling connected to the community as P B27 expressed:

I think Facebook’s so amazing because it does provide that connectivity...I think that's where the council Facebook page could be so powerful because it could really, really create that, and that's so important for a healthy community. (P B27)

i) become more proactive and involved in community matters as P C31 described:

Yeah, absolutely, I think you naturally become more proactive, the more information you’re given, if you figure it does affect you or your children or the community you’re more likely to get involved, but you're definitely more proactive. You’re not only addressing council with things but talking to your neighbours, involving them, so yes. (P C31)

j) feeling companionship by sharing information and concerns with other residents as P C31 highlighted:

Absolutely, like I said, I think it’s the perfect platform for that [creating a sense of community] because you’re not alone in the sense that other people are sharing information with you and sharing your concerns etcetera, so I think it would improve that for sure. (P C31)

This significant number of perceptions ways of the value social cohesion highlighted by participants reflecting the high level of creation of this value through council Gov 2.0 initiatives, P D37 summarised, saying “Yeah I think it has [create a sense of community], and it’s put me more in contact with aspects of the community I hadn’t experienced before.” (P D37)

7.6.4 Public interest

Participants’ answers show they perceived the value of public interest through their use of council Gov 2.0 services. Participants understand these platforms can help them highlight their interests, priorities, and concerns to council as P D37 said: “So it may be more of a distraction but it may in fact enable them [the council] to kind of put their finger on the pulse a bit more and see what’s important to people.” (P D37)
Participants indicated that Gov 2.0 services, mainly social media tools, helped them to develop a positive dialogue with other residents by influencing them to attend more events, and encouraging council to organise more events as P A23 expressed:

Yeah, I think it’s good because you can have an influence about other similar events, perhaps. If there’s a lot of good talk about an event that happened, they might do something again, similar, because it was good feedback. I think it does provide that. (P A23)

Participants are also of the view that these platforms not only enable them to gather other residents around a particular view easily (just by doing like, comment, or share), which made it easy for them to indicate their interest to council, but to put pressure on council to deal with them, taking up the openness advantage of these tools. These views were expressed by P A21 as follows:

You could post things that interest – oh maybe you’d post something that you think needs to be changed, and then other people have liked it or commented on it, and that just shows how much – like it’s easier than doing a petition. It shows how many people care about that kind of thing. Then the council can look at that and deal with it, and work towards something because if they don’t deal with it, again they will look terrible. (P A21)

7.6.5 Common good

Participants have not perceived the contribution of Gov 2.0 services towards the common good value. They have clearly stated that negatively, preferring to use other avenues of use over council social media platforms to work for the common good as the P C31 stressed:

Not [to work together for a common good] with their Facebook itself but I know that when communities have a point and they can go to raise concern and see some plan of action it would be a good avenue to do that. (P C31)

P C34 also answered similarly, saying that council is still struggling with creating this value through Gov 2.0 services: “Working together [for a common good], but I think council struggled with that one, but there are certainly ways that social media have done good things in our community.” (P C34)
7.7 CHAPTER SUMMARY

This chapter has presented the results of Phase 3 of the research. It relates 19 residents’ experiences of using their councils’ Gov 2.0 initiatives, as told through in-depth face-to-face interviews. These interviews were conducted to ascertain how citizens’ perceive public value from their use of Gov 2.0 initiatives.

The findings reveal how participants perceive values identified in the previous chapter. Furthermore, they also show that honesty, integrity, and common good were either perceived negatively or minimally by participants. These findings support the quantitative phase findings which found these values were not valid and therefore not included in the framework. However, the findings of this qualitative phase show that Victorian citizens perceive both adaptability and stability public values which were found invalid in the previous phase due to their high correlation with other values. Participants perceived those values linked to the main areas of public values (public trust in government, quality of public services delivered and, achievements of social outcomes) in different ways.

The next chapter will integrate the results from three phases in this study: Phase 1 as presented in Chapter 5, Phase 2 as presented in Chapter 6, and findings from Phase 3 as presented in this chapter. These findings will be discussed with relevant, extant literature.
8.1 INTRODUCTION

This chapter discusses the findings of this research study to address the research challenge presented in Chapter 1: **How do Gov 2.0 initiatives contribute towards public value creation?** Chapters 5, 6, and 7 have addressed the study’s three sub-questions:

Chapter 5 addressed QA: What aims do government officials have in implementing Gov 2.0 initiatives to create public value?

Chapter 6 addressed QB: What public values do citizens perceive from using Gov 2.0 initiatives?

Chapter 7 addressed QC: How do citizens perceive public values from their use of Gov 2.0 initiatives?

In order to address this study’s main research question: **How do Gov 2.0 initiatives contribute towards public value creation?** In the Victorian local government context, this chapter brings together the findings from the previous three chapters.

This chapter is organised to discuss these findings in relation to the main areas of public value creation. Section 8.2 discusses the findings of the quantitative phase (phase 2). Section 8.3 discusses the role of Gov 2.0 initiatives within the three main areas of public value creation (development of public trust in government, quality of public services delivered, and achievements of social outcomes). This is followed by the presentation of the revised framework for assessing public value of Gov 2.0 in section 8.4. The overall study findings and the validity of research instrument used are discussed in section 8.5. Finally, a number of specific recommendations are proposed for Victorian local governments on how to enhance public value creation through implementation and use of Gov 2.0 initiatives in section 8.6. The chapter is summarised in section 8.7.
8.2 QUANTITATIVE PHASE FINDINGS

This section presents a discussion of the quantitative phase findings (phase 2). In accordance with sub-research question (b), this phase sought to identify the public values citizens perceive from using their local government Gov 2.0 initiatives. This section discusses the findings relating to the main areas of public value creation identified by Kelly et al. (2002) and Kearns (2004); it discusses findings of citizens’ perceptions on areas of public trust in government, service quality, and the achievements of social outcomes.

The quantitative phase produced a reliable and valid measure of Public Value of Gov 2.0 initiatives. The eighteen public values (illustrated in figure 6.8) show that Public Value of Gov 2.0 can be created through three constructs: public trust in government, service quality, and the achievements of social outcomes. Statistical tests confirmed that the final measurement model of public value of Gov 2.0 shown sufficient reliability and congeneric, convergent, and discriminant validity.

The CFA undertaken in this phase confirmed the useability of the eighteen public values identified for evaluating the public value of Gov 2.0. These findings confirm the view that Gov 2.0 initiatives can contribute to public value creation. In doing so, the findings provide a better understanding of which public values citizens perceive when using Gov 2.0 initiatives. The CFA process confirmed the hypothesised areas of public value creation can be used to measure citizens’ perceptions towards the public values as shown in table 6.14. The main public value constructs and the identified public values related to each of them correspond to the overall focus on perceived citizen value of Gov 2.0 initiatives.

This phase’s findings suggest that the proposed set of values identified are a good representation of what citizens value in their local government Gov 2.0 initiatives. Statistically explaining 67%, 98%, and 63% of variance for the constructs public trust, service quality, and social outcomes respectively in response from citizens. Additional value to the final measurement model is that all the indicator values developed specifically for the Gov 2.0 environment, using a Public Value approach. Furthermore, the model was developed with a firm theoretical underpinning of the public sector context. The range of public values identified in this phase’s findings further confirms
the theoretical scope of public value suggested by the ICT literature (Kearns 2004; Stoker 2006; kurnsuana 2011). Table 8.1 summarised the definitions of public values perceived by the Victorian citizens through their use of Gov 2.0 initiatives.

**Table 8.1: Gov 2.0 public values**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measure Value</th>
<th>Definition</th>
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<tbody>
<tr>
<td></td>
<td><strong>Responsiveness</strong></td>
<td>The level to which online services are delivered to citizens which inform them with a rapid response (Tan et al., 2008).</td>
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<td></td>
<td><strong>User democracy</strong></td>
<td>An institutionalized mechanism for feedback from users, which complements other forms of user feedback (Andersen et al., 2012).</td>
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<td></td>
<td><strong>Citizen involvement</strong></td>
<td>The social process of taking part (voluntarily) in either formal or informal activities, programmes and/or discussions to bring about a planned change or improvement in community life, services and/or resources (Bracht, 1991; Isaias et al., 2012).</td>
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<tr>
<td></td>
<td><strong>Self-development</strong></td>
<td>The empowerment of an individual’s abilities, skills, and knowledge, as that person augments and realizes his or her personal potential (Savolainen &amp; Kari, 2004).</td>
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<td></td>
<td><strong>Dialogue</strong></td>
<td>Any negotiated exchange of ideas and opinions (Kent &amp; Taylor, 1998).</td>
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<tr>
<td></td>
<td><strong>Listening to public opinion</strong></td>
<td>Responding more specifically to the opinion expressed in the social media or in opinion polls (Jørgensen &amp; Bozeman, 2007).</td>
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<tr>
<td></td>
<td><strong>Openness</strong></td>
<td>The degree to which government agencies show their decision-making processes and publish information and facts in a timely manner (Wong &amp; Welch, 2004).</td>
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<td></td>
<td><strong>Professionalism</strong></td>
<td>Citizens can anticipate service delivery at a standard level of quality (Liff &amp; Andersson, 2013).</td>
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<tr>
<td></td>
<td><strong>Accountability</strong></td>
<td>Implies an obligation to explain to someone else, who has authority to assess the account and allocate praise or blame for what was done or not done (Jones &amp; Stewart, 2009).</td>
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<td></td>
<td><strong>Reliability</strong></td>
<td>The level at which public services provided online are available in an accurate and trustworthy manner (Tan et al., 2008).</td>
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<td></td>
<td><strong>Timeliness</strong></td>
<td>The degree to which the information is sufficiently updated and accessible to the user within an adequate timeframe (Aschoff et al., 2007).</td>
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<tr>
<td></td>
<td><strong>Robustness</strong></td>
<td>The ability of a system to maintain function even with changes in internal structure or external environment (Callaway et al., 2000).</td>
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<tr>
<td></td>
<td><strong>Friendliness</strong></td>
<td>The simplicity with which citizens can access, use, navigate and work on a website and content (Lu et al., 2009).</td>
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<tr>
<td></td>
<td><strong>User orientation</strong></td>
<td>The user-centricity of e-government information and services that is directly related to the satisfaction of users (Karunasena &amp; Deng, 2010).</td>
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<td></td>
<td><strong>Fairness</strong></td>
<td>Perception of fairness in management processes (Erlingsson et al., 2013).</td>
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<td></td>
<td><strong>Equity</strong></td>
<td>The ability of government to customize service provision in order to satisfy the requirements of the various categories of citizens that they serve (Andrews &amp; Van de Walle, 2012).</td>
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<tr>
<td></td>
<td><strong>Social cohesion</strong></td>
<td>A sense of belonging and solidarity for citizens with various backgrounds (Cheong et al., 2007).</td>
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<tr>
<td></td>
<td><strong>Public interest</strong></td>
<td>Those outcomes best serving the long-run survival and wellbeing of a social collective construed as a ‘public’ (Bozeman, 2012).</td>
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The findings show that the quality of public services provided through Gov 2.0 initiatives is the most important construct in evaluating the public value of Gov 2.0. The
achievements of social outcomes is perceived to be the least contributor. Furthermore, the analysis reveals that the public values of integrity, honesty, adaptability, stability, and common good are non-critical values in this situation, and thus, during the measurement model analysis stage, these indicator values were dropped due to insufficient validity. The results of the examination of the three hypothesised areas (public trust, service quality, and social outcomes) support the final measurement model as discussed in the following sub-sections.

**Public trust in government**

The first area examines public trust in government through Gov 2.0 initiatives. This is an important aspect where good governance requires government to: a) be responsive, b) encourage citizens’ democratic participation, c) involve citizens to address issues, d) improve citizens’ awareness, e) facilitate exchange of opinions and ideas with citizens, f) listen to public opinion, g) disclose information rapidly, h) be professional in conducting their duties, and i) explain their decisions and actions to citizens. In the public trust area, structural model analysis indicates that citizens highly value having their opinions heard by council (listening to public opinion) and openness and transparency of government (openness) on Gov 2.0 platforms with 0.76 and 0.73 respectively. The analysis also indicates that citizen involvement is the least perceived value in the public trust area with 0.54.

**Quality of public services delivered**

The second area examines the quality of public services delivered to citizens. This is an important area for creating public value through Gov 2.0 initiatives representing a significant part of government activity. Public service quality examines the quality aspects of Gov 2.0 platforms including: its ease of use, reliability, stability, timeliness, robustness, friendliness, and the ability to customise these platforms to suit individual user’s preferences. Within this area, the structural model analysis indicates that citizens highly value reliability, friendliness, and robustness of Gov 2.0 platforms. The user orientation of these platforms is the least valued aspect in this area with 0.61. It is worthwhile noting that service quality is the highest latent variable loading on the public value of Gov 2.0.
Achievements of social outcomes

The third area examines the achievements of social outcomes. In addition to the ability of local government to work together with residents towards the public interest, this area assesses fairness, equity, and social cohesion among council residents. The results indicate that while citizens have perceived all these examined values, public interest is shown to be the most perceived value (by 0.79) and equity and social cohesion are the least perceived values with 0.51 and 0.53 respectively.

8.3 ROLE OF GOV 2.0 IN PUBLIC VALUE CREATION

The aim of the discussion here is to provide a fuller picture of how citizens perceive public values from their use of Gov 2.0 initiatives implemented by their local government, and how they associate these values to the main areas of public value. The study was designed to use a sequential multi-phase mixed methods approach. In Phase 1 the researcher used a qualitative approach through interviewing Victorian local government public administrators and elected officials. This phase elucidated government aims toward the creation of public value through the implementation of Gov 2.0 initiatives, and the public values they focus on daily. In Phase 2, citizens who used these initiatives were surveyed to identify locally relevant public values perceived by Victorian citizens from their use of Gov 2.0 services. This was followed by Phase 3 where 19 participants from Phase 2 were interviewed in-depth on how they perceived the values identified and why. The aim of this qualitative phase was to carefully develop good, locally relevant indicators on how public value can be perceived and consequently, how it can be evaluated.

Contrasting findings revealed citizens in Phases 2 and 3 with government aims revealed from Phase 1 helped clarify how each value was developed and who were the main contributors to its creation. The outcome of implementing this sequential multi-phase mixed methods approach by this research is an in-depth understanding of how Gov 2.0 initiatives contribute to public value creation.

Based on these findings, it can be said that under the three areas assessed (development of public trust, quality of public services delivered, and achievements of social outcomes), Victorian citizens perceived 19 public values out of 23 values examined in this study. These public values are perceived through different experiences of citizens’
use of their local councils’ Gov 2.0 initiatives. Within the Gov 2.0 environment, the study has found that many perceived public values can be created, even when local government does not directly aim to create them.

Phase 2 shows that Victorian citizens perceived all values found to be motivators for local governments to implement Gov 2.0 initiatives, as identified in Phase 1. Furthermore, citizens have not perceived most of the values that are not in the governments’ focus such as honesty, integrity, robustness, and common good. The only two values perceived by citizens but not by government are fairness and public interest. However, Phase 3 shows that the creation of these two values depends either on the technology itself, or citizen-to-citizen interactions, rather than government involvement.

The way citizens perceive fairness from their use of Gov 2.0 services is mostly related to technology features. The use of Web 2.0 technologies by local governments to serve and interact with citizens made citizens feel these services are accessible, available, fair and equitable for all. The public interest value was also found to depend mainly on citizen-to-citizen interaction where the government role is limited to respond to citizens' interests raised on Gov 2.0 platforms. The public values fairness and public interest were not a motivators for local government (phase 1), but were perceived by citizens (phase 2). During phase 3 it become clear fairness and public interest values is perceived by citizens because they are generated by citizens and the role of technology.

During phase 2, a number of values were deleted to address correlation between variables. However, in phase 3, the citizens interviewed could clearly articulate an understanding of adaptability and stability. The explanations given for stability is closely aligned with the definition of the construct as outlined in chapter 3. Nonetheless, citizens expressed a different way of understanding of the adaptability of social media tools. They included aspects such as ease of use, access at any time, and saving money due to access at any time which do not appear in the literature. Furthermore, citizen explanations given for their perception of robustness value found to be highly related and understood by citizens as reliability, thus, the robustness value dropped.

The combination of findings from all phases involving the ways and roles of different contributors to public value creation leads to the following conclusion: within the Gov 2.0 environment public value can be created even when government does not have a direct aim to create it. However, the government’s role is still significant in developing
and maximizing the creation of public value through Gov 2.0 services at local government level, mainly through government-citizen interaction. Within the Gov 2.0 environment, there are three main contributors to the creation of public value including technology, government, and citizens.

Figure 8.1 depicts the main contributor/s to the creation of public values within Gov 2.0 environment (government, citizens, and technology). Technology can be considered the main contributor to public value creation within the Gov 2.0 environment. Technology provides citizens with reliability, stability, timeliness, friendliness, user orientation, adaptability, equity, and fairness. These support both citizens and government with interactions that can lead to the creation of the public values: openness, dialogue, citizen involvement, accountability, user democracy, public interest, responsiveness, listening to public, social cohesion, self-development, and professionalism.

The findings also show that citizens’ use of these initiatives leads them to play a significant role in the creation of most of the perceived values. This empirically confirms the argument by Jørgensen and Bozeman that “public value is not governmental” (2007, p. 372), and Misuraca’s (2012) argument that public value can be generated by citizens through the replacement of government tasks by bottom-up, user driven innovation using social media tools. Misuraca (2012, p. 99) stated: “There are also signs that there will be fundamental shifts in the relation between government and citizens that could result in new ways of ‘public value creation,’ which are worth further investigation”.

While both government and citizen’s level of contribution vary from value to value, openness was found to be a significant factor in creating many of the values through citizens and government interaction. Thus, it can be argued that the openness value can be considered a significant factor (dominating value) to the creation of other values such as responsiveness, equity, fairness, and accountability.
Figure 8.1: How public value is created in the Gov 2.0 environment

Discussing these findings under the development of public trust in government, quality of public services delivered, and achievements of social outcomes will clarify how Gov 2.0 contributes toward the creation of public values in these areas, and consequently, to public value as a whole. The following sub-sections discuss these findings in relation to the role of Gov 2.0.

8.3.1 Development of public trust

Public trust in government is concerned with the extent to which citizens feel they can develop trust in their local governments through interaction via Gov 2.0 initiatives. The study found that the development of public trust is not one of the motivations in implementing Gov 2.0 initiatives. Similarly, Victorian citizens do not feel that trust in their local governments has changed. However, government officials have indicated that they are trying to develop citizens’ trust by providing more information and facilitating participation in public life through Gov 2.0 initiatives. These efforts appear to be not enough to develop trust, which seems to be strongly influenced by the political-cultural standpoint.
Interestingly, the study also found that although citizens have not increased their trust, they do identify with most of the values relating to public trust. Their perceptions are mainly motivated by openness of Gov 2.0 initiatives. Openness (transparency) is one of the motivators behind local governments’ implementation of these initiatives. This finding confirms Osimo et al’s (2010, p. 5) conclusion: “In social computing communities values such as informality, openness and equality may become more dominant”. Citizens feel empowered (Frissen, 2005) to put pressure on local governments to be more transparent, accountable, responsive, and to promote user democracy. Citizens perceive that government cannot ignore their comments and inquiries on social media because everything is viewed by everyone on these platforms, and ignoring them can lead to public anger and damage council’s reputation.

The empirical investigations in this study found that in the development of public trust, the values citizens clearly identify as contributing to its creation through Gov 2.0 initiatives are responsiveness, user democracy, self-development, dialogue, openness, citizen involvement, listening to public opinion, and accountability.

Responsiveness is at the core of e-government development in Australia as evidenced by the government’s 2006 e-government strategy, ‘Responsive government: a new service agenda’ (AGIMO, 2006). The enhancement of government responsiveness was found to be one of the motivators behind Victorian local governments’ implementation and use of Gov 2.0 initiatives (see Chapter 5, section 5.4.1). These initiatives contributed to enhancing Victorian citizens’ perceptions of responsiveness as per the abovementioned 2006 e-government strategy.

Table 8.2 summarises the public values created by Gov 2.0 initiatives to development public trust, detailing the main contributor/s and how citizens perceive each public value.
Table 8.2: Summary of the creation of public values related to public trust in government through Gov 2.0

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<th>Public value areas</th>
<th>Phase 1</th>
<th>Phase 2</th>
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<tbody>
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<td></td>
<td>Government/Perceived by citizens</td>
<td>Contributor/s</td>
<td>How citizens perceive value through Gov 2.0</td>
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<td>Value</td>
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<td>Responsibilities</td>
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<th>Public value areas</th>
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<th>Phase 2</th>
<th>Phase 3</th>
<th>How citizens perceive value through Gov 2.0</th>
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<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Government</td>
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<td>Listening to public</td>
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<td>Professionalism</td>
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<td>Accountability</td>
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<td>Citizen/Government</td>
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<td>Honesty</td>
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<td>Integrity</td>
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Citizens expect a faster response on social media than other e-government response mechanisms such as e-mails. Therefore, citizens highly value the response on social media tools, especially during crises. Citizens’ perceptions of responsiveness through Gov 2.0 were not only from government officials’ replies and inquiries, but from other citizens’ replies too. Citizens’ contribution to citizens’ inquiries on Gov 2.0 platforms can reduce the pressure on government to respond and proves that the use of Gov 2.0 allows citizens to express their needs, choices, even shape the way services are delivered, and they can “take part in the actual delivery” as argued by Misuraca (2012, p. 103). Furthermore, citizens’ contributions on these platforms are found to lead to a ‘responsiveness cycle’ where more feedback and interactions can be developed.

Local government use of Gov 2.0 platforms to communicate and interact with their citizens has made citizens feel their opinions are being heard and taken into account. This contribution has increased user democracy by offering citizens new and powerful avenues to provide feedback about council services. Andersen et al. (2012, p. 6) interpretation is “an institutionalized mechanism for feedback from users, which complements other forms of user feedback”.

Citizen involvement is one government priority that struggles to increase. At the local level this involvement is very important to solve community problems, public policymaking and implementation, and service delivery. The interviewed citizens appreciate their local government efforts in using Gov 2.0 initiatives to facilitate their involvement in council matters and overcome obstacles that hinder them from attending council meetings. The findings show that citizens who have children found it very convenient to participate in council debate through social media tools. Alike, citizens who feel less confident to speak in public also feel more confident to express their ideas on social media tools where they do not need to concern themselves with emotions. These findings indicate that the implementation of Gov 2.0 initiatives by Victorian local governments have facilitated citizen involvement. The use of Gov 2.0 platforms to involve Victorians in council matters helped citizens to overcome obstacles that hinder them from participating in council meetings such as: lack of interest, responsibilities of taking care of children at home, or fear of public speaking.

Public value is about co-creation and active involvement (Meynhardt & Bartholomes, 2011). Though citizens feel that Gov 2.0 facilitates their involvement, interaction with government officials on these initiatives is another significant motivator for more active
participation. Citizens’ involvement on these platforms is shown to have greater potential to overcome the lack of interest obstacle that hinders them from being involved in council matters and events. The uptake of social media tools encourages and motivates them to be more involved, which leads to face-to-face meetings with other citizens and public officials. This strengthens the relationship between government and citizens and promotes social cohesion among the community. Exchanges of opinion between citizens and government and between citizens lead to strong relationships and improved trust, and the overall result includes social cohesion, dialogue, and self-development. These findings show that Victorian local government implementation of Gov 2.0 initiatives has involved more citizens, which meets the aims of the Gov 2.0 taskforce report and Victorian Gov 2.0 action plan.

Jørgensen and Bozeman (2007) state that citizens learn and develop knowledge through their contact with government. Yet, this study found that Victorian local governments’ use of social media tools also allows citizens to learn and develop knowledge through their contact with other citizens on these initiatives. They indicated that they receive more information in accessible ways (e.g. through posts and comments) from different members of the community about many aspects concerning their local community. The high volume of citizen input to these initiatives in dialogue form includes government officials allowing citizens to shape perspectives about council matters, other community members who are using these initiatives, and about the councillors elected. Citizen self-development was one of the values citizens perceived and are of the view that they have contributed to its creation via Gov 2.0 initiatives.

The findings from this study show that Victorian local governments are not focusing on initiating dialogue on Gov 2.0 initiatives; rather they are more focused on monitoring the dialogue taking place on social media platforms and getting involved when necessary. However, citizen’s involvement is based on the type and amount of information provided by government on council social media. Furthermore, besides their appreciation of the interactivity and dialogue on social media, they acknowledge local government’s role to initiate and maintain dialogue established on these platforms. Citizens also value the immediacy of these tools that allow for government to respond quickly, which leads to a feedback loop as the first step in meaningful dialogue. Such dialogue is open for other citizens to view and become involved. Facebook is the most preferred social media platform. In addition, citizens feel connected to the community
when using social media. The lighthearted nature of these tools is also perceived positively by those who use them. Citizens feel they do not need to communicate with council in a formal way, which is more convenient. This motivates them to provide more input.

These findings also show that by implementing and utilising Gov 2.0 initiatives Victorian local governments have achieved more than they originally aimed (i.e. to find out what citizens think about council) for. Moreover, the findings indicate these initiatives help to achieve the leadership goals of the Australian taskforce report (2009), which aims to motivate public figures to form or join existing online communities to assist government to become more informed, responsive, innovative, and citizen-centric.

Local government’s willingness to listen to public opinion is an important factor for citizens’ involvement in a meaningful dialogue and to obtain feedback. Many governments already adopted an active listening strategy and pull strategy using Gov 2.0 initiatives to overcome the limitations of information pushing strategy (Mergel, 2010). Therefore, the implementation of Gov 2.0 initiatives generates a feeling among citizens that their local government is willing to listen to them. Citizens have already experienced the interactive nature of social media tools. However, the findings here show that citizens who use local government social media feel they can persuade government to listen to them and take their voice into account by working collectively on these platforms. This new relationship between citizens and their local governments enhances citizens’ ability to influence government decisions and play a greater role in public service planning and delivery. Thus these findings indicate the emergence of a new era of government-citizen relationships where citizens are empowered, and government-centred culture weakens.

Professionalism within the government domain is about citizens’ expectations of quality public service delivery (Liff & Andersson, 2013). However, the way citizens perceive the professionalism of public servants via Gov 2.0 initiatives is quite different from the literature and the way in which Victorian local governments are aiming to achieve professionalism. On council social media platforms citizens like to use these tools casually and they prefer council officials to interact with them in a less formal way, especially in terms of language used, response time, and interaction. This can develop a user-friendly relationship between citizens and public officials and encourage citizens to
get more involved, which can lead to creating other public values such as dialogue and friendliness. Furthermore, public officials’ response time and accuracy of information provided are important factors for perceiving the perception of public officials’ professionalism on social media platforms. These factors (response time and accuracy) were expressed by Victorian local governments and perceived by citizens who use Gov 2.0 initiatives.

Accountability is an extremely complex matter in the public administration field (Denhardt & Denhardt, 2000). This study found that citizens perceive the accountability value through their uptake of Gov 2.0 initiatives. While citizens prefer to interact with council officials in a casual manner using social media tools, they feel these platforms empower them to hold these officials and council to account. Citizens realise the advantages of openness and the interactive nature of Gov 2.0 to disseminate their voice very quickly, referring to council officials’ previous posts, comments, and obligations. These advantages enhance citizens’ role in ‘multiple accountability systems’ as “overseers of government, customers as users and taxpayers as funders” synthesised by O’Flynn (2007, p. 10). This can significantly enhance the accountability of local governments, the aim of the Australian Government 2.0 Taskforce (2009) report pillar for the use of Web 2.0 as a collaborative tool. However, the study found that interactions between citizens and local government officials via Gov 2.0 initiatives did not contribute to citizens’ perceptions of honesty and integrity, and these values were not a focus of government.

8.3.2 Quality of public services delivered

Service quality is about the level of service delivered by IS service providers to citizens compared to their expectations mainly in relation to features such as reliability, responsiveness, empathy, and assurance (Gorla et al., 2010). Improving public service quality is one of the reasons behind Victorian local governments’ implementation of Gov 2.0 initiatives. It is also emphasised by the report ‘Reform of Australian Government administration: building the world’s best public service’ as “delivering high quality programs and services that put the citizen first” (Commonwealth of Australia, 2009). Citizen expectations of such services are influenced by their experience with private sector service quality. This study found that IS platforms have contributed to citizens’ confidence Gov 2.0 systems. This confidence has been built
through citizens’ perceptions of a number of public values including adaptability, reliability, stability, timeliness, robustness, friendliness, and user orientation. Table 8.3 summarises public values created by Gov 2.0 initiatives regarding quality of public services delivered. It details the main contributor/s, and how citizens perceive each public value.
Table 8.3: Summary of the creation of public values related to quality of public services through Gov 2.0

<table>
<thead>
<tr>
<th>Quality of Public Services Delivered</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
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<tbody>
<tr>
<td>Public value area</td>
<td>Value</td>
<td>Perceived by citizens</td>
<td>Contributor/s</td>
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<tr>
<td>Public value area</td>
<td></td>
<td>Government Motivator</td>
<td>Focus</td>
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<tr>
<td>Adaptability</td>
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<td>Reliability</td>
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Adaptability refers to how easily technology can be changed to extend its utilisation (Pérez & Murray, 2010). Citizens highly perceive the adaptability value of Gov 2.0 initiatives, especially citizens who are time poor. These initiatives provide citizens with the ability to interact with council, accessing a range of services at any time without having to visit council offices during working hours. Citizens perceive greater ease of use when they use these initiatives. Furthermore, citizens’ ability to access Gov 2.0 initiatives from different devices (e.g. desktops, laptops, tablets, and smart phones) almost anywhere through wireless Internet technologies is a significant factor that enhances citizens’ perceptions of adaptability. The accumulation of these adaptability features has resulted in citizens’ ability to access more council services compared with face-to-face service in a convenient way.

Reliability of online government services includes the accuracy of its technical functionality in terms of accessibility and availability to deliver services accurately and within the expected time (Papadomichelaki & Mentzas, 2012). Availability of council Gov 2.0 services was found to be the main factor behind citizens’ perception of reliability. Gov 2.0 platforms allow citizens to access and retrieve more information compared to traditional methods of obtaining council information such as council newsletters or by visiting council offices. The clarity of information provided via these platforms in written form adds another element to the reliability of these platforms where this information is accurate, more comprehensive, and cannot be misinterpreted. Citizens’ perceptions of these factors meet Victorian local governments’ aim for providing their citizens with reliable services by implementing Gov 2.0.

This has increased their perceptions of the stability of these platforms. The identification of stability and timeliness of Gov 2.0 initiatives has developed a perception among citizens that the services provided are robust and reliable. These values have developed among citizens through their experience of no issues or crashes with Gov 2.0, with immediate response rates to their actions indicating IS excellence by “ensuring ‘error-free’ performance” (Gorla et al., 2010, p. 208).

Citizens who access and use Gov 2.0 services believe they are user friendly. They feel that these platforms are very easy to use, with almost hassle free service. These Gov 2.0 platforms have saved them time, effort, and helped them avoid unpleasant answers face to face. The emotionless interactions on Gov 2.0 platforms have a high impact on citizens’ perceptions of user-friendliness. Citizens do not need to be concerned about
how the system feels about them when they obtain the service. This neutrality enables citizens to feel more comfortable during online uptake and also increases trust in services. Furthermore, interaction via Council Gov 2.0 platforms does not require citizens to have good written English language skills. On these platforms citizens only need to ‘click’ or follow the steps and select the options to request the service they need, or to use basic informal language to interact with council officials. Citizens’ perception of friendliness meets their governments’ aim for providing them with more user-friendly services by implementing Gov 2.0 initiatives.

The study also found that Gov 2.0 platforms and tools provide citizens with the ability to be proactive through self-service, service personalisation and the development of personal service pathways, supporting the research by Osimo et al. (2010). Yet, user-orientation was not a motivator for Victorian local government in implementing Gov 2.0 initiatives. Citizens value their ability to set council services to meet their preferences. For example, citizens who are time poor or have other responsibilities that hinder them from visiting council offices have found these services offer them greater flexibility to conduct transactions whenever convenient. Likewise, the use of these platforms made citizens feel that council bureaucrats have less ability to control the information they are able to access. The interactivity and openness features of Gov 2.0 initiatives help citizens to choose the information they want to receive, how they receive it, and on which platform. Citizens can also post and interact with other citizens to find out more about topics and services of interest. By using these initiatives citizens also appreciate the ability to set alerts for Council events and meetings they want to attend, book services, and manage and control bookings online. These findings correspond with Jørgensen and Bozeman’s (2007) argument that user orientation relates to friendliness and timeliness.
8.3.3 Achievements of social outcomes

Social outcomes refer to the extent Victorian citizens feel that their use of Gov 2.0 has contributed to the improvement of equity, fairness, social cohesion, public interest, and common good. The study found that interaction between government officials and elected councillors, and citizens on Gov 2.0 platforms implemented and managed by the local governments in Victoria have generated some social public values. The study findings empirically confirmed O’Flynn’s (2006) argument that the use of Gov 2.0 by local governments can contribute to the creation of significant social public values including equity, fairness, social cohesion, and public interest. Table 8.4 summarises these values created by Gov 2.0 initiatives in relation to the achievement of social outcomes. It shows the main contributor/s, and how citizens’ perceive each public value.
Table 8.4: Summary of the creation of public values related to social outcomes through Gov 2.0

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<th>Public value area</th>
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<td>Value</td>
<td>Government Perceived by contributor/s</td>
<td>How citizens perceive value through Gov 2.0</td>
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<td>Motivator Focus by citizens</td>
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<td>Limitation of the human factor in Gov 2.0 services</td>
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<td>Equity</td>
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<td>Available to all council online users</td>
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<td>Limitation of the human factor in online services makes it equitable</td>
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<td>Provide same accessibility chances to council dialogue with same chances for all the voices to be heard</td>
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<td>Social cohesion</td>
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<td>Government Citizen/Citizen/</td>
<td>Can make the community more active and more harmonised</td>
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<td>Makes a citizen feel a part of the community, especially when invited to attend community events</td>
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<td>Brings different parts of the community together</td>
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<td>Gathering different parts of the community together improve residents’ quality of life</td>
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<td>Provide residents with various types of activities within the community</td>
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<td>Citizens develop a sense of being a part of certain online groups that have the same views about community matters</td>
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<td>Closes the gap between citizens and council</td>
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<td>Citizens feel connected to community</td>
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<td>Citizens become more proactive and involved in community events</td>
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<td>Citizens feel companionship by sharing their information and concerns with other residents</td>
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<td>Public interest</td>
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<td>Citizen/Government</td>
<td>Help citizens highlight their interests, priorities, and concerns to council</td>
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<td>Create and develop a positive dialogue with other residents about public interest</td>
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<td>Can be used to encourage and convince other residents to attend events that support public interests</td>
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<td>Make it easier for residents to gather around a particular view (just by doing like, comment or share)</td>
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<td>The open nature of social media tools helps put pressure on council to take action</td>
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<td>Common good</td>
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In the public domain, equity is one of the main reasons behind providing public services to citizens (Grand, 2007). However, the study found that providing citizens with equitable services was not one of the reasons for implementing Gov 2.0. Despite this fact, citizens perceive they are treated more equitably on Gov 2.0 platforms compared to face-to-face services. Besides providing citizens with equal chances to access the council information and services, Gov 2.0 platforms have also made citizens feel they have the same chance as everyone else to participate in public dialogue and have their voice heard. This encourages them to get involved in their local government, providing more input and feedback, which can lead to enhancing council policies and improving public services (Broster et al., 2011). These findings show that the equity value can be created by the uptake of technology, and the implementation of Gov 2.0 initiatives has contributed to the creation of this value, even though these governments were not aiming to do so.

Governments have a moral obligation to guarantee the norms of fairness in service delivery (Denhardt & Denhardt, 2000). The limitation of the human factor in the services provided on Gov 2.0 platforms is one of the main factors behind the development of fairness among users. Citizens believe they are getting fairer treatment when they deal with technology compared to receiving personalised service from council staff.

The study found that the fairness value was developed through citizens’ experience using Gov 2.0 services in various ways. For instance, the equity of access to council services through Gov 2.0 has developed their perceptions of receiving fair treatment. Similarly, the openness feature of Gov 2.0, mainly through social media platforms, was a significant factor in the development of the fairness value. On these platforms citizens are able to view other citizens’ enquiries and how they are treated by council officials and compare outcomes with their own experiences. Again, the findings show that the creation of a value, such as fairness, can be developed through the citizen’s perception of other values (e.g. equity), and these can be created by citizens’ use of Gov 2.0 technologies, even though this was not the government’s focus.

Improving social cohesion among Victorian local communities is the only value that motivated Victorian local governments to implement and use Gov 2.0 initiatives. Social cohesion is a very important task for local government where local communities are mostly a mix of different backgrounds and cultures. This study found that citizen
involvement using Gov 2.0 initiatives resulted in enhancing social cohesion within the local community. This led them to face-to-face engagement with different people from different sectors and groups within the community, resulting in more understanding and development of relationships between community members. The development of understanding between among community groups and establishment of relationships at the individual level, were perceived by citizens as an important aspect that can make their community healthier and harmonised.

Community social cohesion includes aspects of citizens’ quality of life (Berger-Schmitt, 2000). This study found that citizens who use and interact on Gov 2.0 platforms, such as Facebook, perceived many positive experiences that make them feel they have a better life and enhance their sense of community. Citizens were invited by their councils to attend events through Gov 2.0 platforms. These invitations are perceived by citizens as a personal invitation, which motivates them to join the events they have been invited to attend. They feel an important part of community, and become increasingly motivated to join and participate in future events. Joining council events and activities provides more opportunities to get to know other residents and develop understanding and relationships. The dialogue that takes place on Gov 2.0 platforms is a significant factor in developing social cohesion among citizens. Through these discussions citizens develop a sense of community, not only by feeling they belong to a group that shares the same views about community matters, but developing this sense by sharing information and concerns with other residents.

Public interest refers to “those outcomes best serving the long-run survival and wellbeing of a social collective construed as a ‘public’” (Bozeman, 2012, P.7). Citizens have realised that the features of Gov 2.0 tools offer them a great opportunity to discuss and share their opinions about the issues that matter to their community. The study found that Victorian citizens are using these tools to highlight and voice their interests, priorities, and concerns to both council officials and other citizens on these platforms. Citizens are able to gather their opinions collectively about certain issues they are concerned with and highlight their importance to council. They also use dialogue on these open platforms to create positive perceptions with other citizens to develop some kind of shared vision. In addition, citizens can take advantage of Gov 2.0 to put pressure on council to reprioritise their plans to meet their interests. In this way Gov 2.0 platforms are being taken up by Victorian citizens, which can help their local
governments to develop their policies and decisions based on publicly shared interests rather than individual or small group interests. This can change the concept of public interest from the aggregation of individual interests to a dialogue about shared values (Kim & Robinson, 2012).

In the social outcomes area, this study has also examined common good. However, this study found that this value is neither a motivator for Victorian local governments to implement Gov 2.0 initiatives, nor has it been perceived by citizens who use them.

8.4 REVISED FRAMEWORK FOR EVALUATING THE PUBLIC VALUE OF GOV 2.0

This section presents a revised framework for assessing the public value of Gov 2.0 in the Victorian local government context. It combines and triangulates quantitative and qualitative findings, identifying main values and their indicators. The values that have not been supported in this research will not be included in the following discussion, and they have been distinguished in *italics* within dotted line rectangles in figure 8.2. Furthermore, the revised framework used the outcomes of Phase 3 on how citizens perceive values to identify indicators that can be related and used to assess each value within the three areas of public value creation.

The development of public trust in government can be assessed through citizens’ perceptions of (a) responsiveness, (b) user-democracy, (c) citizen involvement, (d) self-development, (e) dialogue, (f) listening to public opinion, (g) openness, (h) professionalism, and (i) accountability. The public value responsiveness can be evaluated through citizens’ perceptions of council response time to their inquiries on Gov 2.0 platforms, the effective use of Gov 2.0 tools by council officials during crises and emergencies, and the usefulness of Gov 2.0 platforms in helping citizens respond to enquiries.
User-democracy through Gov 2.0 can be assessed through citizens’ perceptions of (i) their ability to share their complaints and enquiries with other citizens, (ii) their ability to unite regarding council services using these tools, and (iii) the extent to which citizens can invest in the openness of these initiatives to put pressure on council to have their voice taken into account and thus influence council decisions.

The public value of citizen involvement through Gov 2.0 can be assessed through citizens’ perceptions about whether Gov 2.0 initiatives have (i) encouraged them to be more involved in council debates and events, (ii) motivated them to attend consultation meetings, (iii) led to face-to-face meetings and development of personal relationships
with other residents, and (iv) made them become more connected with council officials and their local community.

The value of self-development through Gov 2.0 initiatives can be examined through citizens’ perceptions of (i) how useful these tools are for them to develop their knowledge about council services and local community, (ii) the ability of different parts of community to provide information on these platforms, (iii) how easy and accessible the information and other residents’ opinions and comments are on these platforms, (iv) whether these platforms provide useful opinions and ideas that can be adopted by other citizens, and (v) the ability of citizens to develop their views about councillors they elected.

The public value of dialogue can be assessed through citizens’ perceptions of (i) the ease of use and immediacy of interaction using Gov 2.0 tools, (ii) how useful these tools are to keep them connected with community, (iii) the informality and convenience of interactions with other residents and council officials, (iv) whether these tools can help citizens have more discussion, especially disadvantaged and shy ones, and (v) whether interactions on these platforms led to the development of citizens’ knowledge and understanding about council and local community.

Listening to public opinion value can be gauged through citizens’ perceptions of (i) their ability to use Gov 2.0 tools to unite their views collectively and make them more obvious to council to be taken into account, (ii) the extent to which citizens think their interaction with council officials has developed council’s understanding of community needs and concerns, and (iii) whether citizens’ feedback resulted in any improvements in council services.

The openness value can be evaluated through citizens’ perceptions of (i) their ability to access accurate and updated information whenever needed, (ii) the clarity of information provided on these tools, (iii) the ability of these systems to record and show the time of all interactions, (iv) citizens’ ability to contribute to input on these tools, (v) the extent to which citizens’ enquiries and comments on these platforms are available to the public to view and comment on them and, (vi) whether citizens become more empowered through the openness feature of these social media tools.
The public value of professionalism can be assessed through citizens’ perceptions of (i) how convenient it is to interact informally with council officials, and (ii) the immediacy of council response time and accuracy of information provided on these tools.

The public value of accountability can be gauged through citizens’ perceptions of (i) their ability to use openness of Gov 2.0 tools to hold council officials accountable, (ii) have their opinions heard and shared more by other citizens, and (iii) whether these tools promoted any understanding between them and council officials about council actions and decisions.

The public value of the quality of public services delivered can be evaluated through citizens’ perceptions of (a) adaptability, (b) reliability, (c) stability (d) timeliness, (e) friendliness, and (f) user orientation. The adaptability value of Gov 2.0 can be measured through citizens’ perceptions about the ease of use of these initiatives, the ability to access these tools from different devices and locations, and the number of services delivered through these platforms.

Reliability of Gov 2.0 services can be assessed through citizens’ perceptions about how comprehensive the information provided through these platforms is, and the availability and accuracy of information provided. The stability value of these initiatives can be evaluated through citizens’ perceptions about the smoothness of Gov 2.0 system functionality. The timeliness value can be evaluated through citizens’ perception of the immediacy of these platforms’ response to their actions.

The friendliness value can be evaluated through citizens’ perceptions about the ease of use of these platforms, how helpful these tools are to avoid annoyance with council, the availability and accessibility of these platforms and the services linked to them, whether the use of these platforms have saved citizens time and effort, and how these tools are accessible and convenient for citizens with special needs and parents with young children.

The user orientation value of Gov 2.0 initiatives can be evaluated through citizens’ perceptions about their ability to get all the information about council without being controlled by bureaucrats, the possibility for citizens to set alerts and bookings for council services and events that interest them, and how citizens can manage and control these platforms to best suit their needs.
The achievements of social outcomes can be evaluated through citizens’ perceptions of (a) equity, (b) fairness, (c) social cohesion, and (d) public interest. Citizens’ perceptions of the equity public value is assessed through the ability of all citizens who use these platforms to access the same information and services, have the same accessibility to the council dialogue, for all voices to be heard by council officials and other citizens as well as the ability of citizens’ to gain council services using Gov 2.0 initiatives without the need to interact with council officials. The fairness value can be assessed through citizens’ perceptions about how the equity they perceive through their use of these tools has developed fairness among all citizens who access these platforms.

The social cohesion value of Gov 2.0 initiatives can be evaluated through citizens’ perceptions of (i) the contribution of these tools towards making the community more active and harmonised, (ii) whether these tools are encouraging citizens to attend community events from diverse groups with various types of activity, (iii) whether citizens have developed a sense of being a part of certain online groups that share the same views about community matters, (iv) how close citizens feel they have become to council, (v) whether citizens feel they have become more connected to community, (vi) to what extent Council Gov 2.0 tools have motivated citizens to become more proactive, and feel companionship by sharing their information and concerns with other residents, and (vii) whether these platforms have helped citizens to maintain and develop personal relationships with other community members.

Public interest can be assessed through citizens’ perceptions of (i) their ability to highlight their interests, priorities, and concerns to council through social media tools, (ii) whether citizens have developed a positive dialogue about their interests using Gov 2.0, (iii) whether these tools encourage and convince residents to attend events that support the public interest, and (iv) to what extent citizens feel the open nature of social media tools help them put pressure on council to take actions within their interest.
8.5 VALIDITY OF INSTRUMENT AND THE OVERALL STUDY RESULTS

The principle of validity is an essential research principle that needs to be taken into consideration by the researcher. Validity has been defined as the degree to which the data collected actually reflected the phenomenon being investigated (Williamson et al., 2000).

In order to yield an exclusive, rigorous methodological guide for instrument development in the context of Gov 2.0 environment, this study has implemented a number of validity measures. Besides the utilisation of a mixed methods approach to collect data from multiple sources and participants (discussed in section 4.9) to improve research validity (Parry, 1998), this study has combined instrument validation techniques recommended by Straub et al. (2004) and construct development by Lewis et al. (2005). These assessment techniques were used to validate content, convergent, discriminant and factorial validity and reliability analysis.

Each research phase of this research phases was conducted with the related validity assessment techniques recommended. The content validity assessment is used in the early stages of the study during the development of the study theoretical model constructs. Haynes et al. (1995, p. 238) refer to content validity as “the degree to which elements of an assessment instrument are relevant to and representative of the targeted construct for a particular assessment purpose”. In this stage, the study used the content analysis methodology utilising the literature review, inductive method, and content analysis techniques. The utilization of these techniques resulted in: a) clarifying the potential of Gov 2.0 on public value creation, and thus, the importance of the adoption of Public Value concept to assess Gov 2.0 initiatives, b) proposing the study main constructs in broad theoretical terms and conceptual definitions, and c) adopting a list of public values that have potential to contribute to the development of each of the main constructs. The outcome of this initial stage is that it finalised the theoretical framework and identified a list of public values that the government may generate among citizens through the implementation and use of Gov 2.0 initiatives. These values were associated with each of the three main constructs (development of public trust, quality of public service delivered, and achievement of social outcome). This outcome of this stage forms the basis of phases 1 to 3 of the research study.
Phase 1 was designed to provide the researcher with a better understanding of the Victorian local government aims toward public value creation through interviewing the government officials and administrators. This phase conducted and followed a number of measures to ensure the validity of its outcome. Besides the use of the theoretical model yield from the literature review and content analysis techniques, the data was collected from four different highly ranked local governments in terms of the use of social media tools. These councils were selected through comprehensive sampling procedures (see section 4.5) to ensure access to the most appropriate individuals for all research phases (Silverman, 2001). Collecting data from four different local governments who provide similar online services and features contributed to this phase’s generalisability (Bryman, 2003).

This phase concluded that Victorian local governments are working towards the creation of many public values without directly aiming to do so. From the 23 identified, 17 public values were found to be in the government’s focus and the remaining six public values (honesty, integrity, robustness, fairness, common good, and public interest) were of less concern to them. These findings are concluded the views of 20 government officials and administrators who are in relevant positions for the implementation and use of Gov 2.0 initiatives by their local governments as recommended by Rubin and Rubin (2005). Furthermore, the interviewees were representing different government levels (decisional, managerial, executive, and operational) and positions including mayors, councillors, executives, coordinators, and operators (see section 5.2.1). This way of collecting of data on the same topic from multiple sources and participants contributes to the research validity (Parry, 1998).

Phase 2 of the study developed on the knowledge gained on public value creation within Gov 2.0 environment and was guided by the study’s theoretical evaluation model and the outcome of the government officials’ interview phase. Phase 2 was developed to identify what public values citizens perceive from using Gov 2.0 initiatives. In order to substantiate findings and improve internal validity, the study has also utilised a considerable number of procedures to handle the need for instrument validation to establish rigor survey research.

These procedures started with pre-testing the survey questionnaire. Pre-testing is one of the techniques recommended to evaluate the relevance of the survey questions’ understandability, ease of completion and to identify questions for addition or deletion.
This study’s survey was pre-tested by a group of experts as recommended by Saunders et al. (2000). Some of the survey questions were amended based on participants’ comments and suggestions to improve the reliability and validity of the data (Saunders et al., 2000).

The study also has implemented and followed various statistical validation techniques during the survey data analysis including confirmatory analysis approaches to measure the GOF in data sample (Kline, 2005; Hair et al., 2006). To confirm the accuracy and representativeness of the proposed Gov 2.0 evaluation model, various reliability and validity tests were conducted till the final evaluation of the model reached satisfactory validity results.

The data collected through the survey were firstly screened to ensure that the datasets are free from any errors or omissions that could disturb the GOF measurements in SEM analysis (Kaplan, 2009). Data screening included dealing with missing data, normal distribution of the dataset, and managing outliers, kurtosis, and skewness. The screening tests confirmed the validity of 206 surveys. For further confirmation, reliability test using Cronbach’s alpha test on survey latent variables and those indicator values associated with them was performed before the GOF analysis. The Cronbach’s alpha reliability test results indicated internal consistency of the model and the dataset is ready for further GOF analysis.

Confirmatory Factor Analysis (CFA) was used to test the validity and internal reliability of the measurement model to confirm its “hypothesis about the relationship of a set of measurement items to their respective factors” (Netemeyer et al., 2003). CFA procedures suggested by Hair et al. (2006) were followed to test the study measurement model. The study measurement model was validated using convergent, discriminant, and higher-order factor validity tests. The validation tests performed on the measurement model have resulted in deletion of some indicator variables including honesty, integrity, adaptability, stability, and common good. The deleted indicator variables considered not important variables in evaluating the public value Gov 2.0 from the citizens’ perspective due to their lack of validity. The outcome of this CFA validity evaluations confirms that the theoretical latent constructs are reflecting the indicator public values proposed in the measurement model providing the evidence that the theoretical measurement model hypothesis are supported (Hair et al., 2006).
The study identified the public values in the study’s theoretical framework (Chapter 3), which were reviewed against government’s views (Chapter 5), and validated using SEM (Chapter 6). The final research phase (phase 3 in chapter 7) developed an in-depth understanding of how citizens perceive the values identified in the previous phases. The findings of citizens’ interviews in phase 3 provided a comprehensive understanding of the creation of public value through Gov 2.0 initiatives at the Victorian local government level.

The combination of both qualitative and quantitative research approaches in three different phases by this research provided a cross-validate mechanism for research findings (Kaplan & Duchon, 1988). This combination provided the researcher with the ability to verify certain empirical details from differing perspectives (Mingers, 2001). The triangulation process, over the process of cross-validation of the different phases’ findings resulted in meaningful interpretation of the overall study results (Kaplan & Duchon, 1988).

8.6 RECOMMENDATIONS

While this research has been conducted within a Victorian local government context, the recommendations may be seen to apply more broadly to local governments elsewhere. While it is not appropriate to generalise, many of these recommendations have potential relevance to other local e-government initiatives and communities.

This in-depth research discloses that through the implementation and use of Gov 2.0 initiatives at the local government level in Victoria, public value can be created not only by government, but citizens who use these initiatives and through information systems supporting Gov 2.0 applications. The study also revealed that openness, dialogue, and responsiveness are the core values generated from government-citizen interaction on Gov 2.0 platforms. The creation of these values contributes to other values. By fostering the creation of public value through Gov 2.0 initiatives, this study provides some specific recommendations here based on the findings.

Openness is one of the significant values that can lead to creating and enhancing other values on Gov 2.0 platforms. This study, however, found that local governments use these tools for providing information and allow for limited interaction on these platforms. This may not help create and enhance the openness value on Gov 2.0
platforms where citizens expect more government officials to interact with them, and provide an immediate response with accurate information. It is therefore recommended that local governments should change and adopt new interaction policies and strategies that allow more staff to interact on these platforms. The new policies and strategies need to make staff feel supported and encouraged to interact more actively to meet citizens’ expectations, and contribute to creating other values through these interactions. Failing to involve more staff on Gov 2.0 platforms slows the response time and can generate a sense among citizens that council is not responsive or trying to conceal information.

In order to create public value, it is not only important for local governments to understand the motivations for citizens’ use of Gov 2.0 platforms, but also for them to understand what encourages citizens to continue their interactive involvement.

The implementation of Gov 2.0 platforms by Victorian local governments will not encourage citizen involvement in and of itself. Instead, having a good relationship between citizens and their elected councillors on these platforms can enhance this involvement. While citizens have expressed they enjoy interacting with their councillors, they are more likely to be involved in online dialogue when councillors are also involved: only a small number of councillors are currently using these platforms to interact with their residents. The low uptake of Gov 2.0 tools by councillors to interact and communicate with their constituents on these platforms is problematic for the creation of citizen involvement value and consequently some other values too. Therefore, the study recommends elected councillors recognise the importance of their involvement in the dialogue taking place on Gov 2.0 platforms to ensure that citizens’ involvement is encouraged and well matched with council’s inclusive role and objectives.

The other factor that encourages citizens’ involvement is their interest to see their input incorporated in the decision-making process and outcomes. Thus, local governments needs to demonstrate to their residents that they are listening to them on Gov 2.0 platforms, and that their opinions are taken into account to make them feel their input is valued. Local governments can also encourage citizen involvement by offering rewards. For example, local governments can provide awards for citizens who are actively involved in online dialogue by giving them free access to community services, which can significantly improve their involvement on Gov 2.0 platforms.
Such involvement has huge potential for collaboration between citizens and local government. This collaboration can benefit local government in many ways such as reducing the workload on council staff and improving service quality. However, this collaboration based on citizen’s involvement in the dialogue needs local governments to develop their online listening skills and adopt decentralised control of council services delivered on Gov 2.0 platforms. Therefore, in order to foster the creation of public value using Gov 2.0 platforms, this study recommends local governments take a more active steering role, rather than controlling interactions on Gov 2.0 platforms.

Citizens have expressed their willingness to understand local government via Gov 2.0 initiatives. Thus, local governments need to harvest the potential to increase understanding between them and council residents using Gov 2.0 initiatives. Local governments are recommended to initiate or be involved in online dialogue with their citizens to clarify their actions and justify any council decisions they feel are not welcomed by their constituents. Furthermore, among the Gov 2.0 platforms evaluated in this study, Facebook was the preferred platform used by citizens. Thus, it is recommended to invest more in council staff involvement on Facebook without ignoring the importance of other platforms.

The role of both elected councillors and staff members’ involvement in the creation of public value using Gov 2.0 platforms has been proven in this study. However, the study has found that some factors can affect citizens’ involvement in online dialogue. The factors shown to be critical from the citizens’ perspective when they interact with council online include response time, openness, active listening, and informality of language use. Therefore, both councillors and staff members need to interact more frequently with citizens online, and develop and adopt new skills that suit the nature of interaction on these platforms.

The study has highlighted that Victorian citizens’ trust in their local government is highly influenced by their political-cultural standpoint, and they tend not to provide negative feedback or criticize council’s openness (transparency) on Gov 2.0 platforms. Thus, the study suggests that Victorian local governments need to take advantage of Gov 2.0 platforms not only to create public value by serving and interacting with residents, but because they need to use it to work to develop new types of culture and behaviour among their residents. For example, encouraging citizens to provide negative feedback and criticising council openly on Gov 2.0 platforms. Furthermore, to change
how their residents base their trust perceptions on the services provided to them, rather than basing it on their political or cultural stand by adopting effective governance process where citizens themselves play a significant role towards the creation of public values such as responsiveness, dialogue, self-development, openness, user democracy, accountability, social cohesion, and public interest.

Finally, it is recommended for all local governments to consider the findings of this study, to use it as a comprehensive tool to create public value, and gain the best outcomes from their investments in new technologies. The findings of this study can assist Victorian local governments to develop their Gov 2.0 strategies by:

1. Setting aims for implementing Gov 2.0 initiatives
2. Identifying objectives for implementing Gov 2.0 initiatives
3. Clarifying how they will achieve these objectives and aims
4. Identifying local government officials who need to be involved
5. Evaluating the impact of local government Gov 2.0 initiatives
6. Justifying the resources needed to support Gov 2.0 initiatives with tight budgets.

8.7 CHAPTER SUMMARY

This chapter has discussed the ways in which citizens perceive public values from their experiences of Gov 2.0 initiatives implemented by their local governments in Victoria. What roles government, citizens, and technology play in the creation of these values, and which indicators can be measured to evaluate the public value created through these initiatives has also been discussed. The findings were discussed under the main areas of public value creation identified in the study framework (i.e. public trust in government, quality of public services delivered, and achievement of social outcomes). The revised framework and recommendations for this study was presented at the end of the chapter. Research reflections, contributions, future research, and final concluding remarks are addressed in the following chapter.
Chapter 9: Conclusions

9.1 INTRODUCTION

The conclusions chapter offers reflection on the research questions and delivers critical thoughts on the creation of public value in the Gov 2.0 environment. This is followed by the main findings of the study and an outline of the study’s contributions for both theory and practice. The chapter also highlights strengths and limitations of the study, how the study objectives were achieved, and future research suggested. Finally, the chapter presents concluding remarks.

9.2 REFLECTION ON RESEARCH QUESTIONS

The study proposed three research questions in Chapter 1 in order to understand how Gov 2.0 initiatives contribute towards public value creation. These three questions addressed: the aims government officials have in implementing Gov 2.0 initiatives to create public value, the public values citizens perceive from using these initiatives, and how citizens perceive these public values.

Phase 1 (interviews with local government elected officials and administrators) found that Victorian local governments do not have a direct aim to create public value in particular. However, of the 23 values examined, 17 were in focus with Victorian local government. These values included dialogue, responsiveness, citizen involvement, openness, listening to public opinion, adaptability, timeliness, friendliness, accountability, professionalism, reliability, user democracy, user orientation, equity, social cohesion, self-development, and stability. Some other values were not included in local government’s focus: integrity, robustness, fairness, common good, and public interest.

In Phase 2 (survey questionnaire with end user citizens), citizens’ perception of 23 public values proposed in the framework fell under the areas of development of public trust in government, quality of public services delivered, and achievement of social outcomes. These were examined using SEM in the quantitative phase of this study. Within the context of Victorian local government, the quality of public services...
delivered on Gov 2.0 platforms created public value to citizens, and it is the most critical area for evaluating public value of Gov 2.0 compared to the other two areas (public trust and social outcomes). While quantitative examinations also revealed that openness, listening to public opinion, adaptability, reliability, robustness, friendliness, and fairness are the public values most perceived and valued by citizens, the findings also showed that self-development, stability, and social cohesion are the public values least perceived. However, SEM analysis indicated that honesty, integrity, and common good were not important to evaluate the public value of Gov 2.0 within Victorian local government due to their lack of validity.

Interviews with citizens (Phase 3) revealed how they perceived public value from their use of local government Gov 2.0 initiatives, to access services or interact with council officials and elected councillors. On Gov 2.0 platforms, openness, equality, and dialogue were the most dominating values, where the creation of these values contributed significantly to the creation of others. Interviews with Victorian citizens align and support quantitative findings showing that citizens who use local government Gov 2.0 initiatives perceive honesty, integrity, and common good either negatively or minimally. Thus, this phase confirmed these values are not valid to assess the public value of Gov 2.0 within Victorian local government.

Phase 3 interviews with citizens also revealed that they find it difficult to differentiate between reliability and robustness when they relate these values to Gov 2.0 service quality. Citizens understood the robustness of Gov 2.0 services as reliability. This clarified the cause of correlation issues in Phase 2 of SEM analysis. Robustness was therefore not supported to evaluate the public value of Gov 2.0 in the Victorian context. Together, the findings on what values are perceived by citizens in the quantitative phase and how these values are perceived in the qualitative phase were used to develop and revise the initial proposed framework for evaluating the public value of Gov 2.0.

9.3 CRITICAL REFLECTIONS ON THE CREATION OF PUBLIC VALUE IN THE GOV 2.0 ENVIRONMENT

While this study findings support Jørgensen and Bozeman’s view that “public value is not governmental” (2007, p. 372), Misuraca (2012) argued that public value can be generated by citizens through the replacement of government tasks by bottom-up user-
driven innovation and online interaction using social media tools. This study has clearly identified the main players and the role of each player in the public value creation process on Gov 2.0 initiatives at local government level. In the Gov 2.0 environment, the study findings also show that public value could be created by citizens who use local government Gov 2.0 initiatives, even though local governments do not have a direct aim to create it. Furthermore, besides the government role in public value creation, citizens who use Gov 2.0 platforms and associated technology (Web 2.0) are also playing a significant role in the creation of public value. Thus, within the use of Gov 2.0 initiatives at the local level of government, three contributors to public value creation included government, citizens, and technology (Web 2.0).

The technology used in Gov 2.0 services provides a suitable environment for government and citizens to create public value. Thus technology is significantly contributing to citizens’ perceptions of the quality of public services delivered via local government Gov 2.0 platforms. These study findings support the argument by Meynhardt (2009) who considers that public values created through public services and their technical functionality is an ‘instrumental-utilitarian dimension’. Technology provides citizens with values that directly contribute to quality of public services provided through these technologies including adaptability, reliability, stability, timeliness, friendliness, and user-orientation. Technology also contributes significantly to the creation of two values related to social outcomes: equity and fairness.

The citizen’s role in public value creation was significant. The creation of public value through citizens’ involvement and interaction on Gov 2.0 platforms equipped local governments with the potential to harness the power of collaboration with the masses of active citizens and their resources.
9.4 MAIN FINDINGS OF THE STUDY

The main findings of this research project are related to: a) what aims do government officials have in implementing Gov 2.0 initiatives to create public value? b) what public values do citizens perceive from using Gov 2.0 initiatives? And c) how do citizens perceive public values from their use of Gov 2.0 initiatives? The triangulation of the findings from these three research questions resulted in defining the main contributors to the creation of public value within Gov 2.0 environment, how it is created, and how it is perceived and measured.

This research project has found that within the Victorian Gov 2.0 context, public value can be created even when the government does not have the direct aim to create it. The way Victorian local government implement and utilise Web 2.0 technologies, the type and level of e-service strategies implemented, and the way they evaluate their councils’ implementation and use of Gov 2.0 initiatives shows that they are neither adopting the Public Value concept nor aiming to create it. However, Victorian local governments create unintentional public value for those who use Gov 2.0.

The study further found that technology (Web 2.0) and citizens themselves are the main contributors to the public value created within Gov 2.0 environment. Technology can be considered the main contributor to public value creation within the Gov 2.0 environment. Technology provides citizens with the public values such as reliability, stability, timeliness, friendliness, user orientation, adaptability, equity, and fairness. The creation of these public values by technology provides both citizens and government with interactions that can lead to the creation of the public values: openness, dialogue, citizen involvement, accountability, user democracy, public interest, responsiveness, listening to public opinion, social cohesion, self-development, and professionalism.

The study also confirmed the use of the Public Value concept to evaluate government efforts in implementing and use of Gov 2.0 initiatives. Using the Public Value concept, Gov 2.0 can be evaluated through the development of public trust in government, quality of public services delivered, and achievement of social outcomes. Furthermore, the study has identified the public values that contribute to each of these areas and the indicators that can be used to survey the citizens’ perception of these values within a Victorian local government Gov 2.0 context (see the revised framework in section 8.4).
9.5 RESEARCH CONTRIBUTIONS

The findings of this study contribute to the fields of IS and public administration research from both theoretical and practical perspectives. This section is therefore divided into two parts: the first part reflects study contributions to the academic field, mainly the public value of Gov 2.0. The second part highlights the importance of this study to practitioners in the public sector, mainly at the local level.

9.5.1 Contributions to Theory

From a theoretical perspective, this study contributes to IS research by developing an evaluation framework for assessing the public value of Gov 2.0 initiatives at local government level. The framework is developed using the area of public value as determined by Moore (1995), Kelly et al. (2002), and Kearns (2004), and public values inventory by Jørgensen and Bozeman (2007). By developing this framework, this study validated the use of the concept of Public Value to assess the contribution of Gov 2.0 initiatives towards public value creation. The framework addresses main shortcomings of previous frameworks of which none were developed on the basis of evaluating the public value of Gov 2.0 where social media tools are employed in government service delivery activity and government-citizen interaction. The interpretation of public values used in previous frameworks may not reflect the Gov 2.0 environment where citizens can contribute significantly towards public value creation processes in their local governments. The study has identified the ways in which Victorian citizens perceive each of the public values supported in this study. These identified ways of establishing base values that can be used as indicators for evaluating citizens’ perceptions of public values through Gov 2.0 initiatives. The developed framework is a first in evaluating public values of Gov 2.0 from the citizens’ perspective. The framework can also be useful for assessing the public value of Gov 2.0 initiatives across all local governments in Australia, and other developed countries where the same Gov 2.0 initiatives have been implemented.

9.5.2 Contributions to Practice

From a practical perspective, the public value concept has been used for the first time to evaluate local government efforts in implementing Gov 2.0 initiatives. The study’s comprehensive investigations have produced significant contributions and in-depth
understanding of the topic. The assessment of Gov 2.0 initiatives, which included multiphase methods, clarifies many aspects and areas, and would therefore assist Victorian local governments in many ways:

- This assessment will enable Victorian local governments to discover what they have achieved from their implementation and use of new technologies.
- The public values and indicators associated with them, illustrated in the revised framework, will provide Victorian local governments with a public value compass that can be utilised for decision making by elected councillors, and to focus council efforts to achieve these values.
- The study identified ways that Victorian citizens perceive each of the public values assessed. This level of detail on how each of the public values was created and perceived can significantly facilitate the way staff and elected officials in Victorian local governments interact and serve their citizens on Gov 2.0 platforms.
- The study determined dominating values that local governments can target in order to facilitate the creation of other values.
- The study has captured the way Victorian citizens perceive value from their interactions with local governments on Gov 2.0 platforms. These findings provide local government with a clearer picture on what their citizens think about many aspects involved in the interactions taking place on these platforms. Understanding how citizens think and behave on these platforms will help governments steer interactions more effectively to create public value among citizens.
- The study provides Victorian local government with a tool to evaluate their efficiency using framework indicators to assess their Gov 2.0 implementation and use efforts from their citizens’ perspective.
- The study findings enable Victorian local governments to reorganise their future activities and budgets around the values that were proven to be created through these platforms, and valued by their constituents. Using the findings, local governments can transform from reactive, inward-focused public tier to proactive tier.
- This research could be very useful for Victorian local governments to justify their investments in Gov 2.0 initiatives to higher levels of government (state or federal governments). These study findings would also help Victorian local governments to attract more support for future Gov 2.0 implementation, or for recruiting staff to manage and implement more platforms.

9.6 REFLECTION ON RESEARCH STRENGTHS AND LIMITATIONS

Besides the significant contributions illustrated in the previous section, this study has many strengths and limitations. The research employed a mixed methods approach using both quantitative and qualitative measures in order to comprehensively conclude the citizens’ perceptions of their use of local government Gov 2.0 initiatives. The triangulation strategy adopted in this study improved the validity of the findings (Morse, 1991).

Several previous studies (e.g. Wimmer et al., 2008; Mergel, 2012) highlighted the necessity to understand the value of the implementation of e-Gov initiatives, particularly how they can create value, how citizens perceive its value, and how to evaluate this value. This empirical study was carried out in four Victorian local governments that had a high level of Gov 2.0 implementation and a high level of citizen interaction on these platforms. The study outcome is a product of “live experience” (Murphy & Yielder, 2010, p. 65) through researcher engagement with participants involving government officials, elected councillors and citizens. Furthermore, the web-based survey was distributed through council social media tools to guarantee that all participants were actual users of Gov 2.0 initiatives and to overcome the limitations associated with online surveys. The results of such an in-depth study leads to generalisability and applicability for other local governments in other Australian states and territories, and in other developed countries with a similar context for “generating understanding” (Stenbacka, 2001, p. 551).

There are several limitations associated with this study. Despite the fact that the framework did not include any new values that needed to be validated before it could be used as an instrument for future evaluation, it is worthwhile considering that public values are diverse from one society to another, or even between countries (Jørgensen &
Therefore, the public values proposed in this study framework may not be useful to evaluate those in other societies or countries. Thus, the framework developed in this study needs to be validated in order to be implemented elsewhere, where the context will be different to Victoria, Australia. Furthermore, as technology develops and the implementation of Gov 2.0 is still considered in its early stages across local governments, adoption of these study measures need to consider contemporary changes (Petter et al., 2008).

To conclude, this research study is an original attempt to evaluate the public value of Gov 2.0 initiatives, and how citizens perceive this value where both public value and Gov 2.0 are relatively new. Accordingly, all values used in this study framework to evaluate public value are used for the first time in this way, and they have not been tested or developed using similar studies previously. Therefore, this study can be considered as a base for future research that can improve and elaborate on these values and how they were perceived.

9.7 ADDRESSING RESEARCH OBJECTIVES

This research study has outlined three aims in section 1.2.1 including (a) identify the critical values for evaluating the public value of Gov 2.0 at local government level, (b) develop a theoretical framework for evaluating the public value of Gov 2.0 initiatives based on the literature, government and citizens’ perspectives, and (c) provide policy recommendations particularly to Victorian local government.

This study has achieved these aims as follows:

a) The first objective has been accomplished through both quantitative and qualitative phases of the study. After the values were proposed from the literature through the initial theoretical framework in Chapter 3, the study has quantitatively identified critical values that can be used to evaluate the public value of Gov 2.0 at the local level through examining citizens’ views in Chapter 6. The values identified quantitatively were then re-examined from the citizens’ perspective in Chapter 7, resulting in confirming 19 critical public values that can be used to evaluate the public value of Gov 2.0 at the local level of government as discussed in section 8.3.
b) The study’s second objective has been accomplished through developing a comprehensive evaluation framework which includes the 19 values achieved in the first aim, besides pinpointing specific indicators to evaluate each of these values as discussed in section 8.4. The Gov 2.0 evaluation framework was developed through in-depth examination of citizens’ perceptions of the value of their experience in using their local government’s Gov 2.0 initiatives. The resulting framework provides original and new ways of how public value can be used to evaluate government efforts regarding the implementation and use of Gov 2.0 initiatives.

c) The study third objective was accomplished by concluding research findings that emerged from the lived experience of Victorian citizens’ use of their local government’s Gov 2.0 initiatives. Apart from research findings which provide Victorian local governments with a scientific assessment of their efforts and investments in Gov 2.0 initiatives, the study has reflected these findings with the literature in public administration and Information Systems. This combination has resulted in producing specific recommendations that can significantly help Victorian local governments maximise the creation of public value through their Gov 2.0 initiatives.

9.8 SUGGESTIONS FOR FUTURE RESEARCH

The study findings indicate that beside the government role in public value creation in Gov 2.0 environment, value can be created through citizens who use these platforms and through technology. There is evidence that the contribution of each of these three players is limited to a number of values, but not all values examined in this study; however, some values can be created either by one of the players separately (e.g. adaptability of technology) or collectively (e.g. dialogue by government and citizens on Web 2.0 platforms). Therefore, this study suggests that evaluation of the Gov 2.0 contribution to public value, based on the role of the players involved, can contribute to clarifying in-depth the role of each player in public value creation in the Gov 2.0 environment.

As previously indicated, this study was limited to Victorian local governments only, and not extended to include other Australian states or territories. For future research, this
study suggests extending the research in two different ways where public values can be different from Victorian society. Firstly, to other Australian states and territories to create a comprehensive picture of how Australian citizens perceive public value from local government Gov 2.0 initiatives. Secondly, the study can be conducted in other developed countries with similar implementation of Gov 2.0 initiatives, to enrich knowledge of public value creation in different countries and cultures.

The study findings indicated the domination of certain values such as openness, dialogue, and equality. The results indicated that producing such values can significantly contribute to creating other values. Thus, this study recommends that mapping of public values created through Gov 2.0 can be a future research area. Advanced research on how values can be created through Gov 2.0 initiatives are related, influencing each other to produce a valuable outcome that can be used by governments to focus and facilitate their efforts to maximise the public value of Gov 2.0.

9.9 CONCLUDING REMARKS

This thesis responds to demanding and contemporary challenges of understanding how Gov 2.0 initiatives can contribute to public value creation. And further, how to evaluate the return on investments by implementing these technologies in the public sector. Government implementation and use of Gov 2.0 initiatives at the local level significantly contributes to the creation of many public values perceived by citizens who use these platforms. The implementation and use of Gov 2.0 initiatives at the local level of government highly contributes to the quality of public services delivered to citizens. Furthermore, the implementation and use of these initiatives by local government enhances both government-citizen and citizen-citizen interactions. These interactions on these platforms results in creation of important values such as openness, equality, and dialogue. The creation of such values through the interactions on Gov 2.0 platforms significantly contribute to the creation of other values such as responsiveness, self-development, and social cohesion. The way public value was created on local government Gov 2.0 initiatives indicates that the creation of public value on Gov 2.0 environments is not limited to government efforts only. The technologies (Web 2.0) supporting these initiatives and citizens who use these initiatives play a significant role as well. However, in order to maximise the creation of public values through these
initiatives, local government need to implement new strategies and policies that encourage and support more staff involvement on Gov 2.0 platforms. The findings of this research study make an important contribution to clarify the value of investing in these new technologies for both academic and public sector areas. This contribution provides a clear understanding of the value of Gov 2.0, value for whom, by whom and, how it is created and evaluated.
Bibliography


Australian Public Service Commission 2012. Circular 2012/1: Revisions to the Commission's guidance on making public comment and participating online. In: Publications and media (ed.).


Berger-Schmitt, R. 2000. *Social cohesion as an aspect of the quality of societies: Concept and measurement*, ZUMA.


Howitt, D. 2010. Introduction to qualitative methods in psychology, Prentice Hall New Jersey NJ.


O'Reilly, T. 2005. What is web 2.0: Design patterns and business models for the next generation of software.


Pérez, J. & Murray, M. C. 2010. *Generativity: The new frontier for information and communication technology literacy*, DigitalCommons@ Kennesaw State University.


Stake, R. E. 1995. The art of case study research.


Ulbig, S. G. Policy, Process, and People: Sources of Trust in Municipal Government. Annual meeting of the Northeastern Political Science Association, 2004 Boston, MA.


Appendices

Appendix A: Invitation to participate in the research (Phase 1)

2 pages
Appendix B: Explanatory statement (Phase 1)

3 pages
Appendix C: Interviews consent form

2 pages
Appendix D: Interview questionnaire – public officials (Phase1)

1 page
Appendix E: Invitation and survey (Phase 2)

9 pages
Appendix F: Invitation to participate in the research (Phase 3)

2 pages
Appendix G: Explanatory statement (Phase 3)

3 pages
Appendix H: Interview questionnaire – end users (citizens) (Phase 3)

2 pages
Appendix I: Ethics Approval

From: resethics@swin.edu.au [resethics@swin.edu.au]
Sent: Monday, 10 November 2014 2:17 PM
To: Helana Scheepers
Cc: RES Ethics
Subject: Acknowledgement of Report for SUHREC Project - 2011/105

Dear Helana Scheepers,

Re: Final Report for the project (Report Date: 17-04-2014)

2011/105 'E-Government service quality assessed through the public value lens: the case of the state of Victoria'

[Thesis title has been changed with consent of Swinburne Research]

The Final report for the above project (Report Date: 17-04-2014) has been processed and satisfies the reporting requirements set under the terms of ethics clearance.

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Appendix J:  List of Publications


