Citizen Accountability in Open Government: A Case of a Canadian Local Government

by

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ABSTRACT

CITIZEN ACCOUNTABILITY IN OPEN GOVERNMENT: A CASE OF A CANADIAN LOCAL GOVERNMENT

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University of Guelph, 2018 Dr. Philippe Lassou
                                Dr. Agnes Zdaniuk

Accountability is a considerably complex and ambiguous social construct involving multiple elements. As an element of good governance, accountability has been the focus of a vast body of literature in public administration. A recent initiative aimed at improving citizen accountability (CA) that has been introduced and implemented in public governments in several countries is titled Open Government (OG). OG principles suggest that enhancing citizen engagement and transparency will improve CA and trust. However, the empirical research on how the entire CA process works in such a context is limited. The aim of this research is to explore the CA relationship between a local democratic OG and the citizens of a city in Ontario, Canada.

Given the nature of the research questions (“How”) and considering that the study focuses on a contemporary phenomenon (i.e., CA) in a specific real-life context (i.e., a local OG), a case study was conducted in a city in Ontario that had adopted and implemented OG initiatives. Semi-structured interviews with elected and appointed officials of the city provided the primary sources of data. Archival data from social media platforms and municipal documents provided secondary sources of data for this study. A conceptual model of accountability by Bovens (2007a) informs the methodology and data analysis.

The findings show that in the context of this case study, citizens are actively creating new accountability forums, which is facilitated by information and communication technologies.
(ICTs). Findings contribute to the literature on accountability through emergent themes that help to explain the accountability process in this case, that were previously not explained with conceptual models offered in the extant literature. Citizens were found to play a role in mediating the information provision phase of accountability relationships in the context of OG. Thus, this study also contributes to the public administration literature by demonstrating how accountability is arranged in an OG context and how the process of CA may be carried out in this case. Regarding practical contributions, the findings resulted in several managerial recommendations for public organizations. Study limitations, theoretical implications, and future research directions are discussed.
DEDICATION

This dissertation is in honour of my father, Dr. Mohammad Bahramirad, who has always encouraged me to pursue my education to its fullest.
ACKNOWLEDGEMENTS

First and foremost, I would like to express my sincerest gratitude to all who have supported me to this end. My thanks go to my advisors Dr. Philippe Lassou, Dr. Ron Baker, and Dr. Agnes Zdaniuk for the continuous support, for their patience, and immense knowledge. Their guidance helped me in all the time of research. also, I would like to thank the rest of my advisory committee members: Dr. Cameron Graham, Dr. Michele Bowring, Dr. Louise Hayes, and Dr. Rumina Dhalla for their encouragement, insightful comments, and their challenging questions. Your encouragement and feedbacks have been priceless. I am also grateful for the support of Dr. Davar Rezania, Dr. Jamie Gruman, and Prof. Elliott Currie in advancing my career.

I would also like to thank all my friends, specially Alireza Talebi, Gelayol Djangi, Ruben Burga, Josh LeBlanc, Farzana Mir, and Iman Shabani who supported me with all their capacity and motivated me to pursue this research. I will never forget your kindness and support throughout this process. I also wanted to thank those who participated in this research, their willingness to contribute and take part in this journey is greatly appreciated. It would have been impossible to gather valuable insights for this study. Special thanks go out to the municipal government who agreed to participate in this study. My sincere thanks also go to the wonderful staff in the Department of Management for always being so helpful and friendly. I am glad to have interacted with so many wonderful people during this time.

Last but not least, a special thanks to my family, to my parents for supporting me emotionally and encouraging me not to give up even in the hardest moments of these years. Words cannot express how grateful I am to my mother and father for all of the sacrifices that you have made. Your prayers, reassurances, comforting and heartwarming blessings are what that has sustained me so far.
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</thead>
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<td>Event 1: The Swimming Attire Policy Change</td>
</tr>
<tr>
<td>15.2</td>
<td>Event 2: The Construction Project Misfortune</td>
</tr>
<tr>
<td>15.3</td>
<td>Event 3: Use of OGD and the Mediated Information</td>
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**Table Entry:**

- **Event 1:** The Swimming Attire Policy Change
- **Event 2:** The Construction Project Misfortune
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LIST OF ABBREVIATIONS

OG.................................................................Open Government
OGD..............................................................Open Government Data
OGP..............................................................Open Government Partnership
OGM ..............................................................Open Government Manager
CA .................................................................Citizen Accountability
ICTs..............................................................Information and Communication Technologies
IT .................................................................Information Technologies
CAO ...............................................................Chief Administrative Officer
FOI .................................................................Freedom of Information
ATIA ...............................................................Access to Information Act
MFIPPA .........................................................Municipal Freedom of Information and Protection of Privacy Act
CHAPTER ONE - INTRODUCTION

1.1 Introduction and Statement of the Research Problem

One of the essential preconditions of a working democratic process is public accountability. Public accountability provides the information needed to judge the propriety and effectiveness of government conduct for citizens and their representatives (Bovens, Schillemans, & ’t Hart, 2008; Przeworski & Stokes, 1999). The importance of public accountability is to monitor and control government conduct through democratic means. Likewise, it is used to enhance the effectiveness and learning capacity of the public administration (Schillemans & Smulders, 2016). Public accountability is also essential to avoid the development of concentrations of power (Aucoin & Heintzman, 2000; Bovens et al., 2008).

From the perspective of public governance, accountability can be viewed as one of the elements by which democracies control the actions of their governments (Bovens, 2007a; Bovens et al., 2008; Mulgan, 2000). Accountability is linked to the extent to which governments pursue the wishes or needs of their citizens (accountability as “responsiveness”) regardless of whether they are induced to do so through processes of authoritative exchange and control (Koppell, 2005). Accountability is applied to the public discussion among citizens on which democracies depend on (accountability as “dialogue”), even when there is no suggestion of any authority or subordination between the parties involved in the accountability relationship (Mulgan, 2000).

One specific type of public accountability studied is the direct accountability relationship between governments and their citizens (Meijer & Schillemans, 2009). This type of accountability is labelled as citizen accountability (CA). CA is a timely concept given the focus
of recent public governance initiatives in many countries including Canada, to enhance citizen engagement and direct involvement in order to “rebuild trust”.

The development of the Internet, and more specifically Information and Communication Technologies (ICTs), which enable people to interact and share information through the World Wide Web, have had a revolutionary impact on the activities of public sector government since the turn of the 21st century (Bertot, Jaeger, & Hansen, 2012). Extant literature suggests that these technologies facilitate citizen engagement (Attard, Orlandi, Scerri, & Auer, 2015). A recent initiative that targeted the use of modern technologies in order to enhance citizen engagement and transparency in public sector government, is Open Government (OG). The literature suggests that OG initiatives could impact public government efficiency as well as CA, by defining an active role for the citizens as co-producers of value (Linders, 2012). Such initiatives have been adopted and have been implemented in Canada since its early introduction in 2011.

Despite the importance of accountability for public sector governance and the recent focus on CA and implementation of OG by governments, the literature on CA is limited. Moreover, how accountability operates is context dependent. It has been argued that there is a significant need for conducting empirical research to obtain an understanding of how CA works in Canadian contexts (Lindquist & Huse, 2017). The objective of this study is to explore how the entire CA process works in a context of OG in Canada. Specifically, local governments in Canada are known to be the “closest to the people” (Tindal, Tindal, Stewart, & Smith, 2013, p. 1). There are a variety of interactions between citizens and local governments in Canada that

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1 Please refer to the Appendix D for the detailed definition and history of OG development.
occur on a daily basis. Thus, understanding how CA works in the context of local governments in Canada has implications for both research and practice.

1.2 Organization of the Dissertation

This dissertation is organized into seven chapters.

- Chapter one lays out an introduction to the topic of this study and the problem statement. It also includes the research objective as well as presenting an outline for the organization of the dissertation.

- The second chapter reviews the literature on accountability in general and CA in particular. This chapter identifies a gap in the literature, describes additional impetus for conducting the study, and concludes with the research question.

- Chapter three presents the conceptual framework of the study and its elements. In this chapter, I discuss what each element of accountability means and how the process of CA is conceptualized in the literature. This framework informs the analysis of the data in chapter five.

- Chapter four presents the methodology and justifies the appropriate design and evidence needed for this study. Furthermore, the methods for ensuring the trustworthiness of this research and ethical considerations are discussed.

- Chapter five presents the empirical analysis of the data. In this chapter, I present the findings from the data analysis. This chapter concludes with synthesizing the findings of the study in terms of an extended conceptual model for the CA that was analyzed.
- Chapter six includes the discussion around the findings and contributions of the study. Both contributions to the literature and to the practice are discussed in this chapter.

- Chapter seven concludes this dissertation. An overview of this research along with a summary of major findings and contributions is presented in this chapter. The thesis culminates with a discussion of study limitations and future opportunities for research.
CHAPTER TWO - LITERATURE REVIEW

2.1 Introduction to Chapter

In this chapter, I begin with a review of the various conceptualizations of accountability in the extant literature. Afterward, I describe accountability as a context-specific construct, by introducing forms of accountability that are specific to the public administration domain. I will then focus on accountability relationships between citizens and public administrations; referred to broadly as CA. The literature review not only describes what CA is and how it should function, but how it differs from other types of accountability. I will consider OG as a recent practice for improving CA in public administration through its emphasis on the use of technology, open data, and citizen participation. I identify that modern ICTs such as mobile applications, social media, and open data are argued to play a role in facilitating CA. This is the underlying assumption of OG. However, the literature is inconclusive and limited about how CA works in such a context. I will define a research question to study how the entire CA process works in a local OG.

2.2 Accountability

The Oxford English Dictionary has defined the word accountability as “The quality of being accountable; liability to account for, and answer for one’s conduct, performance of duties, etc.” (“Accountability, n. : Oxford English Dictionary,” n.d.). The word continues to be used as a “conceptual umbrella”, incorporating many other loosely defined terms such as transparency, equity, democracy, efficiency, responsiveness, responsibility, and integrity (Behn, 2001; Bovens, 2007a). Furthermore, accountability has different meanings based on whether it is framed as a normative, broad concept, or as a narrow mechanistic relationship (Bovens, 2010; Dubnick, 2014a). This section begins by exploring some of the various conceptualizations of
accountability in the extant literature and concludes by highlighting the conceptualization most relevant to this thesis – citizen accountability.

2.2.1 Conceptualizations of Accountability

The first instances of empirical studies of accountability appeared in scholarly literature through case studies (Romzek & Dubnick, 1987; Day & Klein, 1987). Most noticeably accountability studies have been published in interrelated disciplines including social psychology (Lerner & Tetlock, 1999; Tetlock, 1983), political science (Olsen, 2013; Strøm, 2000), public administration (Aucoin & Heintzman, 2000; Bovens, 2007a; Bovens et al., 2008; Hood & Peters, 2004; Hupe & Hill, 2007), accounting (Hood, 1995; Laughlin, 1990; Roberts, 1991; Roberts & Scapens, 1985), law (Papadopoulos, 2007; Yu & Robinson, 2012). Over time, myriad conceptualizations of accountability have been offered.

Dubnick and Justice (2004) provide a review of the various meanings and conceptualizations of accountability. The authors first differentiate between accountability as a word and as a concept; arguing that accountability as a word only has meaning in the English language. Conversely, as a concept, accountability can be conceptualized using numerous frames of reference. Dubnick and Justice (2004) identified six frames in which accountability can be reviewed and studied: Cultural, Institutional, Organizational, Social Transactional, Task environment, and Social psychology. The frames and the conceptualization of accountability within each frame are summarized in Table 2.1.
Table 2.1. Conceptualizations of accountability within six frames (Source: adapted from Dubnick & Justice, 2004, pp. 9–10)

<table>
<thead>
<tr>
<th>Frame</th>
<th>Conceptualizations of Accountability</th>
<th>Unit of analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural</td>
<td>Within a cultural frame, accountability is a reflection of the legitimized “certainties” within a community - certainties that accompany beliefs about how the world (including social relationships and causality) is organized. Thus, hierarchical cultures will generate one form of accountability, while egalitarian societies will generate another. The variations and dynamics of this frame have considerable and as-yet largely undeveloped, potential.</td>
<td>Society</td>
</tr>
<tr>
<td>Institutional</td>
<td>Within an institutional frame, accountability is manifested as rules, norms and grammars through which authority is “controlled” in order to render it “appropriately” exercised.</td>
<td>Institution</td>
</tr>
<tr>
<td>Transactional</td>
<td>Within the context of social transactions, it emerges as a way for individuals to relate to one another - an ongoing process of account-giving, excuse-making and account-taking that is fundamental to the development and maintenance of trust.</td>
<td>Transactions</td>
</tr>
<tr>
<td>Organizational</td>
<td>Within an organizational frame, accountability is the formation (“enactment”) of informal and formal mechanisms for dealing with expectations and uncertainty.</td>
<td>Organization</td>
</tr>
<tr>
<td>Task environment</td>
<td>In complex task environments of multiple, diverse and conflicting expectations, accountability is a means for managing an otherwise chaotic situation.</td>
<td>Tasks</td>
</tr>
<tr>
<td>Social psychology</td>
<td>Within a social psychological frame, accountability has emerged as a means by which we “construct ourselves” and develop identities - as parent, as sibling, as citizen, as worker, etc. - that are applied in the other frames.</td>
<td>Individuals</td>
</tr>
</tbody>
</table>

Within each of these frames, the presence of accountability has been argued to “promise” positive outcomes (Dubnick, 2005). For example, the presence of accountability helps to control undesirable behaviours of accountable actors (Mulgan, 2000), promote ethical behaviour (Butler, 2005; Lerner & Tetlock, 1999; Messner, 2009), enhance performance (Dubnick, 2005), foster
integrity (Dubnick & Frederickson, 2010), support democratic outcomes (Ezzamel, Hyndman, Johnsen, Lapsley, & Pallot, 2004), justice and equity (McLaughlin, 2005), and learning (Bovens et al., 2008; Schillemans & Smulders, 2016).

Accountability has also been conceptualized along a normative versus descriptive continuum. For example, accountability has been viewed as an intrinsic value which resides inside the human mind as well as an instrumental mechanism helping to dictate the behaviour of an opportunistic actor within a principal-agent relationship (Bovens, 2010; Dubnick, 2002, 2014b; O’Kelly & Dubnick, 2014). In social psychology and ethics research, the conceptualization of accountability is mostly regarded as an intrinsic value (Tetlock, 1983). Meanwhile, in political science and public administration domains, the conceptualization is often that which views accountability as a mechanism within a principal-agent relationship (Bovens, 2009; Dubnick, 2014b; Dubnick & Frederickson, 2010; Olsen, 2013).

According to Dubnick and Frederickson (2010), the focus of research questions in these studies could be categorized into three main foci. The first group of studies concentrated on the inputs for accountability such as the characteristics of programs or structures as determinants of accountability. The second category investigated the processes of accountability where the studies mainly focused on the rules and policies with regards to reporting requirements to enhance accountability. The third category focused on the accountability mechanism results such as performance outcomes (Dubnick, 2005) or learning (Schillemans & Smulders, 2016).

While there are various disciplines and frames that are used to conceptualize accountability, there is ‘minimal conceptual consensus’ among these views (Bovens, Schillemans, & Goodin, 2014). For instance, Mulgan (2000) argues that all forms of
accountability at their core are linked to behaviours associated with ‘account giving’. Moreover, Bovens and colleagues (2014) argue that there are five conceptual agreements that can be found across disciplines (e.g. social psychology, accounting, political science) with regard to accountability:

“1. Accountability is about answerability towards others with a legitimate claim to demand an account; 2. Accountability is a relational concept, linking those who owe an account and those to whom it is owed; in another sense, linking agents and others for whom they perform tasks or who are affected by the tasks they perform; 3. This relation is most commonly described in the current literature in terms of agents and principals, although some also speak about accountors and accountees, actors and forums, or agents and audiences; 4. Accountability is furthermore a retrospective— ex-post—activity. 5. Finally, accountability is a consequential activity as anyone who is being held accountable may testify and get punished” (p. 7).

Such viewpoints suggest that accountability relationships cannot be conceptualized independently of people. In other words, accountability is a social relation that would not exist separate from its constitutive elements. Sinclair (1995), after conducting interviews with 15 Chief Executives of Australian public sector organizations helps to affirm such claims with the conclusion that “accountability is subjectively constructed and changes with context” (p. 219). Similarly, Roberts (2009) explained accountability “is in a particular context. It is not a mere showing or making visible of the self against a pre-determined set of categories, but rather involves active enquiry – listening, asking questions, and talking – through which the relevance or accuracy of indicators can be understood in context” (p. 966).

2.2.2 Constitutive Elements and Types of Accountability in Public Administration Context

To specify the constitutive elements of accountability, Bovens et al. (2014) describe that the following question can be posed to identify different elements of accountability relationships: who is accountable to whom, for what, by which standards, and why? Based on the answers to
different parts of this question, different types of accountability are more salient than others (Bovens et al., 2014, p. 10). Table 2.2 summarizes how the question being asked helps to determine the most salient types of accountability. Descriptions of each type of accountability and why it is relevant to the key question being asked are also provided.

Table 2.2. Constitutive elements of accountability and types of accountability based on the nature of accountability elements (Source: synthesized by the researcher from the accountability literature)

<table>
<thead>
<tr>
<th>Key Questions</th>
<th>Types of Accountability</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who is accountable?</td>
<td>Individual / Collective Accountability</td>
<td>The actor who is accountable to a forum could be individually accountable or could be accountable on behalf of a collective group (Bovens, 2007a). Example of these would be a CEO of a company who is individually accountable to the board of governance versus a Non-profit organization in which every member of the organization could be called into account regardless of their role or contributions.</td>
</tr>
<tr>
<td></td>
<td>Hierarchical Accountability</td>
<td>Hierarchical accountability can be studied when there is a clear hierarchical organizational structure in which one could be labelled as the superior who would have a higher rank and thus power over his or her inferior (Roberts, 2001). The inferior is accountable to the superior to explain his or her conduct. This type of accountability implemented through the formal chain of command within the hierarchical structures</td>
</tr>
<tr>
<td></td>
<td>Corporate Accountability</td>
<td>Corporate accountability could be also distinguished in which a corporation would be called to account as a legal entity (Bovens, 2007a).</td>
</tr>
<tr>
<td>Accountable to whom?</td>
<td>Political Accountability</td>
<td>The actor is accountable to a forum which could have a variety of forms depending on the context. Bovens and his colleagues discuss five different forms of forums including, political, legal, professional, administrative, and social forums (Bovens, 2007a; Bovens et al., 2014):</td>
</tr>
<tr>
<td></td>
<td>Administrative / Managerial Accountability</td>
<td>In a public administration context, when the civic managers face the political forum which they are accountable to, that would be a case of political accountability. Similarly, political accountability exercised between the voters and their representatives.</td>
</tr>
<tr>
<td></td>
<td>Professional Accountability</td>
<td>Administrative accountability which has also been labelled as managerial accountability is exercised in the organizations where the actor is accountable to his or her superior. In this case, the forum would be often a manager hence the categorization of managerial accountability (Sinclair, 1995).</td>
</tr>
<tr>
<td></td>
<td>Legal Accountability</td>
<td>When there is a professional association in which the actor is a member of, such a forum can also hold the actor to account. For example, professional engineers need to adhere to the certain rules of conduct to be able to hold their professional designation. Thus, the members of such associations are professionally accountable to their community.</td>
</tr>
<tr>
<td></td>
<td>Social Accountability</td>
<td>In cases which the actor must face a legal forum such as a court, the forum could take a legal form. In such cases there often is a jury which passes the judgement hence the legal accountability could be discussed in such contexts.</td>
</tr>
</tbody>
</table>
| | | Lastly, the forum could consist of a group of active citizens, interest groups or societal stakeholders which can create a case of social accountability forum. In such situations, the actor is accountable to a social forum. Social accountability literature often emerges in contexts which democratic structures are weak, unresponsive, or non-existent (Fox, 2015). Thus, most social accountability empirical research conducted in developing
Accountable for *what*?

Can be discussed by categorizing accountability based on the nature of the *conduct*.

<table>
<thead>
<tr>
<th>Type of Accountability</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Financial Accountability</td>
<td>The type of information that is being provided by the actor could also be used to classify the type of accountability relationships. In this sense, it is the content of the relationship that forms the classification of an accountability relationship. That is what Bovens (2007a) labelled as the nature of the conduct.</td>
</tr>
<tr>
<td>Process / procedural versus Product Accountability</td>
<td>If the actor is obligated to provide financial information on the spending of financial resources such as financial reports, then the accountability relationship could be classified as financial accountability (Laughlin, 1990). The other form of information that could be demanded by a forum is product versus process information (Behn, 2001). The actor may be obligated to provide the details of the process of how he or she evaluated certain procedures to accomplishing certain tasks or just the information on whether or not the final product was produced or the final services were delivered (West, 2012).</td>
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</table>

What are the *standards* by which the conduct of the actor is to be judged by the forum?

Can be discussed by categorizing accountability based on the nature of *standards*.

<table>
<thead>
<tr>
<th>Type of Accountability</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Bureaucratic Accountability</td>
<td>The standards by which the conduct of the actor is judged by the forum could define the type of accountability. By standards, Bovens et al. (2014) refer to the rules and norms of an institution.</td>
</tr>
<tr>
<td>Legal Accountability</td>
<td>In bureaucratic accountability, the bureaucratic adherence to rules and procedures are considered the standards that are expected from the behaviour of public officials (Romzek &amp; Dubnick, 1987; Romzek &amp; Ingraham, 2000).</td>
</tr>
<tr>
<td>Professional Accountability</td>
<td>If the expectations are based on legal rules and norms, legal accountability could be discussed (Bovens, 2007a).</td>
</tr>
<tr>
<td>Political Accountability</td>
<td>Professional norms and standards form a case of professional accountability (Bovens, 2007a).</td>
</tr>
<tr>
<td>Performance Accountability</td>
<td>Political norms and demands create a case of political accountability (Bovens, 2007a).</td>
</tr>
<tr>
<td>Various outcome-oriented standards</td>
<td>Various outcome-oriented standards could be also distinguished as norms and standards, for example, performance expectations can generate a case of performance accountability (Dubnick &amp; Frederickson, 2011).</td>
</tr>
</tbody>
</table>

Why the actor is compelled to render an account?

Can be discussed by categorizing accountability based on the nature of the *obligation*.

<table>
<thead>
<tr>
<th>Type of Accountability</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Vertical (Mandatory) Accountability</td>
<td>Vertical accountability could be identified where there is asymmetrical power between the actor and the forum and often exists in hierarchical structures. “Most political accountability arrangements, which are based on the delegation from principal to agent, are forms of vertical, mandatory accountability” (Bovens et al., 2014, p. 13).</td>
</tr>
<tr>
<td>Horizontal (Voluntary) Accountability</td>
<td>Horizontal accountability often emerges where the actor and forum have relatively symmetrical power and there is no mandate that the actor is obligated to give account. Thus, this type of accountability also discussed as voluntary accountability (Schillemans, 2010, 2011).</td>
</tr>
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</table>

The time-consuming nature of communication between citizens, political forums, and public agents in a chain of vertical accountability generated the need for the emergence of a new type of accountability that effectively links citizens directly to frontline service providers. This
contemporary form of accountability in the public administration literature has been labelled as *Citizen Accountability (CA)* (Meijer & Schillemans, 2009; Schillemans, 2008).

### 2.2.3 Citizen Accountability

Meijer and Schillemans (2009) argue that CA is a form of accountability that has been introduced to supplement traditional forms of accountability. The authors define CA as “mechanisms and practices where public-sector organizations directly account for their conduct in the broadest sense of the words to citizens, clients or more generally to societal stakeholders. It is a contemporary extension of the system of accountability and a reinstatement of the original idea of democratic accountability to citizens” (Meijer & Schillemans, 2009, p. 255).

The impetus behind CA is to create faster lines of communication between civil servants and citizens, particularly in regard to the responsiveness of civil servants to citizens (Meijer & Schillemans, 2009). This system differs from the traditional belief that public servants are to be held accountable primarily by elected politicians. Meijer and Schillemans (2009) differentiated between traditional accountability and CA by explaining how the latter incorporates a democratic chain of the delegation going from public sector organizations via government and popular representatives to citizens. On the other hand, CA directly connects public sector organizations to citizens without the need for intermediary steps. Figure 2.1 demonstrates the difference between these two forms of accountability. In this figure, the authors explain the solid lines as “pre-existing”, indirect accountability to citizens, and the dotted line as new and direct accountability to citizens.
Figure 2.1: Direct and Indirect CA (Source: Meijer & Schillemans, 2009, p. 260)

Meijer and Schillemans (2009) also argue that CA differs from traditional accountability (i.e., vertical, political accountability) according to the three accountability phases of information provision, debating, and consequences. The first difference stems from the fact that in vertical accountability relationships, the forum makes requests for information, while in CA citizens may rely on a plethora of publicly available data (Meijer & Schillemans, 2009) or use freedom of information clauses (Mattei, Christensen, & Pilaar, 2015). Second, while debates for vertical political accountability often takes place in a formal and procedural format, citizens accountability lacks such formalization and debate may occur at any time. Third, consequences in traditional accountability are experienced through the forum’s power to impose sanctions such as fines or firing. Meanwhile, in CA the only method that is available for citizens to impose sanctions are through informal channels (Schillemans, 2008) that are exercised through ‘exit’ or ‘voice’ (Behn, 2001; Paul, 1992). Generally speaking, ‘exit’ can be defined as leaving an organization that provides public services and going to another provider. For example, leaving a public school and going to another school illustrates exit. In addition, voice is defined as complaining about the quality of the services or performance of a public organization (Paul, 1992).

While both exit, and voice are the informal sanctions that citizens may utilize, there are constraints to their usage. For example, exit is not an option when there is only one service
provider, such as tax collection (Meijer & Schillemans, 2009). In such cases, other public 
organizations are not directly available to citizens and thus a sanctioning of the public 
organization can only be achieved publicly through exercising voice (Hirschman, 1970; Paul, 
1992). Exercising voice through negative publicity may be seen as a form of sanctioning that can 
damage reputation, despite no formal sanctions being used (Busuioc & Lodge, 2016).

Meijer and Schillemans (2009) present two forms of CA. The first form incorporates both 
information provision and debate through active citizen involvement like citizen panels or 
councils (e.g. public agencies such as school boards in the Netherlands). In this type of CA, both 
information and debate phases are ensured through formal meetings. The second form of CA 
incorporates only information provision by public organizations and relies on the active 
involvement of citizens to interpret information and question it in a debate when deemed 
appropriate (Meijer & Schillemans, 2009). In such situations, opportunities are being provided 
for the citizens to act as accountability forums by disclosing relevant information on the conduct 
of public organizations. However, only the information phase of accountability is ensured here 
and Meijer and Schillemans (2009) argue that “in order to create a full accountability process, 
citizens have to act on the provided information to question the information (debating phase) and 
to use informal sanctions” (p. 261).

With regards to the emergence and strengthening of CA arrangements in different 
contexts research has found that reporting by public agencies may improve CA. For example, 
Greiling and Grüb (2015) reported that the sustainability reporting practices of public enterprises 
could contribute to the emergence of CA. One of the most recent initiatives to improve 
accountability in its broad sense and more specifically CA is the development and 
implementation of OG initiatives (Schillemans, Van Twist, & Vanhommerig, 2013).
Even though there is a vast body of literature on public accountability, and conceptualizations of CA are continually introduced (e.g., Hudson, 2017; Kettl, 1997; Klingner, 2000; Sugiyama, 2016) empirical studies of CA are still limited. A literature search in Google scholar for “citizen accountability” in the title of the articles returns only 17 results. Specifically, there are no studies of how citizens exercise their power to reward or sanction public officials in situations where there is no formal citizen forum. Such situations may arise in OG contexts wherein transparency and citizen participation are promoted.

2.3 Open Government: Citizen Accountability through Innovative Transparency and Participation

OG differs from similar initiatives in public administration due to its ties to citizen engagement (Harrison et al., 2012; Harrison & Sayogo, 2014). While engagement was emphasized in historical discussions on democracy and in movements such as New Public Management (Gruening, 2001; Hood, 1991, 1995) or the New Public Service (Denhardt & Denhardt, 2000), it only remained a theoretical concept with little empirical support (Lee & Kwak, 2012). Furthermore, the concept of citizen engagement in its face-to-face meaning has been argued to have certain limitations, deeming it inoperable in practice (Noveck, 2009).

OG promises to actualize the concept of citizens’ engagement by the use of modern technologies (Petrakaki, 2017). As such, it promises to transform the relationship between the government and its citizens by improving the opportunities for citizens to participate and influence the government decision making and service provision. Such objectives in OG are assumed to be achieved by implementing new forms of access to data and transparency (Lourenço, 2015). Thus, implementation of OG is likely to enhance engagement, transparency, and as a result CA by use of modern ICTs. As OG initiatives are built on the principles of
transparency and citizen participation to promote CA, it is important to review the literature on transparency, citizen participation, and accountability to identify the empirical findings and research gaps in these areas.

2.3.1 Transparency and CA

Transparency is defined as “the ability to look clearly through the windows of an institution” (Meijer, 2009, p. 258). The instrumental value of transparency is arguably linked to accountability (Meijer, 2014). Transparency provides the means for having access to information. Moreover, the provision of information is what Bovens (2007a) argued as the first phase of an accountability relationship. Thus, transparency remains a prerequisite to and facilitator of accountability (Fox, 2007). However, research suggests that more transparency does not necessarily ensure enhanced accountability (Fox, 2007; Shkabatur, 2012). Thus, it is important to provide the literature findings on the relationship between these two concepts to highlight what has been found and what discrepancies remain in the literature.

2.3.1.1 The direct relationship between transparency and accountability

The literature offers a vast number of articles which have argued that transparency has a direct relationship with accountability (Bertot, Jaeger, & Grimes, 2012; Fox, 2007; Lourenço, e Sá, Jorge, & Pattaro, 2013; Meijer, 2014). Such articles suggest that accountability would be promoted by enhancing transparency. For example, Schillemans (2011) found that transparency can facilitate horizontal accountability between public managers and citizens. When citizens have access to information about the conduct of public administration, there is a better chance for engaging in a discourse which could lead to horizontal accountability between public managers and citizens. Similarly, Koppell (2005) noted “Transparency is the literal value of accountability” (p. 96). He conceptualized transparency as a dimension of accountability. Based
on his five-dimension model of accountability, when a public organization reveals performance information it is likely to positively contribute to perceptions of their accountability.

While public forums consist of citizens who do not have formal power over public organizations, they can indirectly send signals to vertical accountability forums to hold the organization accountable (Meijer, 2014). Such behaviour would only be possible by providing transparent information to the citizens so that they could call their public officials to account. Hence, transparency is a requirement for CA relationships (Meijer & Schillemans, 2009).

### 2.3.1.2 The inverse relationship between transparency and accountability

An inverse relationship between transparency and accountability has also been proposed. This position argues that transparency reduces the need for accountability to a vertical forum because actors can be held to account through transparency of the “public eyes” (Mabillard & Zumofen, 2017; Meijer, 2014). Such conceptualization reduces accountability to information provision while ignoring the other phases of the accountability process. Bovens (2007a) argues that transparency by itself does not involve scrutiny of the actor’s conduct by a forum. Moreover, Bovens (2007a) argues that transparency and access to information is a “very important prerequisites for accountability” (p. 453), but it cannot be qualified as accountability if the forum does not have the power to scrutinize the conduct of the actor and sanction undesirable behaviours. Pollitt (2006) argued about the accessibility of the information as opposed to its actual usage in a similar fashion. He argued that having access to information does not necessarily mean the information is being used for holding someone accountable. Likewise, Shkabatur (2012) states that transparency by itself could not force a public organization to correct its mistakes. With regards to CA, Meijer and Schillemans (2009) argue that transparency of government information only ensures the information provision phase of accountability. As
they state, “in order to create a full accountability process, citizens have to act on the provided information to question the information (debating phase) and to use informal sanctions” (Meijer & Schillemans, 2009, p. 261). Thus, while transparency facilitates CA it cannot be equated to CA.

Hood (2010) offered an interesting view of the relationship between accountability and transparency, highlighting the potential tension between both concepts. Hood categorizes these two concepts as “Siamese twins,” “matching parts,” or an “awkward couple.” When viewed as ‘Siamese twins’ the argument is that these two concepts are not really distinguishable. The idea of ‘matching parts’ is that these two concepts are separable and complement each other to produce good governance. Lastly, using an ‘awkward couple’ lens means that accountability and transparency are potentially or actually in tension with one another (Hood, 2010, p. 989). Therefore, the literature on the relationship between transparency and CA seems to be inconclusive.

Meijer (2014) discusses another limitation of transparency in promoting CA. He explains that in order to hold officials accountable, “citizens have created special organizations for accountability, such as Parliament, the municipal council, the Court of Audit, the Ombudsman, and also the media” (Meijer, 2014, p. 515). Furthermore, Meijer (2014) argued that citizens would not simply have enough incentives to participate in CA arrangements. However, OG literature claims a remedy for such limitation. OG initiatives such as the Open-by-default concept or Open Data practices are among the initiatives that the OG literature claims can overcome the limitations of transparency in the emergence of CA (Lourenço, 2015).
2.3.1.3 Transparency in OG

The OG literature also identifies innovative forms of transparency that could impact CA. Meijer et al. (2012) distinguished between active/innovative versus passive forms of transparency in OG in terms of information disclosure. Passive information disclosure is exercised by the actor in retrospect, only after the forum has demanded the information. Conversely, in active forms of information disclosure, the actor voluntarily discloses the information prior to a demand being made, often in specific and often short intervals (Bertot, Jaeger, & Grimes, 2012). Heald (2006) uses the phrases “transparency in retrospect” versus “transparency in real time” to describe this.

Depth and timing of disclosure have been significantly affected by the internet. The Internet has created an environment in which the frequency of information disclosure can be increased and disclosed instantly in real-time or shortly after the actions have occurred (Lourenço, 2015). This concept is also known in OG as Open by default (Lathrop & Ruma, 2010). OG initiatives may emphasize real-time/active forms of transparency through modern tech-enabled platforms. A practice that is designed to promote citizen engagement and transparency in OG is the use of Open Government Data (OGD) (Attard et al., 2015; Janssen, Charalabidis, & Zuiderwijk, 2012). According to Gonzalez-Zapata and Heeks (2015), OGD provides government data which have certain distributive qualities (e.g. free availability, reusability, interoperability). Such characteristics allow data to readily be accessed, used by other stakeholders and be integrated with other data sets to create new data products and generate new information. For example, users can analyze the open data to sharpen the focus of policy-making (Janssen et al., 2012, p. 260). Use of OGD is argued to impact public accountability (Lourenço, 2015).
Similarly, there is a strong emphasis on the integration of social media and new communication technologies for internet platforms in OG (Harrison & Sayogo, 2014). Social media has unique features believed to impact government transparency (Bertot et al., 2012). Citizens can utilize social media as a tool to quickly obtain information that may have been unavailable prior to the introduction of these technologies. Therefore, this system differs greatly from information provision in a traditional sense, where the agent was responsible to provide information and report to the principal. As information provision is an essential element of the CA process, the information that is provided through these innovative channels could also influence the operation of CA in OG.

The OG literature suggests that innovation and technologies play an important role in promoting transparency and CA, particularly in regard to initiatives such as Open Data (Gonzalez-Zapata & Heeks, 2015). Empirical research is limited however in its ability to demonstrate how CA works in an OG context where transparency is promoted, and citizen participation is encouraged.

2.3.2 Citizen Participation and CA

The accountability literature also offers some insights into the relationship between citizen participation and accountability. Most literature exploring this relationship exists in the area of social accountability. Situations are often described where citizen forums hold public organizations accountable. These forums tend to take place in developing countries where the democratic structures are weak, unresponsive, or non-existent (Fox, 2015). For example, Goetz and Jenkins (2001) presented two cases from India where citizen initiative sought to break away from vertical accountability arrangements in order to hold officials accountable. Goetz and Jenkins (2001) report on actions initiated solely by citizens, but not promoted or facilitated by
the public organization themselves. They conclude that to make such initiatives impactful, citizens’ forums need to have a legal standing where rules and laws provide sufficient power for grassroots movements to participate in accountability arrangements.

The effects of different “market conditions” on CA have been explored by Meijer and Schillemans (2009). The authors analyze CA in the Netherlands in a variety of contexts including education, healthcare, social security and land registry. The authors argue that when citizens have multiple options to ‘exit’ from one organization and receive public services from another organization (e.g. movement between schools), they can exercise such sanction as an informal consequence for CA. Furthermore, they demonstrate the use of informal sanctions by ‘voice’ as well; wherein citizens can complain about the quality of services. Results of the study demonstrate how public organizations’ anticipation of CA can affect its focus on client demands and performance in various contexts. While Meijer and Schillemans’ (2009) study of CA significantly contributes to our understanding of how CA may operate, they only focused on a form of CA that emerged by the formation of citizens panels and councils.

The literature review of accountability and citizen participation reveals a limited number of empirical research which has considered the interaction between these two major concepts. Damgaard and Lewis (2014) stated that “there have been surprisingly few systematic examinations of how citizen involvement might be integrated with accountability concerns despite the large scholarly interest in both issues” (p. 2). The authors conceptualize a five-rung ladder for citizen participation with the integration of accountability elements to measure accountability at each level of participation. They differentiate between the passive role citizens may play as recipients of information and an active role characterized by posing questions,
passing judgments, and most importantly defining and applying consequences. However, their model remains at the conceptual level and has not been confirmed empirically.

Many challenges exist for getting citizens to engage in governmental affairs. To highlight some of the challenges of engaging citizens in governmental affairs, Meijer, Curtin, and Hillebrandt (2012) conducted a systematic review of 103 articles comparing and contrasting OG viewpoints on economic, political science and legal perspectives. The authors stated that OG is about the openness of information as well as openness in interactive terms. They explained interactive openness as disclosure of information in real-time in which the information regarding an action is disclosed immediately. Further, the authors conclude that a multidisciplinary approach in OG is needed to create meaningful connections between participation and transparency to enable active citizenship (Meijer et al., 2012). Their conclusion highlights the need for more empirical research in OG to identify how transparency and participation work together.

Citizen participation in government decision making processes in OG has been explored (see Kube et al., 2015). In a case of OG in Germany, the researchers found that “citizens are not just concerned about receiving services and transfers. They aim for societal development which is beneficial for all members of society” (Kube et al., 2015, p. 889). Specifically, the use of modern ICTs in creating tools to engage the citizens was demonstrated in their study. Such findings suggest that the limitations of traditional forms of transparency and participation could be overcome by modern ICTs and CA should be studied in such contexts.
2.3.3 Innovations to overcome the limitations of Transparency and Participation for CA

Prior to recent initiatives of OG, practices of using modern technologies to publish government reports in digital formats on the Internet were labelled as e-government practices (Wong & Welch, 2004). While e-government during the early 2000s was argued to promote a more transparent, interactive, open, and accountable government, researchers found fundamental limitations with the technologies that were available at the time. For example, Wong and Welch (2004) argued that web-based technologies that existed in the early 2000s were only preserving or strengthening prior practices. Therefore, early stages of e-government practices had limited impact on fundamentally changing the nature of the relationship between citizens and public agencies.

To overcome the challenges of citizen participation and transparency in promoting CA, extant OG literature encourages the use of ICTs (Yavuz & Welch, 2014). ICTs have been argued to enable public organizations to overcome the limitations that were once recognized as barriers to public participation. In their study, Yavuz and Welch (2014) examined the relationship between public organizations’ website openness and managerial, organizational, and environmental outcomes. Results demonstrate that “higher website openness is positively related to an increased frequency of public participation in agency decision making and civil society influence, increased technical capacity, lower organizational control, and higher perceived usefulness of website technology” (Yavuz & Welch, 2014, p. 574).

The Internet has made it easier for citizens to be able to find official information about public organizations. For example, Pina, Torres, and Royo (2010) report that noticeable improvements have been made to the transparency of financial information due to the posting of financial figures and reports on the Internet. Despite arguing that ICTs increase transparency and
empower citizens to closely monitor government performance, the authors were unable to find any significant impact on CA as a result of the use of ICTs. It is noted, however, that most government websites that they analyzed were non-interactive with their online presence. This limitation made it impossible to change the relationship between the government and the citizens in real-time, thus detrimentally affecting citizen engagement.

The limitations of some ICTs in public governance may be attributed to the general technological limitations of traditional forms of web technologies known as Web 1.0 (Aghaei, Nematbakhsh, & Farsani, 2012). Such technologies offered one-way interaction between providers and users where users could access data but not actively interact or communicate a response to it. Conversely, newer ICTs offer more advanced tools that can initiate ongoing two-way interaction and discussion between web service providers and users. This is broadly known as 2.0-technologies (Kaplan & Haenlein, 2010). The most prominent form of these technologies is social media platforms on the Internet. Social media is designed for social interaction among users in an online environment (Hanna, Rohm, & Crittenden, 2011). An aggregation of web-based services such as wikis, blogs, Facebook, and many other forms of social networking services are commonly referred to as social media in general. With the introduction of social media, the Internet has changed from a source of information to a way of correspondence with people who hold influence over public officials (Hanna et al., 2011). Extant literature has demonstrated that social media has been successful in providing enhanced information sharing, easily accessible information, and most importantly, presence of multi-user interaction (Bertot, Jaeger, & Grimes, 2012; Bonsón, Torres, Royo, & Flores, 2012; Bryer & Zavattaro, 2011; Evans, Franks, & Chen, 2018). In summary, contemporary ICTs develop a unique and complex level of attendance and information sharing which empowers users of these web-based systems.
to join in, collaborate and share diverse information and engage in a conversation with one another (Kaplan & Haenlein, 2010).

Given the prevalence of public internet access and the current popularity of social media, major changes have taken place in the field of OG research as well as evaluation methods of accountability. The use of government social media has increased openness and accountability by enhancing citizen participation and engagement in decision-making and policy development, facilitating openness and transparency efforts, and reducing corruption (Stamati, Papadopoulos, & Anagnostopoulos, 2015). However, there are few studies that explore which properties of social media allow it to offer openness and accountability, or the implications of social media on policy and practice. Stamati and colleagues (2015) conducted a study using interviews with top managers, policymakers, and relevant stakeholders in five different settings to explore these notions. They discuss the distinct possibilities for openness and accountability through the integration of characteristics of social media into ICTs policies. Moreover, they argue that the integration of social media in public sector management could have significant benefits for improving the accountability relationship with the citizens. Integration of ICTs and social media in the public sector government is also promoted by OG (Lee & Kwak, 2012). However, the level of integration and impact of social media in OG could be categorized and studied distinctly (Lee & Kwak, 2012). Specifically, it is yet to be explored how CA works in such contexts.

The accountability literature has highlighted the limitations of transparency and participation for achieving CA. For example, Noveck (2009) builds a persuasive argument for the capabilities of innovation to overcome the limitation of transparency and citizen participation by use of technology. She provided several examples in which technology facilitates collaboration and transparency and built a case for connecting access to information with new
types of citizen participation, which she entitled ‘wiki government’. This idea has close ties to Paul Mason’s idea of post-capitalism (P. Mason, 2016) wherein technology can facilitate one’s collaboration efforts toward solving social problems. These perspectives are strong and provocative but consist of general assertions not yet founded in empirical studies (Meijer et al., 2012, p. 12). Moreover, Schillemans et al. (2013) argue that CA emerges in OG in more innovative and dynamic forms. They compared the characteristics of traditional forms of accountability with what they labelled as innovative accountability and argued that in OG and other similar tech-enabled contexts, CA could not only be achieved but it could result in beneficial learning outcomes. Such studies highlight the changing environment of CA in contemporary societies. The next section reviews the general themes that were identified in the literature of OG and CA.

2.4 Citizen Accountability in Open Government

After reviewing the literature on citizen accountability, I reviewed the literature on CA within OG. In order to identify contributions made to the literature in the areas of CA and OG, I conducted a Boolean search in three academic databases (ProQuest ABI/INFORM, EBSCOHost Business Source Complete, and Web of Science) with the search string ("Citizen Accountability" AND "Open Government") returned only one relevant article by Evans, Franks, and Chen (2018). This article looked at how local governments in the USA and Canada operationalize the government-citizen trust relationship through the administration of social media (Evans et al., 2018). The authors report that local governments can use social media to disseminate information, respond to service requests, and resolve the issues that were brought up by citizens. Furthermore, findings suggest that reaching fiduciary trust (i.e. an asymmetrical relationship between the trustee or agents (i.e. local government) and the principal (i.e. citizens) requires
reciprocal rather than one-way trust behaviours. Such two-way communications are supported by social media platforms. In summary, this article helps to affirm the role of ICTs in facilitating citizen participation in OG. After reviewing the initial search results, I attempted to broaden the search limits to review a broader scope of the literature to discuss themes that were explored in OG literature with regards to accountability to citizens.

CA is a specific instance of horizontal accountability wherein public administrations are directly accountable to the citizens (Schillemans, 2008). Broadening the search string to ("horizontal accountability" AND "open government") returned seven peer-reviewed articles. Bovens (2007b), even prior to the introduction of Obama’s OG, explored what he referred to as ‘new forms of accountability’ such as horizontal accountability directly to the citizens. He conceptually posited that “traditional and new forms of accountability regarding European governance” (p. 104, emphasis in original) are together needed and should complement each other. Wahyuningsih and Hastjarjo (2014) looked at the practices of social accountability in OG in a case of Regency of Karanganyar and reported challenges that exist for enhancing social accountability. Moreover, Touchton, Sugiyama, and Wampler (2017) looked at the components of democracy for improving the well-being of the citizens. They considered the role of OG technologies in contemporary contexts to develop their arguments. Vanhommerig and Karré (2014) explored how 2.0-technologies have changed the role of citizens in the government and the potential that ICTs have created for citizens to monitor and interact with the governments. Furthermore, Klaus (2016) conceptually argued that transparency is lacking in military contexts. He suggested the use of OG initiatives for enhancing the military transparency and accountability in militaries. Similarly, Alom (2018) conceptually provided a model for proactive transparency to demonstrate how such practices could hold the frontline public bureaucracies
accountable and prevent corruption. Lastly, Petrakaki (2017) conceptually discussed the implications of the use of ICTs for horizontal/social accountability to citizens. Using the literature, Petrakaki (2017) discussed that the introduction of ICTs in the public sector changes the accountability relations of public administrations and shift the traditional sources of accountability to horizontal accountability to citizens. She introduces citizens as co-producers of digital information who could bring the public officials to account using ICTs. Petrakaki (2017) arguments are supportive of the findings in this thesis, however, her paper lacks empirical support.

Conducting a similar search in the Google Scholar search engine returned 59 results. Most of these findings were non-peer-reviewed articles from open sources. I reviewed these results and found two relevant peer-reviewed articles that were not found in prior searches. Nam and Pardo (2014) conducted a case study to explore the implications of an initiative for transforming the quality of non-emergency services in the city of Philadelphia. Their finding broadly suggests that using ICTs are shifting the accountability of public administration from the government to citizens. However, they do not explain how CA works in such conditions as they were more focused on managerial activities of the city with regard to providing services to the citizens.

Lindquist and Huse (2017) systematically reviewed the literature and compared the scholarly Canadian literature with the international literature on innovations in accountability. The authors built on Bovens and other scholars in the public accountability literature and posited that “governments in the digital era are dealing with new modes of horizontal, interactive, dynamic, and citizen-initiated accountability, which challenge traditional hierarchical or vertical approaches. We need systematic studies of emerging multi-dimensional or hybrid approaches,
perhaps considering mutuality and reflexivity, and whether they need new ways to display and share information” (Lindquist & Huse, 2017, p. 648). The current thesis is a response to such call for research by providing some empirical evidence as to how CA works in an OG environment.

2.5 Gap in the literature and the Research Question

Despite the amount of attention and research paid to accountability, this literature review suggests that there is a need for more empirical research to understand CA (Lindquist & Huse, 2017; Petrakaki, 2017; Schillemans et al., 2013). OG fosters contemporary types of participation and transparency. The use of ICTs is assumed to overcome the challenges of engaging citizens prior to OG. Such modern technologies are argued to play a role in facilitating citizen participation. This is the underlying assumption of OG, however, the empirical research to explore CA arrangements in the OG context is limited (Lourenço, Piotrowski, & Ingrams, 2017). Lourenço et al. (2017) review of public accountability literature identifies that only one study had looked at the entire process of accountability (i.e., information provision, debate, consequences) in the context of public administration and ICTs. This single article was published in 2004 which was prior to the introduction and development of OG in 2009. Therefore, prior to the current dissertation, there was a gap in the literature as to how the entire CA process works in OG. This is particularly true in a Canadian context (Lindquist & Huse, 2017). More specifically, local governments in Canada have a direct relationship and impact on their citizens. For example, many of the daily services that people rely on are provided by municipal governments. Services such as maintenance of local road networks, airports, parks and recreational sites, police services, water and sewage services, garbage collection and recycling all fall under municipal control. Additionally, local governments/municipalities typically are responsible for policy making that directly affects local communities (Tindal et al., 2013). As a result of such services,
Local governments is said to be the “closest to the people” (Tindal et al., 2013, p. 1). Local governments use modern technologies to provide access to data and interact with citizens. Thus, conducting research in a local OG could shed some light on how CA works in an OG setting and would contribute to a better conceptualization of CA in a contemporary context. This study attempts to contribute to the accountability in public administration literature by investigating the OG initiatives in a case of local government. I articulated the following research questions for this study.

2.5.1 Research Questions

How does the entire CA process work in a local OG?

1. How is information provision in a local OG? What type of information is being provided as part of OG initiatives?

2. How citizens debate with government officials in a local OG?

3. How citizens use informal consequences in a local OG?

The entire CA process refers to information provision, debate, and informal consequences (Lourenço et al., 2017; Meijer & Schillemans, 2009).
CHAPTER THREE - CONCEPTUAL FRAMEWORK

3.1 Introduction to Chapter

In this chapter, I explain and justify the conceptual framework that informed the data collection and analysis of this research. More specifically, Bovens (2007a) and Meijer and Schillemans (2009) scholarly contributions were referenced to provide the foundational conceptualization of CA and the elements of accountability relationships analyzed. I first provide a discussion on the justification of the conceptual framework. Subsequently, I introduce Bovens (2007a) model, explain its constitutive elements and the key strengths and limitations of this framework. A summary finalizes this chapter.

3.2 Selecting a conceptual framework for this research

There are various conceptualizations of accountability. Accountability has been conceptualized as a virtue or a mechanism (Bovens, 2010). It has been conceptualized within different frames such as Cultural, Institutional, Transactional, Organizational, Task environment, and Social psychology (Dubnick & Justice, 2004). There are different descriptive typologies for identifying and distinguishing different types of accountability (e.g. Romzek & Dubnick, 1987; Sinclair, 1995; Stewart, 1984). There is a differentiation between accountability within hierarchical settings and socializing forms of accountability which considers power symmetries and face-to-face interactions which could lead to building trust as a result of socializing accountability (Roberts, 1991). There is an agreement in the accountability literature that accountability is context dependent and a specific type of accountability does not have a similar consequent nature in different contexts (Laughlin, 1990; Sinclair, 1995). Thus, is important to select a conceptualization of accountability which is appropriate for a relevant context.
(Laughlin, 1990; Sinclair, 1995). Thus, is important to select a conceptualization of accountability which is appropriate for a relevant context.

Given the objective of this study is to understand how CA works in a context of OG, it is essential to first determine whether an accountability relationship exists between the two parties. To address the objective of this study, I first need to identify whether CA exists between the citizens and the local government. If such a relationship exists, I need to analyze both the elements and the process of the relationship, to understand how the CA relationship is working within the OG context. I select (Bovens, 2007a) conceptual framework for public accountability to guide the design and analysis of the study. The selection of this framework is deemed appropriate because Bovens developed this framework for public administration domain and public accountability to the citizens. He views accountability as a mechanism and distinguishes seven characteristics to identify whether an accountability exists between an actor and a forum. In addition, the framework describes the process of accountability in public administration. The value of this form of parsimonious categorization of criteria for the existence of accountability relationships is recognized in the literature (O’Kelly & Dubnick, 2014). Bovens’ framework enables this research to achieve this objective, thus providing value to the study. In the sections that follow, I introduce this framework, explain its key concepts, and discuss its strengths and limitations.

3.3 Bovens’ Model

Bovens described his accountability model as “a parsimonious analytical framework that can help to establish more systematically whether organization or officials, exercising public authority, are subject to accountability at all” (Bovens, 2007a, p. 448, emphasis in original). He
built on the prior scholarly literature of accountability in the public domain (e.g. Behn, 2001; Day & Klein, 1987; Koppell, 2005; Romzek & Dubnick, 1987) and offered a narrow conceptualization of accountability. He argued that the “etymological and historical roots” of accountability suggest that accountability should be conceptualized as a specific social relation. Further, he emphasized that the ‘framework’ is intentionally narrow and analytic in its explicit focus on ‘account giving’. While acknowledging that the framework does overlap with principal-agent models (Bovens, 2009), Bovens emphasized that the actor-forum relationship can be quite different. A graphical scheme of Bovens’ model is depicted in Figure 3.1. This Figure also identifies the elements of accountability relationships.

![Figure 3.1: Bovens’ model of accountability (Source: Bovens, 2007a, p. 454)](source)

Bovens’ model presented in Figure 3.1 is interpreted in the following subsections.

### 3.4 Key Concepts of Bovens’ Framework

Bovens provides seven characteristics for evaluating whether a relationship can be categorized as an accountability relationship. The characteristics identified include the actor, the forum, information provision, debating, judging, and consequences (formal or informal). Each characteristic is part of an overall process, wherein elements are connected to one other. These relationships are listed in Figure 3.2.
A relationship qualifies as a case of accountability when:
1. there is a relationship between an actor and a forum
2. in which the actor is obliged
3. to explain and justify;
4. his [or her] conduct;
5. the forum can pose questions;
6. pass judgement;
7. and the actor may face consequences

Figure 3.2: Seven characteristics of accountability relationships (Source: Bovens, 2007a, p. 452)

Bovens’ framework also conceptualizes the process associated with an accountability relationship. Coupled together, identification of both elements and process of an accountability relationship provides the basis for organizing in-depth analysis of that relationship.

According to Bovens (2007a), the process of accountability starts with the provision of information by the actor, which he or she is obligated to do. Such information includes a discussion of the conduct of the actor. The debate phase takes place after the information has been provided. The forum can pose questions and the actor has a chance to justify his or her conduct in response. The forum then has the ability to pass judgement and the actor may face consequences if their conduct does not meet the standards of the forum. Such a process is cyclical and repeats periodically according to the formal obligations of the actor (Schillemans et al., 2013).

3.4.1 Actor: Who is accountable?

According to Bovens (2007a), the actor is the person or the party that is obligated to render the account. Basically, in an accountability relationship, the actor is identified by the answer to the question of “who is accountable”? Thus, when using Bovens model it is important to analyze the available actors and identify who the focal actor is.
Bovens (2007a) distinguishes between two major types of actors - individual and corporate actors. Individual actors are those who are subject to accountability personally. They are personally accountable to justify their conduct to their respective forum. These individual actors are identified by their names and title. The second type of actors are the corporate actors, who basically serve as a collective representation of an organization or a group. The conduct of such collective organizations is attributed to the whole organization, not any one specific individual. Therefore, the whole organization is subject to accountability and the information provided is attributed to the organization as a whole.

3.4.2 Forum: To whom is the actor accountable?

The literature on accountability explains accountability forums and discusses different types of forums (Bovens, 2007a; Bovens et al., 2014; O’Kelly & Dubnick, 2014; Schillemans & Busuioc, 2015). Bovens (2007a) explained the accountability forum as the ‘significant other’ in an accountability relationship. More specifically, he explains, “the accountability forum, can be a specific person, such as a superior, a minister or a journalist, or it can be an agency, such as parliament, a court or the audit office” (Bovens, 2007a, p. 450). Specific to CA, the forum is composed of citizen stakeholders (Meijer & Schillemans, 2009).

When studying CA using Bovens (2007a) conceptual framework, the second element of CA that needs to be analyzed is the nature of the citizen forum. It is the role of the researcher to determine who the members of the forums are, as well as the overall nature/purpose of the forum. This includes answers to questions such as how is the forum structured? Or, Are there any standards or regulations that the forum needs to follow?
3.4.3 Process of accountability

The next part of the model that needs to be considered in the analysis of CA relationships is the process/relationships that take place between the actor and the forum, as part of discharging the accountability responsibilities and completing a cycle of accountability (Schillemans et al., 2013). This process consists of three main phases, including information provision, debate, and consequences. I will explain these phases in the subsections that follow.

3.4.3.1 Information Provision: Phase 1

According to Bovens (2007a) accountability framework, in the first phase, the actor is obligated to provide information to the forum. This information is on the conduct and behaviour of the actor that he or she was responsible to perform. For example, in the case of CA the actor, or the public government official, is usually obligated to report on their performance regarding their duties and how exactly they used public funds (e.g., taxes) to provide public services. Such information is often provided in terms of formal financial reports or index cards that are presented to the forum.

Information provision incorporates several characteristics. First, disclosure of the method used to access information is provided. Information can be accessed through force or can be provided intentionally by the sender (Meijer et al., 2012). This is close to the concept of voluntary information disclosure discussed in the literature on private sector accounting. However, in the public administration literature, intentional information disclosure is a relatively new concept, which is mostly discussed in OG and eGovernment research (e.g., Meijer et al., 2012). Intentional disclosure is also referred to as proactive transparency, wherein a bureaucratic agency provides information before they were being forced or demanded to do such action (Alom, 2018). Therefore, when it comes to analyzing information provision practices, one
dimension that could be analyzed is the obligation to disclose information and the frequency of such behaviours.

Another characteristic of information disclosure is the timeliness and the medium through which the information is provided (Conroy & Scassa, 2015; Meijer et al., 2012). Information can be provided ex-post, incorporating a delay after an action has been completed, or it can be provided instantly after the action. The speed of information disclosure is categorized in the OG literature as real-time disclosure or Open-by-Default (Conroy & Scassa, 2015). So, the timeliness dimension of the provision of information is also incorporated into the framework of this study.

Information has traditionally been provided using paperback documents. The emergence of information technologies and the World Wide Web has led to the use of such virtual technologies in the public sector government; most notably the development and implementation of eGovernment practices (Linders, 2012). Such developments have resulted in the frequent publishing of digital information over Internet websites. The mediums through which the information is provided have differential effects on the provision of information. For example, the timeliness of providing information over the Internet is much faster when compared to paper copies. Thus, another dimension of information provision analyzed in this study is the medium through which information is being provided.

Lastly, the manifest content of the information itself can be analyzed. It is important to understand what type of information is being provided and how such information is structured. For example, financial statements follow certain standards, while performance reports in human resources department follow a different structure. Thus, the content and structure of the information could be analyzed along with other aforementioned dimensions.
3.4.3.2 Debate: Phase 2, justification of the information and decision

In the second phase, there may be a debate between the actor and the forum in order to justify any potential issues with clarity or missing information (Bovens, 2007a; Schillemans, 2011). So, the question becomes what is the nature of the debate and what is it that the actor and the forum are debating about? The focus of the debate is regarding the degree to which responsibilities that the actor was accountable for have been met. For example, if the actor was to provide certain services for the citizens, such as collecting their garbage and this service was not met, or it was met but with delay, the focus of the debate would be over why the actor did not deliver a satisfactory performance. If the forum identifies that the actor did not use their resources (e.g., financial resources) efficiently, the focus of the debate would be on how the actor utilized resources and why they used them in an insufficient way. Hence, over such debates, the actor would get a chance to justify certain behaviours and also provide more information regarding certain actions taken.

The information provided in the first phase is subsequently discussed during the debate phase. The forum might experience a misunderstanding not have full clarity regarding the information that was provided earlier. As a response, they may then pose a question to the actor, giving the actor a chance to clarify/justify any of the information they have previously provided.

When it comes to analyzing the accountability debate, the analysis should focus on the characteristics of instances where information is provided, and the forum poses questions due to misunderstanding or lack of clarity. The first characteristic that can be analyzed regarding the debate is where and when a debate session takes place. For example, Boven (2007a) exemplifies the debate between a jury and an actor. Such debates normally take place in a formal setting.
(e.g., a courtroom), where there is a scheduled meeting. The time of the meeting is often scheduled months in advance and the location is often fixed.

Another dimension to be analyzed during the debate phase is the degree to which the debate is mandatory, consistently held and temporary in nature. The analysis of the debate can also focus on whether the debate is using a standard and formalized structure or a less-structured format. Lastly, the analysis includes whether the content of the debate is being recorded and archived or not.

3.4.3.3 Consequences: Phase 3, reward or punishment

In the final phase, clarity is provided around the potential consequences that may arise if the actor cannot meet the expectations of the forum. The nature of these consequences can be either formal (e.g., take court action against the actor) or informal (e.g., spreading rumours to blemish the reputation of the actor). In CA, the only type of consequences that are available for citizens to implement are informal (Meijer & Schillemans, 2009). In situations where there are multi-service providers, citizens have two options to informally sanction the providers. They can either use voice or exit the organization. For example, in school systems, parents can both complain about the poor performance of the school, or they can change the school that their children are attending. In situations where there is only one service provider (e.g., local governments in Canada) the only informal option for sanctioning the actor is using voice (e.g., complaining about poor service delivery or performance). In summary, for analyzing the consequences in CA where there is only a sole actor and no option for exit, the analysis should only look for coding the instances of voice and its characteristics in the data.
When it comes to analyzing the consequences in CA, the analysis should focus on two dimensions. The first dimension is the analysis of how fast the consequences will be applied. The second dimension is the nature of voice.

Schillemans and colleagues (2013; 2016) further argue that the three phases are processed in a cyclical order, and culminate in actor learning. The idea is that sanctioning the actor due to poor performance or wrongdoing could have a corrective result wherein the actor can learn from the forum’s feedback and adjust their behaviour accordingly.

<table>
<thead>
<tr>
<th>Accountability Phase</th>
<th>References from literature</th>
</tr>
</thead>
</table>
| 1. Information Provision | Supply and demand for information (Laughlin, 1990)  
Information provision (Bovens, 2007a; Bovens et al., 2008)  
Transparency, Responsiveness (Koppell, 2005)  
Information (Brandsma & Schillemans, 2013)  
The need for information (Stewart, 1984)  
Oversight/Provide information (Thynne & Goldring, 1987)  
Demanding reasons (Roberts & Scapens, 1985) |
| 2. Debate / Discussion | Debate (Bovens, 2007a; Bovens et al., 2008; Meijer & Schillemans, 2009)  
Responsiveness (Koppell, 2005)  
Discussion (Brandsma & Schillemans, 2013)  
Discharge (Broadbent & Laughlin, 2003)  
Explain and justify (Messner, 2009) |
| 3. Consequences / Sanctions | Judgement (Bovens, 2007a; Bovens et al., 2008)  
The judgment (Stewart, 1984)  
Consequences (Bovens, 2007a; Bovens et al., 2008)  
Liability (Koppell, 2005)  
Consequences (Brandsma & Schillemans, 2013)  
Reward and Sanctions (Laughlin, 1990) |

From Table 3.1 it could be learnt that even though there is an agreement in the literature about the concept of phases of accountability, the labels used for different phases of accountability vary among different articles.

I used the elements discussed in the above-mentioned framework to develop the interview questions and for placing of data into conceptual categories during data analysis. As described in the methodology chapter, I used this framework to develop the codebook and code
the primary and secondary data. The next chapter describes the strengths and limitations of Boven’s model.

3.5 **Strengths and Limitations of Bovens’ Model**

3.5.1 **Strengths**

In the public administration literature, Bovens’ model is recognized as a framework for analyzing accountability relationships (O’Kelly & Dubnick, 2014, p. 6). Bovens’ model has provided value as an analytic framework in this area of research (Christensen & Lægreid, 2015; O’Kelly & Dubnick, 2014).

Building on the relational conception of accountability, Bovens’ model of accountability, considers accountability as a social relationship (O’Kelly & Dubnick, 2014). The development of Bovens’ accountability model was initiated by a group of scholars at Utrecht University in the Netherlands, led by professors Mark Bovens, Albert Meijer, and Thomas Schillemans (a.k.a Utrecht University Accountability Group in School of Governance). Initial model development (see Bovens, 1998) used the notion of accountability loosely as a synonym for responsibility, but also sought to explore the differences between accountability and responsibility. Further model development (see Meijer & Bovens, 2005) lead to the explication of what is known as an accountability *forum*, and this was done by equating it to ‘accountee’ in an accountability relationship. As such, the authors distinguished accountability from other types of similar notions such as transparency, responsiveness, responsibility, equity, justice, etc. Collectively, these studies formed the foundation for a major funded research project focused on theorizing accountable governance in the EU (Bovens, ’t Hart, Curtin, & van de Steeg, 2005).
I use Boven’s model in this research primarily because it is relevant for my study, but it is also important to highlight its reception and influence within the academic community. Bovens (2007a) remains one of the most cited articles in the public administration literature, amassing 1726 citations as of March 2018. Furthermore, Bovens’ articulation and scrutiny of accountability is well accepted within the scholarly community (e.g. Christensen & Lægreid, 2015; Olsen, 2013, 2015; Schillemans, 2013; Schillemans & Busuioc, 2015). Figure 3.3 illustrates the growth of academic interest to Bovens’ contributions from his initial accountability publications from 1998 to 2017 based on the number of citations by others.

![Figure 3.3: Citation count for Bovens’ contributions from 1998 to 2017 (Source: Generated by Google Scholar)](image)

**3.5.2 Limitations**

Bovens’ framework was developed based on European contexts. Bovens himself was based in Utrecht, Netherland and developed his model for EU based on the structure of the government in Europe. Specifically, Bovens’ colleagues such as Meijer and Schillemans further tested Bovens’ model in European local contexts. The Canadian context has a to some extent a different structure of government from the Netherlands.

Another limitation of Bovens’ framework that was referred to by other scholars is the way a forum is defined (O’Kelly & Dubnick, 2014; Schillemans & Busuioc, 2015). For example, the model allows for a forum to refer to a location that the debate takes place or the actual
members of the accountability holders. Bovens considers only membership in his conceptualization. In this study, I use both location as well as membership of forums to address this limitation.

3.6 Chapter Summary

In this chapter, I provided the conceptual framework that informs the analysis of this study. Bovens (2007a) conceptualization of accountability was used to develop this chapter. Moreover, Meijer and Schillemans (2009) conceptualization of CA was used to discuss the specific parts of the framework with regard to CA. I will use these elements in the next chapter to analyze the data and draw the findings based on the framework that was discussed.
CHAPTER FOUR - METHODOLOGY

4.1 Introduction to Chapter

The purpose of this study is to understand how CA works in a context of OG. In this chapter, I present the strategies and methods undertaken to design and conduct this study, along with the data collection and data analysis procedures. Initially, a discussion on the design of the study is presented. The methodological approach that was determined to be most appropriate is that of case study. A description of the case study methodology used and a brief discussion regarding types of case studies is provided. I present the unit of analysis, the role of the researcher, and a detailed explanation of additional steps taken to ensure the trustworthiness of this study. I also discuss the practical, ethical and confidentiality considerations of the study. I then present the different sources of data collected and the methods used for data collection. This section is followed by a discussion on the tools used for data management and the formation of a dataset. Lastly, an explanation of the data analysis processes is provided. A summary will conclude this chapter.

4.2 Research Design

Research design refers to the entire process of conducting a research study, from identification of a research problem, to data collection, to analysis and interpretation, and culminating with writing of the results and conclusions (Creswell, 2007). According to Yin (2014), “The design is the logical sequence that connects the empirical data to a study's initial research questions and, ultimately, to its conclusions” (p. 20). The research design is important for a study since it identifies how research should be conducted and how data will be collected and analyzed. Therefore, when conducted properly, the process serves as a roadmap for the
researcher to follow. Research design contributes to the reliability of the study, through the provision of clear steps and transparency, so that other scholars may replicate the findings.

4.2.1 Needed Evidence

The most important factor that informs research design is the research question (Stake, 1995). When employed properly, the research design and methodology should enable the researcher to obtain valid data that addresses the research question (J. Mason, 2002). This study seeks to address the research question of how the entire CA process works in a local OG. Therefore, the first step of the research design is to identify the types of evidence suitable for addressing the research objective. There should be plausible evidence as the foundation for a research project in order to adequately draw conclusions from study findings (Phelan & Reynolds, 1996).

As discussed in the previous chapters, the existing conceptualization of CA has not been explored in the context of OG, wherein citizen participation and transparency are promoted simultaneously. Furthermore, the use of ICTs in the accountability relationship between citizens and public-sector governments in developed democracies remains at the conceptual level in the extant literature. As this study attempts to obtain an in-depth understanding of how the conceptualization of CA present in the literature of accountability in public administration operates within an OG context, it is integral that the evidence used for this study enables the researcher to explore the elements and processes of CA in an OG context.

Evidence for this study includes data on events in which CA relationships were enacted over ICTs. For example, evidence may include the interaction between citizens and public officials over ICTs; such as a debate over an issue regarding smartphone applications. Interviews
with public officials and their interactions with citizens over ICTs provided ideal data for identification of CA events. Furthermore, the analysis of documentary evidence contributed to the identification of CA events. Data collected through interviews and documentary evidence are also complemented by other evidence such as similarly-themed social media threads or other smartphone applications’ comments. It was also important to collect data from each source pertinent to elements of the accountability relationship. Last, but not least, I furthered my understanding of the study context by collecting documentary evidence about the context and history of OG in a local government.

4.2.2 Case Study Design for Evidence Sought

Based on the evidence that is required for addressing the research objective of this study, a case study design was used. In situations where the nature of the question is “How” or “Why”, a case study is a suitable choice of methodology (Yin, 2009, 2014). A case study enables the researcher to understand descriptions, meanings, and concepts within the context of a problem or issue (Denscombe, 2010). Creswell (2007) explains that “A case study is a good approach when the inquirer has a clearly identifiable case with boundaries and seeks to provide an in-depth understanding of the case” (p. 74). Thus, when trying to gain an understanding of a phenomenon that has clearly established temporal parameters, choosing a case study methodology is most appropriate. Considering that this study focuses on understanding a specific phenomenon (i.e., CA) in a specific real-life context (i.e., an OG context), choice of a case study design is appropriate (Scapens, 2004; Yin, 2009, 2014).

According to Creswell (2007) case study approach is a popular methodology in social science research. The origins of modern social science case studies can be traced to anthropology and sociology, but we continue to see the methodology employed in disciplines such as
psychology, medicine, law, and political science (Creswell, 2007). The public administration literature has shown much attention to case study research. In a review of publications from 1975 to 1984 in the Journal of Public Administration Review, Perry and Kraemer (1986) found 37% of the empirical articles used case study methodology.

Case study research involves a detailed and in-depth description of a setting, followed by analyses of the data for themes or issues (Creswell, 2014; Stake, 1995). The steps followed can provide an in-depth understanding of a specific case by studying an event, a program, or an activity (Denscombe, 2010). In case studies, data collection often involves multiple sources of information (e.g., interviews, observations, audiovisual materials, and archival documents). Using multiple sources of information enhances the credibility of the study (Denscombe, 2010; J. Mason, 2002; Yin, 2014). While collecting and analyzing data, a more detailed description of the case can emerge, wherein the researcher can describe various aspects such as the history of the case and sequence of events (Creswell, 2007; Stake, 1995). After describing the case, researchers might focus on analyzing emergent themes, “not for generalizing beyond the case, but for understanding the complexity of the case” (Creswell, 2007, p. 75). In the following sections, I will discuss how each of these aspects of case study design was defined in the literature and were conducted in this research.

4.2.3 Operationalizing Case Study Design for this Research

4.2.3.1 Types of Case Study Research

Case studies can be categorized in a variety of ways. Scapens (1990) distinguished between five types of case studies: Descriptive, Illustrative, Experimental, Exploratory, and Explanatory. Yin (2014) on the other hand, categorized case studies as Explanatory, Exploratory, and Descriptive. According to Yin (2014), an exploratory case study analyzes situations in which
the outcomes of interventions are not clear or unknown. A descriptive case study describes the real-life context in which an intervention or phenomenon occurs. When causal links in real-life interventions are context dependent, an explanatory case is appropriate, as it can be used to explain the interrelations between causal relationships and the context. Stake (1995) made a broad conceptualization of case studies, by collapsing them into intrinsic and instrumental forms. Intrinsic case studies begin with a specific case and attempt to learn more about that case by bringing in readily available data. Meanwhile, instrumental case studies begin with a research question and then select a representative case to understand that research question (e.g., “how” a specific type of system works).

While a variety of case studies have been categorized by authors, it should be acknowledged that case study types are not always exclusive. Scapens (2004) stated that “the distinctions between these different types of case studies are not necessarily clear-cut” (p. 260). Similarly, Yin (2014) states that the three types of case studies (i.e., exploratory, explanatory, and descriptive) are not mutually exclusive.

This study is using a case of local OG to answer the research question of how CA process works in a real-life context. Thus, this research uses case study methodology in an instrumental and functionalist manner.

4.2.3.2 Single Versus Multiple Case Study

Authors have made the distinction between single case study and multiple case study designs (Creswell, 2007; Denscombe, 2010; Stake, 1995; Yin, 2014). According to Scapens (1990, p. 273), a multiple case study design is appropriate when the researchers intend to develop a theory, or when replication of a study is needed to extend knowledge on particular case
findings. It has been argued that single case studies are more appropriate when the researchers want to obtain an in-depth understanding of a phenomenon; particularly one that is context-specific (Creswell, 2007). Additionally, Yin (2014) provides five rationales to justify when single case studies are appropriate to address the research question. Rationale includes critical, revelatory, unusual, common, or longitudinal cases. Most applicable to this study is the notion of revelatory cases. Yin (2014) differentiates revelatory cases from others by exclaiming that this approach is important to take when access to the phenomenon under study was not previously available. Adoption of OG in a public sector government in Ontario is a recent initiative, and thus such a context was not readily accessible prior to implementation. Moreover, as discussed in the literature review, accountability is context-dependent, and the objective of this research is to learn about a social phenomenon (i.e., CA) in a specific context of a local OG. Thus, a single case study design fits particularly well for this study.

4.2.3.3 Unit of Analysis and the Research Site

The unit of analysis for a case study can vary greatly. It can be an event, a program, an activity, or an organization involving more than one individual (Creswell, 2007). The case for this study is a local government in Ontario, Canada which adopted and most importantly implemented, OG initiatives\(^2\). I was able to identify fourteen CA events through the interviews and documentary analysis. I analyzed these events, therefore, the unit of analysis was the CA events.

I chose the research site for this study pragmatically in terms of geographic accessibility and feasibility. The research site was chosen for this case following an online search of city

\(^2\) Please refer to the Appendix E for the background and context information of the selected local OG
websites across Ontario municipalities with OG initiatives. It happened that several local
governments in Ontario had adopted OG initiatives. I chose a local government which was
within my reach and was a ‘leading’ municipal government in the implementation of OG
initiatives according to the city’s website and testimonials. Furthermore, for this municipality, a
specific mobile application related to OG initiatives had been developed and used within Canada,
making this organization unique in terms of such initiatives. The mobile application allowed for
real-time publicly accessible discourse between citizens and elected officials.

4.2.3.4 The Role of the Researcher

In designing case study research, it is also important to identify the role of the researcher.
Scapens (2004) describes the various roles that the researcher can have in case study research.
More specifically, a researcher can be either the Outsider, Visitor, Facilitator, Participant, or
Actor. In all roles, with the exception of the Outsider, there is potential that the researcher has
influence over the case. Moreover, Scapens (2004) explains that as an outsider “the rese-
archer relies on readily available evidence, such as published reports and other such secondary sources”
(p. 264). In this study, my primary role can be classified as that of a Visitor — “someone who
visits the case site, and interviews the subjects of the research” (Scapens, 2004, p. 294). I had
only visited the research site to conduct the interviews, with no previous visits to the site or
interactions with any members of the site. However, given that I also collected archival
documents from the city website and other sources, interactions in this capacity could be
considered under the role of an Outsider.

4.2.4 Research Data

In this section, I explain the process of data collection conducted over the course of 18
months. This section begins by describing the scope of data collected, including sources of
origin. Lastly, I describe the period of fieldwork and how I created and managed a database for this research.

### 4.2.4.1 Sources of Data

Extensive data portraying multiple mediums (e.g., observations, interviews, documents, and audiovisual materials) and perspectives are integral to case study research (Creswell, 2007, 2014). Yin (2014) recommends collecting six types of data for case studies: documents, archival records, interviews, direct observations, participant observations, and physical artifacts. Moreover, he notes that the complete list of potential data sources can be quite extensive depending on the research question, including additional sources such as videotapes and photographs. Each source of data has its own strengths and weaknesses and using multiple sources of data helps to contribute to credibility and confirmability. Table 4.1 includes a summary of the data that were collected with examples for each category. Subsequent sections provide more details for each type of data.

Table 4.1. Study data sources and examples (Source: developed by the researcher)

<table>
<thead>
<tr>
<th>Type of Data</th>
<th>Example of Evidence</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews</td>
<td>• City Councilors&lt;br&gt;• Open Government Manager&lt;br&gt;• City Treasurer / Director of Finance&lt;br&gt;• Mayor&lt;br&gt;• Deputy Chief Administrative Officer&lt;br&gt;• Manager of the City Clerk’s Office&lt;br&gt;• Manager of Communication Department&lt;br&gt;• Information Technology and Innovation Manager</td>
<td>• Contextual information&lt;br&gt;• Identification of CA events</td>
</tr>
<tr>
<td>Documentary Evidence</td>
<td>• Accountability and Transparency Policy Document&lt;br&gt;• Council meeting minutes&lt;br&gt;• Reports for OG development&lt;br&gt;• OG Action plan</td>
<td>• Contextual information&lt;br&gt;• Identification of CA events</td>
</tr>
<tr>
<td>Online Artifacts and Inscriptions</td>
<td>Data from ICTs-enabled platforms</td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------------------</td>
<td></td>
</tr>
<tr>
<td>• Social media content:</td>
<td>• Social media content:</td>
<td></td>
</tr>
<tr>
<td>➢ Online news commentaries</td>
<td>➢ Online news commentaries</td>
<td></td>
</tr>
<tr>
<td>➢ Blog entries (e.g., Mayor’s</td>
<td>➢ Blog entries (e.g., Mayor’s</td>
<td></td>
</tr>
<tr>
<td>blog) commentaries</td>
<td>blog) commentaries</td>
<td></td>
</tr>
<tr>
<td>➢ Videos from official YouTube</td>
<td>➢ Videos from official YouTube</td>
<td></td>
</tr>
<tr>
<td>channel of the City</td>
<td>channel of the City</td>
<td></td>
</tr>
<tr>
<td>➢ Official Twitter page of the</td>
<td>➢ Official Twitter page of the</td>
<td></td>
</tr>
<tr>
<td>City (about 45,000 followers)</td>
<td>City (about 45,000 followers)</td>
<td></td>
</tr>
<tr>
<td>➢ Official Facebook page of the</td>
<td>➢ Official Facebook page of the</td>
<td></td>
</tr>
<tr>
<td>City</td>
<td>City</td>
<td></td>
</tr>
<tr>
<td>➢ Data from a Smart application</td>
<td>➢ Data from a Smart application</td>
<td></td>
</tr>
<tr>
<td>for non-emergency service</td>
<td>for non-emergency service</td>
<td></td>
</tr>
<tr>
<td>provision</td>
<td>provision</td>
<td></td>
</tr>
</tbody>
</table>

For each event identified in the above sources, complementary data were collected from ICTs. Represented both citizens’ voice and public official interactions with the citizens.

4.2.4.1.1 Interviews: Representing the Actors

Semi-structured interviews served as the primary source of qualitative data for this study. The nature of semi-structured interviews is particularly well-suited for case study research (Hancock & Algozzine, 2006). Using the semi-structured approach, researchers ask predetermined, but flexibly worded questions, so the responses can provide tentative answers to the researchers’ questions (J. Mason, 2002). In addition to posing predetermined questions, researchers can ask follow-up questions to probe more deeply into issues of interest. In this manner, semi-structured interviews allow interviewees to freely and openly express themselves and to define the world from their own perspectives, not solely from the researcher’s perspective (Hancock & Algozzine, 2006, p. 40). Through these interviews, I was able to identify CA events in the city as well as obtaining contextual information about the case.

To conduct qualitative interviews, “The researcher should identify key participants whose knowledge and opinions may provide important insights regarding the research questions” (Hancock & Algozzine, 2006, p. 39). The process of selecting interview participants for this
study is explained in section 3.7.1.2. I interviewed civic managers (appointed city officials), and
councillors (elected officials). A total of 13 interviews were conducted during this phase. The
duration of interviews varied between 30 to 90 minutes (average of 45 minutes). The interviews
were conducted in-person when possible and over the phone when interviewee preference or
logistics dictated. All interviews were audio recorded and transcribed. The interview transcripts
were sent back to the participants for review to ensure they were free of error, adding to the
credibility of the data.

Each interview was conducted under the parameters of an interview guide/interview
protocol (J. Mason, 2002). The interview protocol designed for this study is illustrated in
Appendix B and follows a conceptual framework adapted from Bovens (2007a). The protocol
included the general information about the study, information about myself, and the steps I
would take to ensure the confidentiality of the information and the recording process. Initial
questions were guided by the research question. Upon receiving feedback from the first few
participants, questions were refined. Three questions were asked to gain information regarding
the context and history of adoption and implementation of OG. The rest of the questions focused
on the direct accountability relationships with the citizens and OG initiatives.

As a general guideline in interview design, the setting in which the interview is being
conducted also needs to be considered (Denscombe, 2010). While interviews taking place in the
interviewee’s normal setting (in this case a municipal office space) may enhance naturalistic
inquiries, the researcher may seek a private and neutral interview location to increase comfort
and a chance of increasing the quality of the information attained. (Hancock & Algozzine, 2006,
p. 40). Participants were given the freedom of choice in whether interviews were conducted over
the phone, in the workplace, in my office, or in a public place, such as a coffee shop. Participants
chose a variety of meeting locations and those choosing public locations were made aware of the potential of being overheard.

As described by Denscombe (2010), a means to record the interview data is essential. To this end, I audiotaped the interviews using a professional voice recording device. I obtained permission to record the discussion prior to the interviews. This consent was also included in the consent letter, which was sent in advance to the participants. Following each interview, transcription of the recording took place wherein I compared findings with data derived from other interviews, thus making progress checks for data saturation.

Legal and ethical considerations were made for all participants throughout the duration of the study. Ethical considerations for this study were met through garnering research ethics board approval at the University of Guelph (explained in section 3.2.7). Furthermore, interviewees confirmed their consent to participate in the research and were free to withdraw participation at any moment.

4.2.4.1.2 Participant Recruitment Strategies

According to Onwuegbuzie and Leech (2007), “If the goal is not to generalize to a population but to obtain insights into a phenomenon, ... then the researcher purposefully selects individuals, groups, and settings that maximize understanding of the phenomenon” (p. 111). If participants are selected purposefully, not randomly, the method of recruitment is considered a purposive recruitment strategy (Onwuegbuzie & Leech, 2007). The appropriateness of each recruitment strategy is dependent on the research objective, purpose, and question (Onwuegbuzie & Leech, 2007, p. 111). I followed Onwuegbuzie and Leech (2007) and used a mixed purposive recruitment strategy by mixing politically important and snowball strategies. The city
management contained 17 departments. Each department was managed by a manager. These managers were working under 3 deputy CAOs who in turn were working under the CAO of the city. I initially intended to interview all 21 managers in the city. Selection of the 13 participants was informed by the two strategies described in Table 4.2.

Table 4.2. Types of purposive recruitment strategies (adapted from Onwuegbuzie & Leech, 2007, pp. 112-113).

<table>
<thead>
<tr>
<th>Recruitment strategy</th>
<th>Description</th>
<th>Method for this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Politically Important</td>
<td>In the politically important method, the researcher selects pertinent informants who may need to be included/excluded because they connect with politically sensitive information expected in the analysis (Miles and Huberman, 1994).</td>
<td>In this study, the key informant with regards to OG was selected from the city.</td>
</tr>
<tr>
<td>Snowball</td>
<td>This strategy, also known as network selection, usually comes to the fore after data collection has begun. Snowball selection involves asking participants who have already been selected for the study to recruit other participants.</td>
<td>Snowball strategy was used to connect with other key informants in the organization. At the end of each interview, I asked the participant about other key people that were involved in OG initiatives and potentially had helpful information with regards to this study. In most cases, the interviewee introduced the researcher to the next participant.</td>
</tr>
</tbody>
</table>

In regard to the politically important strategy, the initial connection to the first participant stemmed from an introduction by an office member at the University of Guelph, who had initiated a relationship with the city for this research. The first participant was chosen because they had politically relevant information regarding the implementation of OG and its history within the municipality. This person served as the Open Government Manager, and they possessed substantive information regarding what the city was doing with regard to OG, how OG was chosen, and how CA works in their public organization. Following the interview with this
first participant, a snowball recruitment strategy was used to recruit additional participants. As is evident in Appendix B, the last question in the interview protocol helped to initiate the snowball procedure by soliciting additional participants with relevant information. For illustration, the mayor of the city introduced me to the CAO because they thought the CAO had critical information salient to the study. Similarly, the CAO introduced me to the deputy CAO, and this procedure cascaded through additional ranks.

Certain managers among those whom I contacted with were not willing to participate in the study. Some others had delegated the interviews to the OGM of the city. Therefore, the 13 interviews that I managed to conduct were restricted due to these constraints. Having conducted interviews with more participants, I was perhaps able to identify more CA events. However, the identification of 14 CA events that I finally analyzed provided a variance in the findings which deemed satisfactory for the purpose of this study.

4.2.4.1.3 Interview Participants

The research participants represent a myriad of titles and positions. More specifically, roles included: the OGM manager of the city, the manager of the city clerk’s office, deputy CAOs, the city treasurer/director of finance, mayor of the city, the manager of Information Technologies (IT) who was also the former city clerk at the time of developing the plans for adoption of OG, the manager of communication and community engagement of the city and three councillors. Table 4.3 provides more detail about the interview participants of this study.
Table 4.3. Elected and appointed research participants (Source: developed by the researcher)

<table>
<thead>
<tr>
<th>Elected Officials (Politicians)</th>
<th>Appointed Officials (Managers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>Population</td>
</tr>
<tr>
<td>Number of participants</td>
<td>Number of participants</td>
</tr>
<tr>
<td>2 councillors per each ward. 6 wards, in total 12 councillors in addition to the mayor of the city.</td>
<td>5 including councillors and the mayor.</td>
</tr>
<tr>
<td></td>
<td>The hierarchical structure of the city administration included 1 chief administrative officer and the top of the organization’s hierarchy. 3 Deputy chief administrative officers worked under the CAO. A total of 17 sub-departments were managed by other managers who worked in the city administration.</td>
</tr>
<tr>
<td></td>
<td>A total of 8 interviews were conducted with the appointed city officials.</td>
</tr>
</tbody>
</table>

4.2.4.1.4 Documentary Evidence

Public data available online via the Internet was also a major source of data for this study. Data from this source significantly helped in the triangulation process, and hence enhanced the credibility and confirmability of the research. Since the context of the study implies openness and transparency, the organization under study had published hundreds of pages of documents made publicly available. I took advantage of the opportunity to collect the documents that were relevant to this study and added them to the research data. Documents included, for example, interim reports, performance reports, reports for OG development, an OG Action Plan, council meetings minutes, accountability and transparency documents, the city’s organizational chart. Through the document analysis, I was able to identify and complement CA events that were also identified in the interviews as well as identifying new CA events. The documents also provided contextual and background information about the case.
4.2.4.1.5 Online Artifacts and Inscriptions: Representing the Citizens (Forum)

In this study, complementary data were collected from ICTs-enabled platforms where citizens could interact with public officials. During the time of data collection, social media had played a significant role in being one of the most important tools to promote OG in the city. The official Twitter of the city, with more than 45,000 followers, served as a conversational sounding board and a strong source of data. The OG department of the city maintained its own Twitter account, which was included in the data collected. Furthermore, the personal Twitter accounts of the OG manager, councillors, mayor, and others were publicly available and used as well. As an additional platform, the Facebook page of the city was also reviewed and where appropriate, the data supplemented Twitter content. Utilizing numerous social media platforms is consistent with the position of Berg and Lune (2001) who argue that online social media, such as wikis, blogs or discussion boards, can offer an exploration of numerous social interactions and complex relations. Collecting data from ICTs platforms provided evidence for representing the citizens’ voice as the forum in CA relationships.

Lastly, I collected data from the specific mobile application that was developed for non-emergency service provision under OG movement in the city. In this specific application, citizens could request a service by flagging a specific geolocation on a map. They could also comment and provide information about their request. The city could also respond and change the status of the requests. The details of this app will be provided in the next chapter. I also collected data from this application from the commentary section of service requests.

The online data category also includes information published through online news, blogs, and other online media. Several local newspapers published articles on the progress of OG in the city. Also, the reaction of bloggers regarding the same topic was archived in the dataset. There
were TV interviews with the OG manager of the city, and the videos that were published on the official city’s YouTube channel were included as well. YouTube commentary and TV interviews were also partially transcribed, cleaned and imported into NVivo® for further analysis. Finally, official blogs posted on a regular basis by the mayor of the city and the OG manager were incorporated into the database where relevant.

To collect data from ICTs, I purposefully sought specific events of CA which could confirm the instances that were consistent with findings in the interview data and the documentary evidence. For this purpose, finding at least one example for each instance would suffice. However, in most cases, more than two examples were identified and added to the dataset, but the collection of unnecessary data was avoided to bound the manageability of the study within the limits.

As displayed in Table 4.4, Twitter and Facebook from the popular social media platforms and the online smart application that was developed for non-emergency service provision were the main sources of social media websites used to collect data because the city primarily uses Twitter to interact with citizens and the official Facebook page of the city and the mayor are actively monitored and the comments are most of the time responded.

Table 4.4. Types of social media and software used for data collection (Source: developed by the researcher)

<table>
<thead>
<tr>
<th>Type of social media</th>
<th>Period of posts</th>
<th>Software used for data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twitter, Facebook, Weblogs, News comments, Comments from OG apps</td>
<td>February 2014 to September 2017</td>
<td>Lightshot® for taking screenshots, NVivo®, NCapture®</td>
</tr>
</tbody>
</table>
4.2.4.2 Period of Field Work

The fieldwork of this study took about 15 months, beginning in October 2015 and finishing in December 2016. The work was not equally spread during this period. I completed most of the field interviews between May 2016 and November 2016. I visited the research site several times during the latter period to conduct the data collection as a Visitor. However, it is noteworthy that the observation of the change process through different platforms such as the city website, Twitter, and news outlets were started a few months prior to the actual data collection during the research design phase.

4.2.4.3 Data and Project Management Software

I used various software to organize the data and manage the research dataset. Microsoft Office applications were used for the documentation and transcription of the interviews via creating spreadsheets, figures, and models. For creating a concentrated database and making the data management process and analysis more convenient, I used a popular qualitative analysis software known as NVivo®. This software is well regarded in qualitative research for its strength in managing qualitative research projects. NVivo® has different types of licenses with different functionalities. The version that was utilized for this study was the NVivo® (Version 11 Professional). All forms of data were imported and organized into an NVivo® project. While this software helps with data management and coding, it does not automate the analysis process; thus allowing for an appropriate level of subjective interpretation consistent with qualitative work.

A codebook was developed and used within the NVivo® program in order to facilitate coding the data. Figure 4.1, illustrates an example of the NVivo® environment used for this research. As can be seen in the image, NVivo® categorizes the datasets into four main groups: internals, externals, memos, and framework matrices. Most relevant to the discussion here is the
‘Internals’ folder. The internals folder includes all the documents and data collected from various sources. As illustrated, different types of data are found under the internals folder, such as blogs, interviews, online documents, news items, and videos. The online documents include all types of publicly available data that were collected online.

Figure 4.1: NVivo® software environment

4.2.5 Trustworthiness of the Study

When designing a research study, it is important that the quality of the research be ensured. Although there has been debate amongst qualitative scholars, as to what constitutes criteria in this realm, the general purpose is to ensure the quality of research. This may take the conceptualization of “rigour,” “truthfulness,” “goodness,” “legitimation”, or “integrity” (Corbin & Strauss, 2008; Leech & Onwuegbuzie, 2007) for example. In a qualitative case study exploring a potential set of criteria to be used was offered by Lincoln and Guba (1985) who coined the umbrella term as study “trustworthiness.” According to Lincoln and Guba (1985), by
actively working towards trustworthiness, the inquirers can convince their audience that their study is worth paying attention to and take account of its findings.

Trustworthiness of qualitative research has been operationalized using various components. For example, Lincoln and Guba (1985) used “credibility,” “transferability,” “dependability,” and “confirmability” as “the naturalist's equivalents” for “internal validity,” “external validity,” “reliability,” and “objectivity” in positivistic paradigm (p. 300). Baxter and Jack (2008) utilized the same criteria when discussing the trustworthiness of their case study. Since the underpinning philosophical assumptions of this study do not align with positivism, the trustworthiness criteria offered by Lincoln and Guba (1985) seem most suitable. Table 4.5 presents the four components of trustworthiness adopted and the tactics used in this study to accomplish each. The subsequent sections will explain each criterion in more details.

Table 4.5. Study alignment with criteria for ensuring trustworthiness of qualitative research (Guba, 1982; Lincoln & Guba, 1985)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Lincoln and Guba (1985) proposed tactics to ensure each criterion</th>
<th>Tactics that I used in this research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credibility</td>
<td>• Use prolonged engagement</td>
<td>Multiple sources of evidence were used such as interview transcripts and archival data. Also, participants reviewed the transcripts of their interview and confirmed their accuracy. Members of the advisory committee reviewed the manuscript of this dissertation. During the development, this study was presented to academic forums in conferences.</td>
</tr>
<tr>
<td></td>
<td>• Use persistent observation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use peer debriefing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Do triangulation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Collect referential adequacy materials</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Do member checks</td>
<td></td>
</tr>
<tr>
<td>Transferability</td>
<td>• Collect thick descriptive data</td>
<td>Use of a conceptual framework contributes to the transferability of the findings.</td>
</tr>
<tr>
<td></td>
<td>• Do theoretical/purposive sampling</td>
<td></td>
</tr>
<tr>
<td>Dependability</td>
<td>• Use overlap methods</td>
<td>A description of the steps that were taken to design and conduct this study is left as “audit trail” in terms of this dissertation.</td>
</tr>
<tr>
<td></td>
<td>• Use stepwise replication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Leave audit trail</td>
<td></td>
</tr>
<tr>
<td>Confirmability</td>
<td>• Do triangulation</td>
<td>Triangulation was ensured through a collection of data from multiple sources. Furthermore, an audit trail is left for assessment in terms of this dissertation.</td>
</tr>
<tr>
<td></td>
<td>• Practice reflexivity (audit trail)</td>
<td></td>
</tr>
</tbody>
</table>
4.2.5.1 Credibility

Credibility refers to “confidence in how well the data and the data analysis address the intended focus” (Graneheim & Lundman, 2004, p. 109). In other words, credibility answers the question of “Do the data sources (often humans) find the inquirer's analysis, formulation, and interpretations to be credible (believable)?” (Guba & Lincoln, 1982, p. 246). To ensure the credibility of this qualitative research, I followed the tactics suggested by Guba and Lincoln (1982) as shown in Table 4.5.

The first method I used to achieve credibility was peer debriefing, which refers to “seek(ing) out and interact(ing) with other professionals who are able and willing to perform the debriefing function” (Guba, 1982, p. 85). An example of peer debriefing may be processes associated with faculty interactions, or interactions among members of a dissertation committee. Furthermore, to reduce potential aspects of exploration remaining implicit in the researchers’ mind, the research should be presented to an academic committee for review (Lincoln & Guba, 1985). This study has been reviewed by the members of my Ph.D. committee and was presented on several occasions throughout its progression. Presentations took place throughout the course of the study; from the proposal phase through till completion of the data analysis phase. Presentation slides and manuscripts of the work-in-progress were provided to conference attendees at several credible venues, such as the Canadian Academic Accounting Association (CAAA) and Administrative Sciences Association of Canada (ASAC). In addition, I presented this research to other Ph.D. candidates and faculty members within the Department of Management at the University of Guelph, incorporating their feedback to improve the credibility of the results.

Another method that I used to enhance the credibility of the study was triangulation. Triangulation can be achieved by using a variety of data sources within a case study (Lincoln &
Guba, 1985; Stake, 1995; Yin, 2014). This tactic was pertinent during data collection to encourage convergent lines of inquiry using multiple sources of evidence. I collected data from six different sources: interviews, online documents, observation, physical artifacts, archival data, and social media content. Descriptions of each data source, including examples, are presented in section 3.7.1.

Lastly, I used member checks to enhance credibility. The process of member checks refers to the transferring of data and interpretation to source groups involved, before publishing the final draft (Guba, 1982; Guba & Lincoln, 1982; Lincoln & Guba, 1985). A transcript of each interview was sent to each study participant and feedback was sought to confirm the accuracy of the data and findings. Moreover, a member of a sub-department at the University which facilitated the connection between the selected municipality and myself attended a presentation of the findings. I sought feedback from that member to further confirm the accuracy of the findings.

4.2.5.2 Transferability

Transferability refers to whether the findings from one context can be transferred to another. This provides a degree of ‘fittingness’ regarding the comparability of different contexts (Lincoln & Guba, 1985, p. 124; Scapens, 2004). Within a post-positivist paradigm, this concern of fittingness has been referred to as external validity (Yin, 2014), which is the extent to which case study findings can be generalized to other settings (Scapens, 2004).

A statement often made by critics is that single cases offer a poor basis for generalization (Yazan, 2015). Nevertheless, as Stake (1995) noted, “Case study research is not sampling research. We do not study a case primarily to understand other cases. Our first obligation is to
understand this one case” (p. 4). The criticism of generalization in single case studies has been argued to undermine the rigour of this form of qualitative research (Scapens, 1990). However, authors have effectively argued that single case studies offer an in-depth understanding of a particular unit of analysis (Creswell, 2007; Lincoln & Guba, 1985; Merriam, 1988). Specific to this study, I followed the suggestions of Lincoln and Guba (1985) for strategies to reduce transferability limitations. Moreover, I purposefully selected a case that was conceptually suitable for the objective of this study. I also developed an analytical framework using Bovens (2007a) for designing the interview protocol and analyzing the data. Thus, it is my view that my contribution to the conceptual framework will be transferable.

4.2.5.3 Dependability

According to Lincoln and Guba (1985), dependability “seeks means for considering both factors of instability and of phenomenal or design induced changes” (p. 299). Graneheim and Lundman (2004) defined dependability as “the degree to which data change over time and alterations made in the researcher’s decisions during the analysis process” (p. 110). Similarly, in discussing the dependability/reliability of a case study, Yin (2014) explains “the goal of reliability is to minimize the errors and biases in a study” (p. 45). In other words, the objective of this trustworthiness criterion is to ensure that if another investigator follows the same procedures as the initial investigator, the second investigator will achieve similar findings.

The need to document the procedures followed is a prerequisite for dependability, allowing other investigators to replicate previous studies. By documenting the details of the research process and recording the steps taken to accomplish it, the researcher can create a roadmap, which other researchers can follow to achieve the same results. This process has been referred to as the “audit trail” (Guba & Lincoln, 1982; Lincoln & Guba, 1985; Scapens, 2004).
To enhance such reliability/dependability for this study, I created a database with the assistance of NVivo®. All evidence was deposited into a single, focused database, to avoid scattering of data and thus making organization of data more manageable. Furthermore, I followed the data analysis steps proposed by Creswell (2007) with the same intention to enhance the dependability of the study. This dissertation includes a detailed report of the steps taken through the research process, hence, it can be used as an “audit trail” to enhance dependability and reliability.

4.2.5.4 Confirmability: Researcher’s Bias

To ensure the confirmability of the research findings, Shenton (2004) explains that “researchers must take steps to demonstrate that findings emerge from the data and not their own predispositions” (p. 63). This concern is also referred to as the “researcher’s bias” (Creswell, 2007; Yin, 2014). Consequently, the researcher makes an interpretation of the data by filtering it through a subjective lens. Scapens (1990) notes that “the social reality must be interpreted by the researcher and, thus, case studies represent interpretations of a social reality. Therefore, there can be no such thing as an ‘objective’ case study. This raises the problem of researcher bias” (p. 277).

To attenuate bias concerns, Scapens (1990, 2004) suggests two strategies. One way is to feedback the interpretations to the participants, and the second is by using a team of researchers with different backgrounds throughout design and analysis. To reduce the issue of bias in this study, I sought the opinion of my Ph.D. advisory committee on different interpretations. I also presented the interpretation to various academic and non-academic audiences and sought their comments on the matter at hand. Moreover, as mentioned, I was consistent with Guba and Lincoln’s (1982) suggestion to use data triangulation to reduce the research bias. Such a
technique not only contributes to the credibility but the confirmability of the study as well. These sources of data are presented in section 3.7.1.

Lastly, to enhance the confirmability of the study, a confirmability audit was performed. A confirmability audit is an audit “certifying that data exist in support of every interpretation and that the interpretations have been made in ways consistent with the available data” (Guba, 1982, p. 88). I made an attempt to obtain such confirmation during the development of this dissertation by presenting the findings to the members of my Ph.D. advisory committee and other academic peers, seeking feedback throughout.

4.2.6 Practicalities: Access to Data

In the design and methodology section of a research study, there are some factors regarding the feasibility and conductibility of the study that the researcher should carefully consider. Mason (2002) framed these factors as “practicalities.” Among these practicalities, for example, are available resources, skills required for the research, and whether the researcher can gain access to the data sources. In regard to the latter dimension, the access to the research site was gained by contacting a specific sub-department at the University of Guelph. I discovered the existence of and services offered by this sub-department through the university newsletter and initialized contact with them through email. I initiated two informal meetings with a departmental contact person, wherein we were able to discuss each other’s goals for this collaboration. Eventually, this individual contacted city officials and introduced me to the first interview participant.
4.2.7 Confidentiality and Ethical Considerations

The potential ethical considerations of research involving human participants are numerous and need to be treated with caution (J. Mason, 2002). The researchers need to simultaneously protect the rights of research participants and to protect intellectual property. To ensure that ethical considerations are taken into account, the University of Guelph has an extensive research ethics board approval process board. I completed an application for obtaining research ethics board approval and received a certification of approval prior to conducting data collection. The certificate of ethics approval is provided in Appendix A.

In terms of keeping the participants’ identity confidential, I offered to remove the name of the organization from all publications and public presentations of this research. Since OG has been implemented in several local governments in Ontario, this process makes the identification of the city organization difficult. Furthermore, the interviewees that their data is presented in this thesis did not request confidentiality of identity. However, I have remained cognizant of not naming any research participants aside from using their titles.

4.3 Data Analysis Procedure

This section describes the methods utilized for analysis of the research data. As Stake (1995) notes “analysis is a matter of giving meaning to first impressions as well as to final compilations” (p. 71). Creswell (2014) explains that data analysis processes “involves preparing the data for analysis, moving deeper and deeper into understanding the data, representing the data, and making an interpretation of the larger meaning of the data” (p. 183). There is a general consensus among case study method references (e.g., Merriam, 1988; Stake, 1995; Yin, 2014) that when analyzing case study data, the researcher should begin by coding the data, and from those codes provide an explanation for the studied relationships (Creswell, 2007; J. Mason, 2002;
According to Miles and Huberman (1994) “codes are tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study” (p. 56). Two iterations of coding were conducted during data analysis in order to understand how the conceptual framework of the study works in this case as well as leaving room for identifying new findings that are emerging from the data (Denscombe, 2010; Fereday & Muir-Cochrane, 2006). This two-step process is further explained in the subsections that follow. I will first explain the coding procedures followed by an instance of the codes that I developed for one of the CA events specified in the study.

### 4.3.1 Concept-Driven Codes: Top-Down Coding

The conceptual framework of the study describes how CA should work in a public domain. The first iteration of coding was based on codes developed from this conceptual framework. More specifically, I used the conceptual framework presented in Chapter three to develop concept-driven codes (Schreier, 2012). Codes were derived from elements of Bovens’ (2007a) accountability framework, which describes seven characteristics of the accountability relationship. I incorporated five primary code groups from Bovens (2007a) including Actor, Forum, Information Provision, Debate, Consequences. These codes were refined through review of the literature on CA and OG. For example, Actor codes were refined by how Bovens (2007a) posits the nature of actors in accountability relationships as individual or corporate entities. Information provision codes were refined via the work of Meijer and colleagues (Meijer et al., 2012), wherein categorization of information provision in OG can be intentional or mandatory. The objective of this concept-driven coding was to identify the elements of CA salient to the study context and to see whether CA relationships exist in the city. The logistics of this phase
included reading through the data and attaching a node within NVivo to tie segments of the data to a concept-driven code.

4.3.2 Data-Driven Codes: Bottom-Up Coding

The coding process was not limited to using concept-driven or predefined codes. After the application of concept-driven codes, I recognized new codes that emerged from the data that were not covered by the initial top-down coding procedure. This process helped to verify whether CA was operating in a similar fashion to how it is expected to operate under the conceptual framework of the study. The data-driven codes were then added to the codebook, to be used for extending the conceptual framework. Adoption of the data-driven coding approach was intended to limit force-fitting of the data into a predefined frame, which would have not allowed for a full appreciation of the dynamic nature of the data.

4.3.3 An Instance of Coding

In this subsection, I present an example of how I coded a particular CA event. The following quote highlights the essence of this incident:

“...I’m thinking of back the issues of swimsuits ... so a young girl, I think she was four years old, took off her T-shirt at a splash pad and the probably 16-year-old lifeguard asked her to put it back on because she was a girl. And, that blew up internationally [on social media]. Something that could be considered a pretty small incident, it’s a really touchy time for the type of policy in this time ... [what happened next?] So, they just went with the national lifeguard society policy instead of our policy. But, I think for some people, even if it wasn’t the people in that department, some people are like this is what can happen if your policy isn’t up to the times. It can really backfire.”

(Community Engagement Coordinator – emphasis added by the researcher)

Analysis of this interview identified an instance of CA that was initiated in 2015. A young girl had taken off her shirt in a public splash pad and was told by a teenage lifeguard to cover up. The mother of the girl posted this event over Twitter and demanded an explanation
from government officials, citing ‘gender discrimination’ in city splash pad policy. Twitter records corroborated interview data of the event, including the initial post made by the mother of the girl. Figure 4.2 provides instances of the debate and consequences that the citizens’ interaction with public officials generated over Twitter regarding this event.

Figure 4.2: Citizen public posting of an issue resulting in a change in city policy (Source: Twitter©)
Figure 4.3 illustrates the codes that were developed for the splash pad event. More specifically, this figure illustrates an instance of the information provision code. The black boxes in this instance represent concept-driven codes. Based on the conceptual framework of the study, I expected to see both mandatory and intentional obligation to disclose information by the local government. What I found in the splash pad event was that the information being provided by public officials over Twitter was being done so intentionally, without any mandated policy or law. Therefore, I only used ‘intentional’ obligation to disclose for coding purposes. Similarly, in terms of timeliness for disclosure of information, I expected to find either real-time or delayed information provision. However, within the discourse of Twitter, I found certain delays in providing information to citizens. Therefore, I used the concept-driven code of ‘delayed’ information provision for coding this instance. In terms of accessibility to information, I expected to see either access to hard copies of the information, or use of ICTs for simple and quick access to the information. The information that was being provided over Twitter was an instance of the ‘use of ICTs’ for easy access to information.

The red boxes in Figure 4.3 represent the data-driven codes (i.e., bottom-up) that emerged from the data. In terms of content and format of the information provided, I expected to see structured reports prepared in accordance with certain standards. I also expected the use of formal language when presenting the information. What I found in the data for this event was that the information exchanged over Twitter did not follow a structured format or adhere to any certain standard. Therefore, I developed a new data-driven code labelled ‘unstructured’ for this content. Within this data, I was also able to see patterns of very simple and easy to understand language, as well as the use of certain graphical elements which I labelled as ‘affective visuals’. I had not expected to see any of these characteristics in the information based on the conceptual
framework of the study. Therefore, I developed ‘Simplicity’, ‘Understandability’, and ‘Affective visuals’ as data-driven codes, and added them to the codebook of the study.

Figure 4.3: An example of developed codes for the information provision of CA relationships found in the ‘swimming attire policy’ CA event (the red boxes represent the data-driven codes) (Source: Developed by the researcher)

The complete collection of ‘Information Provision’ codes after compiling all the concept-driven and data-driven codes can be seen in Figure 4.4. Similar coding procedures were followed
for all other elements of CA. The complete codebook of the study can be found in Appendix C.

![Figure 4.4: Code summary for the information provision of CA relationships found in the data (Source: Developed by the researcher)](image)

### 4.4 Chapter Summary

In this chapter, I justified the case study design as an appropriate methodology for addressing the research question of this study. The phenomenon under study was described as CA. As for the unit of analysis, a local OG in Ontario, Canada was selected. I described my role as a visitor/outsider in this research context. I explained the tactics that I used for enhancing the trustworthiness of this study, such as using multiple sources of data and undergoing peer review. Furthermore, I introduced the sources of data that were collected for this study and provided a description of the data analysis process. In the following chapter, I present the conceptual framework of the study.
CHAPTER FIVE - RESULTS AND FINDINGS

5.1 Introduction to Chapter

This chapter focuses on analyzing how CA arrangements operate within the selected case. I use the elements of CA relationships according to the conceptual framework presented in chapter 3. I use primary interview data and corroborate it with historical data from social media and online platforms. Myriad sources of data are used to enhance the credibility of the analysis and provide a clearer understanding of the phenomenon. In Appendix G, I have provided three complete events where CA was enacted. The appendix explicates how data was organized for each event.

This chapter is structured as follows. In section 5.2, an analysis of the state of CA in the city, with a specific focus on OG initiatives, is presented. Furthermore, the elements and processes of CA are analyzed. Lastly, a summary will conclude this chapter.

5.2 Analysis of CA in the local OG

CA relationships involve direct interaction between citizens and the local government. According to the conceptual framework of this study, citizens establish forums and the government officials become directly accountable to the citizens through these forums. The first step in the analysis is, therefore, to identify citizen forums. The second step is to identify the actors. The third step is to identify the phases of an accountability process including information provision, debate, and consequences (Meijer & Schillemans, 2009). During analysis, I use the conceptual framework (presented in Chapter 3) to code the data in a top-down fashion. Finally, I discuss the codes that emerged from the data.
5.2.1 Citizen Forums

In this subsection, I explain the analysis of the citizen forums used. I code the data based on the characteristics of the forum explained in the conceptual framework, looking for segments of data that exemplify those characteristics. Subsequently, I look for characteristics in the citizen forums that cannot be explained using the initial conceptual framework. Any new codes that emerged from the data were added to the codebook for this study. To explain the findings, I first present an instance of citizen forum in the data, followed by an explanation of the forum and a comparison of forum characteristics as they relate to traditional, extant findings.

5.2.1.1 An instance of citizen forum facilitated by ICTs

Advancements in modern ICTs have created a platform for which a new form of citizen forum has emerged. In order to differentiate this type of forum from traditional forms of citizen forums, I considered a new label for this forum - a virtual citizen forum. This term is selected because the interactions over ICTs are referred to as virtual interactions (Chudoba, Wynn, Lu, & Watson-Manheim, 2005). Furthermore, the Internet provides a virtual environment for interactions given that users are not in close, face to face proximity with one another. Rather they are recognized with an online username, making them a virtual entity. Therefore, moving forward, I refer to this type of forum as a virtual citizen forum.

“…when we deemed to be not meeting accountability standards or transparency expectations, social media seems to be where people are going to do that.” (Councillor 1 – emphasis added by the researcher)

The quote above from one of the councillors suggests that citizens are in fact monitoring the city’s performance and that they use ICTs such as social media to demand accountability. Citizens can act as a forum over such platforms in the virtual environment and therefore virtual citizen forums can emerge over social media.
An example of such virtual forums is demonstrated in Figure 5.1. In this example, the mayor of the city had used the live video streaming feature of Facebook (the most popular social media platform by 2017 (Statista, 2018)). By using this platform, the actor (i.e., mayor) could respond to questions and comments posted by users in real-time. Furthermore, users can openly view the number of participants, like, comment, or share the media with other users and invite others to join the live forum. There is also a ranking mechanism provided by the Facebook web application that enables users to see the most viewed or liked comments.

Figure 5.1: Example of a virtual citizen forum facilitated using ICTs (Source: Facebook©)

To best understand the virtual forum illustrated in Figure 5.1, several parts of this image should be considered. First, the name of the mayor and his live stream video can be seen and confirmed with other sources (e.g., other official social media accounts, official city’s website, etc.) that it is legitimate and that he, or a direct representative of the office, are responding to viewers. Second, the timestamp that is posted under the title of the video adds to the notion of legitimacy as well. This timestamp demonstrates the exact moment when the video was made.
Third, the number of viewers and participants illustrates in real time the number of forum members. Fourth, another important component of the forum is the use of affective visuals, such as emojis (i.e., “a small image or icon used in electronic communication to express an idea, emotion, etc.” Merriam-Webster Online Dictionary, 2018), which partially convey the feelings of the forum members. For example, the frowning emoji was used by a number of participants, illustrating a common affective reaction held by the forum. Finally, and perhaps most importantly, the figure illustrates how accountability can be achieved in a virtual forum. The debate between the mayor and the forum members can be traced back by watching the progress of this video and the responses of the mayor to the questions posed by the forum.

One important characteristic that was identifiable in such virtual forums was that there are no formal structures or formal periods of membership that could be defined. A virtual online forum could emerge instantaneously, and it could gain the attention of many users, not only within the citizens of one city but anyone around the world with access to the Internet and social media. Another important distinguishable feature of these online forums is the limited period that they are active. In the example shown in Figure 5.1, the online citizen forum was active while the mayor was streaming the video. The forum was practically dismissed (i.e., no more new comments were posted) when the live streaming ended. Nonetheless, the trace of interactions between the actors and the forums can theoretically remain accessible over the Internet indefinitely.
Table 5.1 summarizes the characteristics synthesized from the conceptual framework in Chapter 3 and the themes that emerged from the data. In the sections that follow, I explain each category of this table using the example provided in Figure 5.1.

Table 5.1. Summary of CA forum characteristics and study findings (Source: developed by the researcher)

<table>
<thead>
<tr>
<th>Characteristics of Forum</th>
<th>In the conceptual framework</th>
<th>In the CA analyzed in this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership</td>
<td>Predefined based on certain qualifications and rules (i.e., Persons with authority such as elected citizens for a citizen panel)</td>
<td>Undefined (e.g., citizens without any formal appointments)</td>
</tr>
<tr>
<td>Members Anonymity</td>
<td>Members are identifiable due to physical presence</td>
<td>Mostly anonymous due to nature of virtual environments</td>
</tr>
<tr>
<td>Period of membership</td>
<td>A limited term with a fixed period (e.g., four-year term)</td>
<td>Temporary without a fixed period (e.g., as short as one hour during an online debate or an issue that takes years of online debate between users)</td>
</tr>
<tr>
<td>Size</td>
<td>Static (e.g., citizen panel with 6 chairs for the members)</td>
<td>Dynamic (e.g., it could include only one citizen or hundreds of citizens could be focusing on the same issue)</td>
</tr>
<tr>
<td>Emergence</td>
<td>Predefined (i.e., the emergence of the forum is institutionalized such as a user council)</td>
<td>Dynamic (e.g., a citizen triggers the emergence of the forum by raising a concern. The network would support the first instance. As soon as the issue is addressed the forum gets dispersed)</td>
</tr>
</tbody>
</table>

5.2.1.2 Forum membership

In CA, the forum consists of citizens. The literature of CA suggests that citizen forum members are elected under a predefined set of rules and agreements (Meijer & Schillemans, 2009). A citizen volunteers to become a member of the forum and depending on certain rules or qualifications they would need to pass certain filters and meet certain criteria, to be able to represent their constituencies. The analysis suggests that emergent forms of citizen forums have been introduced, particularly through the use of ICTs.

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3 Please refer to the Appendix C for the complete codebook of the study.
In the example that was provided in Figure 5.1, 1,167 viewers were participating in the online debate with the mayor. These users could be participating from anywhere without needing any specific qualifications, formal elections or other restrictions. The only requirements for becoming a member of these virtual forums is to have access to a device that can access the Internet and support the software requirements for using social media websites. While the conceptualization of forum in the literature suggests that the members of the forum should be only from the citizens (Meijer & Schillemans, 2009), the findings in this study suggest that in virtual forums members can be from other users beyond citizens of the same city. However, the members of the virtual forums have a stake in the issue that is being debated. If they do not have a stake it is not likely that they will be motivated to get engaged in the debate. This implies that the literature either needs to redefine the concept of citizen forum or introduce a new concept for such relationships. Perhaps a term such as ‘stakeholder’ accountability would better represent this form of accountability.

5.2.1.3 Anonymity of the forum members

The traditional forms of forum members often are identifiable since the members should be present and introduce themselves to a higher authority. For example, a user council of a public school consists of parents of the students, with their names and identity clearly stated. In contrast, what I observed in the virtual citizen forums that emerged is that often times the members of such forums could have an anonymous identity.

The analysis of the interview data also suggested that social media users could be participating anonymously. Furthermore, it was recognized that their comments could have an immediate impact over ICTs. This demonstrates an emergent code in the data regarding the anonymity of virtual citizen forum members.
The example provided in Figure 5.1 is anonymized due to confidentiality concerns. However, even without anonymization on the part of the researcher, social media users could easily use a nickname and irrelevant photos for their social media account, which makes their identity practically anonymous. Furthermore, there are no restrictions for using unreal names or photos in such environments. An analysis of the effects of having varying levels of anonymity was outside the scope of this study, but I believe it would be very interesting to understand such effects in future research.

5.2.1.4 Period of membership in the forum

In the literature of accountability, the nature of forums suggest that the members of a forum are committed to fulfilling their duties within a certain time frame (e.g., a four-year term). While analyzing the data, the period of membership that I was able to identify for the members of virtual citizen forums was essentially undefined. In the example provided in Figure 5.1, the duration of the video streaming of the mayor was approximately two hours. The forum initiated as soon as the streaming began and dispersed when the video streaming ended. So, the period of membership in this specific forum was about two hours.

5.2.1.5 Size of forum

Another characteristic that I was able to define based on the nature of forums is the size of the forum. For example, the number of participants in a formal citizen forum such as a user council might be limited to 10 members. Based on my review of the literature, there appears to be a predefined number of members for formal forums.

In the virtual citizen forums that this study presents, size of forums is dynamic, and it could change while the forum exists. For example, in the instance that I presented in Figure 5.1,
the forum began with one initial member and as the streaming continued users got engaged in the forum. Some had left the forum before the end of streaming and some members joined the forum in the middle of the streaming. Such fluidity was a distinguishable characteristic in comparison to other types of forums discussed in the conceptual framings of accountability in the extant literature.

5.2.1.6 The emergence of the forum

Another characteristic of the forum that should be analyzed is how the forum emerges. The literature of CA suggests that citizen forums come into existence based on predefined institutions. The nature of virtual citizen forums that were identified in this study could not be explained using the prior understanding of the emergence of similar forums in the literature.

Virtual citizen forums do not exist until a user triggers the emergence of such forums. For example, in the instance that is presented in Figure 5.1, the first citizen that demands information in the live debate with the mayor basically triggers the emergence of the virtual forum. Other users could join the forum by commenting on the same issue or pose other questions. A network of users would be formed and remains while the debate phase is ongoing. After the consequences phase is completed, forum members disjoin from the network and the forum continuously becomes dispersed until it is inactive. Another example of how citizens could trigger initiation of a virtual forum can be seen with the use of ICTs-enabled smartphone applications where the citizens can directly report a city issue:

“People will create online blogs that they’ll link their Twitter feed, their Facebook and they become fractions of the city, either their upset with the political representation or what the city is doing at large in terms of policy directions or budget. There is a number of times in the last five years I’ve been here that certain blogs have crept up and that social media has attacked us. I think equally, people have also used social
media and blogs to provide more information on the things we’re doing.” (Manager of IT – emphasis added by the researcher)

The quote presented above demonstrates that citizens form virtual forums using ICTs. Furthermore, this process has been acknowledged by the public managers and concluded that such forums could not only provide more information to others but also initiate processes of accountability.

![Figure 5.2: Example of the emergence of a virtual network on Twitter (Graph is Generated by NodeXL®)](image)

Figure 5.2 was created using the network of relationships that emerged based on the interaction of the city mayor with users on Twitter within a one-hour time frame. This figure demonstrates an example of the emergence of virtual networks of citizens and officials and the interaction between them. Each node in the graph represents a unique Twitter user and the links between the nodes represent the connections that were made based on the dialogue between
users. Figure 5.3 depicts a graphical representation of the emergence and popularity of a specific hashtag that was used by the citizens to bind certain information on Twitter. As it can be seen in this graph, the popularity of this instance had risen from May 6\textsuperscript{th}, and slowly declined as time passed. Similarly, a certain issue could be the center of attention of a virtual forum in a limited period while other issues could be debated for a much longer period of time.

Figure 5.3: Emergence and popularity of a hashtag on Twitter over time (Graph is Generated by KeyHole©)

5.2.1.7 Conclusions of citizen forum analysis

In summary, I have explained the characteristics that were introduced in Table 5.1. The analysis revealed that citizen forums could emerge through ICTs. I labelled such forums as virtual citizen forums. Virtual citizen forums have new characteristics such as membership which does not have formal requirements. Furthermore, the members can be anonymous. Also, the membership period of such forums is undefined. The size of the forum could vary during the time. Additionally, it can expand or shrink within a few seconds. Lastly, the process of
emergence and scattering of virtual citizen forum was explained. Such forums emerge when an issue arises through ICTs and they are dispersed as soon as the issue is resolved or there is no more attention drawn to the issue. I will discuss the implications regarding the emergence of such forums in the next chapter. Following the introduction of virtual citizen forums, I explain the analysis of actors in order to analyze the other elements of the CA.

5.2.2 Actors in the Virtual CA

In this subsection, I explain the analysis of the actors in the CA analyzed in this study. As it was discussed in the literature, the actor in an accountability relationship can have various natures depending on the accountability relationship that is being studied. In CA specifically, the actor is often the civic administration as a corporate actor.

5.2.2.1 Corporate Actor

The first type of actor that I was able to identify in the analysis of virtual CA was the civic administration as a corporate actor. The analysis shows that the administration responds to public information demands specifically over ICTs-enabled platforms often in a collective manner (i.e., as an organization, not as an individual). For example, the city administration has an official twitter account that is being used to provide public information to the citizens. Such a representation is being attributed to the city as an organization, not an individual. As another example, when a citizen on social media asks about a specific situation such as “why has the snow has not been ploughed on my street?”, the city usually responds through their corporate Twitter handle. Thus, the response is attributed to the city as a whole and not a specific individual.
Although the city had posted 8 official social media accounts on its official website for different departments (see Figure 5.4), the most active account for providing information to the citizens was its official Twitter for the administration. Ten other official social media accounts were also posted on the city website for different administrative departments that were active on social media. However, during data collection some of these social media accounts were inactive.

![Social media accounts](image)

**Figure 5.4:** Corporate Actor identification on social media (Left image) and individual presence using OGD (Right image) (Source: City’s website)

Even though it was identified that the CA forum had new characteristics within the ICTs environment, the actor characteristics did not differ from those conceptualized in the reviewed literature.
5.2.2.2 Individual Actors

The second category of actor identified in the analysis was that of individual actors. This type of actor was more common among the elected officials, whose individual social media accounts were recognizable by their individual names and personal photos. In fact, all elected officials of the city had official Twitter accounts with recognizable names and photos. Among the appointed officials, the top managers had official Twitter accounts, including the CAO and all deputy CAOs. The OG manager and some other staff in the administration had official, recognizable social media accounts, which could be referred to in tweets. I identified in the analysis that the lower level employees of the administration hierarchy were not actively involved in the tweeting of city information. However, instances of top managers providing information to citizens with regard to civic issues were observed. Most notably, the role of a corporate actor was used to inform citizens, as it was representative of civic administration, and everything with regard to that could be traced back through the CAO of the city:

“… I would go to the CAO, council would go to the CAO and we would say okay there’s been three weeks now of complaints of no grass cutting, what are you going to do about it? If the CAO of the city then said nothing, I don’t care, then council and the mayor might be like, this one employee that we made the main administrator over every single employee may not be the best for our city. But we keep those complaints to the CAO…. And ultimately, we would then hold the CAO to account for that complaint, because he or she as the CAO is in charge of that.” (Mayor – emphasis added by the researcher)

The above quote from the mayor of the city confirms that if a citizen reports an issue that was not taken effectively resolved by the city, the city council would hold the CAO personally accountable for the lack of performance. In such situations, citizens can formally pose questions and demand information regarding the incident that was reported over ICTs. So, ultimately, when the citizens refer to a city problem or reference the corporate actor, the corporate actor
officially held to account is an individual actor. More specifically, this individual was the CAO of the administration.

In conclusion, ICTs have provided the environment in which a direct relationship exists between any public official and citizens. In such environments, the public officials could be directly participating in a CA relationship as an individual or a corporate actor. The prior model of CA relationship in the city did not explain any direct CA relationship between the administration officials and the citizens. However, through ICTs I was able to identify direct CA relationships between the citizens and administration officials over ICTs. Such relationships were enacted between the virtual citizen forums and individual or corporate actors through ICTs.

5.2.3 Information Provision in OG

Having access to new forms of information played a significant role in the OG initiatives studied. In this section, I explain the characteristics of the information provision phase of CA process analyzed in this study. Table 5.2 summarizes the overlap between information provision in CA processes and characteristics of the conceptual framework used for this study (see middle column). This information is subsequently juxtaposed with the content in the right-hand column, which includes the findings of this study. In the subsections that follow, I explain each category of this table and provide findings illustrating each characteristic (i.e., obligation to disclose, timeliness, content and format, accessibility).
### Characteristics of Accountability Information Provision and Study Findings (Source: developed by the researcher)

<table>
<thead>
<tr>
<th>Characteristics of Information Provision</th>
<th>In the conceptual framework</th>
<th>In the CA analyzed in this study</th>
</tr>
</thead>
</table>
| Obligation to disclose                   | Disclosure is forced by law (e.g., Freedom of Information Act, Formal reporting) | • Freedom of Information (FOI)  
• Formal Reporting  
• Intentional disclosure of information |
| Timeliness                               | Delayed: Often published periodically (e.g., based on annual basis) considerably after an action has been done (e.g., the budget reports, financial statements, etc.) | • Delayed and Real-time  
• Forced access and formal reports would be timely  
• Intentional disclosure periods are instantaneous or in very short time after the action is done (e.g., real-time disclosure or open-by-default) using the ICTs. |
| Content and Format                       | Structured based on certain standards (e.g., financial statements based on GAAP standards). Need expert knowledge for interpretations. | • Simplicity and understandability for average citizens without expert knowledge is emphasized.  
• In more timely forms of information provision such as tweets, informal language is being used. Use of affective visuals (e.g., emojis, GIFs, memes) was a distinctive attribute of this category of information.  
• Open Government Data (OGD) |
| Accessibility                            | Traditionally the actual hardcopy reports were used. More recently, the reports are published on the Internet in a digital format. | ICTs enabled platforms such as smartphone applications or 2.0-technologies web applications with real-time interaction with users. |

#### 5.2.3.1 Obligations to provide information

The first characteristic analyzed with regard to information provision in an accountability relationship is the obligation to provide information. This includes whether the actor is forced/mandated to disclose information or he/she intentionally provides information without any pressure from the forum (Meijer et al., 2012). This dichotomy is not new to OG specifically but nevertheless, are included in the practices being conducted for information disclosure to citizens.

The practices that are new and unique to this case are explained in subsection 5.3.3.1.3. In the next subsection, I present findings that illustrate both forced access to information and intentional disclosure of information.
5.2.3.1.1 Forced Access to Information: Freedom of Information Act

Forced access to information happens when an actor is formally obligated to provide information, regardless of whether or not they intended to provide it willfully. Forced access to information is supported by legislated laws such as freedom of information access. This law represents one of the forms citizens can rely on to access internal information of the administration. Opportunities to access government information in Ontario can also be achieved through such policies as the MFIPPA (“Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. M.56,” n.d.). The local government in this case study was mandated by provincial law to follow such policies. According to this act, all citizens are entitled to have access to government information upon request. Although there are several restrictions that hinder access to all types of information, citizens may make requests to access additional information. The government is obligated to provide that information if the application meets the requirements as per ATIA. Such compliance was demonstrated in the analysis:

“We are actually releasing metrics that relate to our freedom of information statistics, how many FOI requests we get, what the general nature of those requests are, how many we process in a year, we’re putting all of that information on an open data portal along with many other data sets.” (City Clerk – emphasis added by the researcher)

In the quote above, the city clerk emphasizes that the administration follows the FOI Act of the province of Ontario and provides information upon request to its citizens. It was observed that the city also provided data for ATIA requests as part of their open data catalogue. Such procedures were found to be quite common. In fact, the city data disclosure for freedom of information access (FOI) reported 172 requests for access to information in 2017. Therefore, one of the channels used for accessing government information by citizens was forced access to information through FOI.
5.2.3.1.2 *Formal Reports: Mandatory Disclosure of Information*

The administration is also obligated to generate formally mandated reports regarding their performance. The disclosure includes presentations to the council and publishing of findings on the city’s website. For example, the administration provides various financial reports to the council such as quarterly operating variance reports, quarterly capital variance reports, semi-annual investment reports, annual reserve and reserve fund reports, annual budget process reports, external audit reports, etc. The city treasurer confirmed that each year the city may provide upwards of sixty formal reports to the city council:

“We could have upwards of sixty plus reports that we are doing annually to council”
(City’s Treasurer – emphasis added by the researcher)

Another initiative that the city began in 2011 was preparing performance reports that were to be disclosed publicly. Internal departments of the administration, such as human resources, were obligated to prepare an annual performance report to be presented to the council which was subsequently publicly disclosed on the city’s website:

“The Human Resources Annual Report, presented this week to the Finance, Administration, Corporate and Emergency Services Committee, represents management’s accountability to Council for the responsibility they have been delegated to manage human resources at the City ... Through this report, their performance is made transparent to Council and our citizens ... And to my knowledge, no other City in Ontario publicly reports, as the City is now doing, the number of exits and costs associated with those exits.” (Mayor’s Blog – emphasis added by the researcher)

The above quote exemplifies an instance of a formal report that was provided for the city council on the performance of the human resources department of the administrative agency. Such reports (following presentation and review by the council) are published on the official city website and are accessible for citizens to download and review. Despite report availability, accessibility was reduced through document length and use of technical terms. The reports that
were prepared prior to 2013 were particularly lengthy and replete with technical jargon. Thus, in order to understand and interpret such reports, users would need to have expert knowledge. Conversely, without such knowledge, individuals are at heightened risk for misinterpreting the information. Civic administrators acknowledged the potential difficulties that citizens might face when it comes to interpreting the formal financial reports.

Data analysis suggested that the city provides several formal reports (including financial reports). However, much of that information may simply be misunderstood by a majority of the citizens. The analysis suggested that one objective the city government sought to achieve through implementing OG was to provide structured information to citizens in a format that is easily comprehensible and readily accessible.

5.2.3.1.3 *Intentional Disclosure of Information*

The disclosure of information explained in the prior section was officially published on the city’s website in accordance with organizational policies and mandated laws. Another form of information provision found in this case and discussed by Meijer et al. (2012), is an intentional disclosure of information that is not mandated by law. Instances of intentional information provision were found in cases specifically dealing with the use of ICTs. Providing information to the citizens through ICTs was discussed by both elected and appointed officials. The following quote exemplifies one such instance:

“[Information provision] is blogs, it's being available on social media. It's status reports on the project that we’re doing. For an example, I had promised a report on the digital services to citizens about three weeks ago. I put up a blog post that said, “sorry it’s going to be late and here's why”. That's information about accountability but it's not normal to do that. Normally we just don't put it out and then we're late and we’re late and that’s what it is, but I promised to people and maybe no one even read that blog post but whatever I promised it, and so I said sorry here's why I didn't do it and here's when
I'm having it by. It’s just how you go about doing the job.” (OG Manager – emphasis added by the researcher)

The quote above suggests that public officials used ICTs to provide more timely information to citizens. Unique characteristics of this form of information provision emerged from the data. I discuss these unique characteristics in the subsections that follow.

The official website of the city posted its policy regarding the use of social media for both elected and appointed officials. The policy provided the criteria under which the administration would respond to requests for information or react to information that is posted by others:

“The City may reply to online questions or comments if: the post asks a sincere question about a City service, program or policy. [or] The post includes inaccurate information – the City may provide a correction” (Social media policy of the city – emphasis added by the researcher)

Throughout numerous examples from social media data provided in this chapter, instances of providing intentional information to citizens are evident. In addition, provision of such things as performance dashboards or information provided through the map application of the city, are strong examples of such intentional disclosure of information.

Another example of the city’s movement toward intentional information provision can be seen in the different types of information that were provided during city council meetings. Figure 5.5 demonstrates two instances of archival information from council meetings. As it can be seen in the year 2011, the city only provided the agenda, addendums, and transcribed meeting minutes. Conversely, in 2017, three columns had been added for each council meeting archive. In addition to providing the agenda, addendums, and meeting minutes, the city posted a “web-
friendly” format of the meeting agenda⁴, an audio recording, and a video recording for each meeting. Although the audio and video files were not available for all meetings, such information significantly contributed to enhancing the transparency of information, giving users a new form of information to review and use when it comes to CA.

![Council meeting archive](image)

**Figure 5.5:** Council meeting information for citizens between 2011 and 2017 (Source: City’s website)

Similarly, provision of OGD which is a unique practice to OG would be considered as another instance of intentional information disclosure. I will provide more detail for the analysis of OGD in subsection 5.2.3.3.3. According to the councillors of the city, the information disclosed (such as the sources presented in Figure 5.5) is disclosed intentionally and purposefully in order to enhance the efficiency of the administration. More specifically, through transparent disclosure, the city expects to get a lower number of requests for information regarding the status

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⁴ This would be an example of improving accessibility of the information which will be discussed in subsection 5.3.3.4
of certain services. In other words, if people can access the information they need themselves, the administrative workload is reduced.

5.2.3.2 Timeliness of information disclosure

Timeliness of information disclosure can be attributed to the actor. One of the objectives of OG initiatives is to provide data and information in real-time without any delays. The findings of this study suggest that a movement towards achieving such an objective was ongoing in the city’s administrative government.

5.2.3.2.1 Timeliness of formal reports

Traditionally, the formal reports being made publicly available took a considerable time to publish and be made accessible. For example, it took over 6 months for the city to publish its consolidated financial statements after the year-end deadline. This represents a challenge as less timely disclosure is not as actionable as having access to information in a timely manner. To address such issues the city moved toward providing more timely performance dashboards and information. For example, with regard to capital construction projects, one of the deputy CAOs indicated the following:

“[In a police construction project] There’s an awful lot of things that could go wrong on that project, including it’s a construction site with live bodies inside the building; police officers and civilians… So, we’ve got to make sure we’re doing all the right things. So, we post that online now, we do all of our projects and it’s a simplified version so that even a guy like me could figure it out, where we deal with what’s the timeline, what’s the budget, where are we in terms of time and budget, so that project will be finished January, or it will be finished Q1 of 2019 so we are reporting on it now. It's easy to say we’ll be on budget but we’re very clear on the segments so you will see if you went there and had a look, we’re projecting that we’ll be three weeks behind, we’re projecting that we’ll be on budget but we’re three weeks behind. And then within that, we identified why are we three weeks behind, this is very specific to allocation.”
(Deputy CAO – emphasis added by the researcher)
The quote above demonstrates the movement of the city administration towards providing more timely information. In order to more quickly and effectively inform citizens about projects, the city began to publish new forms of information, such as monthly updates, visual data such as time-lapse videos, and photos of locations like construction sites. The monthly reports were intended to be easy to understand. Figure 5.6 illustrates a monthly report regarding a construction project.

Figure 5.6: Example of timely and simplified information for a capital city project (Source: City’s website)

In regard to timeliness of disclosure, the deputy CAO of the city discussed availability concerns in light of ICTs. More specifically, they acknowledged the fact that the city administration had to be accessible not only during official business hours but all hours of the day, considering the capabilities of ICTs:
“I know the clerk now has continued to look at proactive disclosure and other means to provide more immediate information that would readily available through FOI. I think our communications department is continuing to look at how to use social media, and how to continue dialogue in that way.” (Manager of IT – emphasis added by the researcher)

The quote above demonstrates that the city administration made strides to providing more timely information through social media. This is in line with the proactive transparency philosophy of OG. In general timeliness of information provision over social media was substantially faster than traditional methods. The official social media policy of the city claimed that they are only monitoring and responding to social media information requests during business hour, but that questions would be answered within one business day:

“Typically, the City responds to online inquiries during regular business hours; Monday to Friday 8:30 a.m. to 4:30 p.m. … Questions or comments are acknowledged or answered within one business day.” (Official city’s website)

Despite such parameters, instances of responding at very early or late hours of the day were evident in the official Twitter feed of the city. This type of information provision was certainly facilitated by ICTs. For example, availability of city administration to respond to a citizen’s question about how he or she could access the official Twitter accounts of the city at 6:30 AM is depicted in Figure 5.7. Such timeliness in responding to requests would not have been possible without recent advancements in ICTs.
5.2.3.2.2 *Real-time Information Provision: Open-by-Default Concept*

A primary objective of OG initiatives is to move toward real-time or “Open-by-default” information disclosure for all sorts of government information. This basically means that as soon as an action is complete, the information with regard to that action becomes publicly available. ICTs play a significant role in facilitating this objective. Although achieving full transparency and openness was unrealistic at the time this study was conducted, the civic administration in this local OG developed goals toward achieving such a level of transparency by implementing the tools and applications described in Appendix E and F.

The information reported in Appendix E (section 13.5) summarizes one of the applications that was developed and used by the city- the interactive map. Within the interactive map application that the city developed for reporting both city issues and non-emergency service requests, the citizens could use their smartphones or computer devices to report issues. Each request automatically receives a timestamp that shows when each request was posted by the citizens. Request information is then made publicly accessible for every user who has access to a digital device and has the software and hardware requirements for using such applications. As a
result of this system, users could browse through all requests to see how quickly the city responded and they could track the steps that were taken to complete each request by reviewing the automatically generated archival information for each request. With such information becoming available immediately after an action, this illustrates the concept of Open-by-default, which is promoted by OG initiatives. The following quote by the mayor and the deputy CAO shows that development of this particular application made the process of reporting problems a much simpler and more efficient process for the city:

“There’s another app called 3-1-1 GIS, and we’ll be linking those reporting a problem there. So, if I’m a resident and I’m so inclined I can email, phone in, Facebook or Twitter in and it will log the issue and I can go on this app and point on the location where it’s been reported and it will say the problem was reported on this day, at this time, service request in action, and then you can get notified through that app as well.” (Deputy CAO – emphasis added by the researcher)

It was also evident that the visibility of the timestamp for service requests generated a sense of obligation for the staff to follow up with service requests as quickly as possible:

“because that posting is public, now the city is very accountable to making sure they go and look at that property issue, or they go and look at that noise by-law issue or they go look at that parking issue because you don’t want to have that public notice available on the map for four days, you want it taken care of in four hours. So, I think that’s important, and then I think it also in a way makes it accountable to staff internally here, how quickly are they responding to things now from a reporting standpoint. … we’re obligated to go and follow up on that issue that has been posted by the citizens.” (Mayor – emphasis added by the researcher)

The quote above also describes how the public visibility of such information could generate a sense of informal obligation for staff to be accountable for services requested through the map application. Therefore, proactive transparency (i.e., real-time information disclosure) through ICTs can enact virtual CA for the service provisions requested in such applications.
This sense of obligation was noted as being a result of OG initiatives. As evidence, the councillor of the city indicated that such forms of information were not available to citizens prior to the recent developments in the city:

“Just a simple thing like a new app they built, I think it’s called 3-1-1. I could complain about a house in our neighbourhood, and there’s an app I can take a photo, or I can just key in that they are parking on the lawn, but I can also see if there have been other complaints on the same property. So, that’s all very open. Normally before we wouldn’t be able to have access to that type of information. I can see as a councillor, or any other citizen can see there’s a lot of activity going on at this house…” (Councillor 3 – emphasis added by the researcher)

The quote above also indicates the potential for city councillors to take advantage of information that is publicly visible through the map application to respond to citizens. Furthermore, the analysis suggested that the civic managers who developed such applications also described a plan for developing similar applications which provide real-time information on similar city services such as grass cutting, snow ploughs, etc.

There was an evident emphasis on the movement of the city toward using modern technologies for developing applications that can provide real-time information to citizens. Examples of such applications are provided in Figure 5.8. One instance that is illustrative of the applications developed, is real-time information provision regarding grass maintenance. Using an interactive map that is exemplified at the top of this figure, the citizens could in real-time when the grass is has scheduled maintenance throughout the city. Similarly, the citizens could take advantage of another tool for tracking the progress of snow plowing during the winter months. They can find out where exactly the plows are and when they will reach their neighbourhood. The last tool that is exemplified in figure 5.8 is a tool for real-time information disclosure regarding the on-going construction projects and their impact on traffic. Using this tool, citizens could access information regarding future plans for construction and plan their commuting routes
accordingly as they were made aware of locations wherein traffic was diverted or blocked. This map also includes a detailed history of construction projects over time. In essence, users could use the tools that were provided to navigate through different projects and highlight how the city projects would affect them personally, allowing for greater autonomy and planning.
Figure 5.8: Examples of tools developed for the provision of real-time information for city services (Source: City’s website)
The most prominent example of real-time information provision by the city can be found in the city map application introduced earlier. The story that follows provides an example of how the map application works, including how citizens can collaborate with the city.

“A citizen is out hiking on a City-maintained trail. She sees a fallen tree that needs to be removed. She reports the fallen tree on [the Map App] and attaches an image. The location of the fallen tree is automatically geotagged, and a work request is created. A City’s Employee receives the service request and attached image. She is able to assess needs and plan routes efficiently based on service request details, image and accurate location of the fallen tree. The employee adds the service request to the crew that is already assigned to the area for the afternoon. The assignment of the service request automatically triggers and issues an update to the citizen. After removing the tree, the City crew updates the service request through their mobile device. Another update is triggered and issued to notify both city and the citizen the service request is resolved.” (Adapted from OG Action Plan – emphasis added by the researcher)

This is a great example of how citizens can access real-time information disclosed by the city. When the citizen reports the fallen tree, a timestamp is provided on the report. After removing the tree and when the city crew updates the status of the request, another timestamp is added. Every citizen with access to this application and internet access can track down these reports and observe how quickly the city provided service. For example, in the images shown in Figure 5.9, a citizen had reported a waste collection issue on 04-11-2016, which was completed on 15-11-2016. Interestingly when the request was initially created the first crew labelled the issue as “Encroachment on city property”, to be later changed to “Waste yard collection” by a second crew responsible for its completion. Different timestamps throughout completion of this process can be seen in the report.
Figure 5.9: Examples of the use of the map app for reporting city issues and the provision of real-time information by the city (Source: 311 Map Application)
5.2.3.3 Information provision content: Simplified Information in OG

The content of information that was provided in formal reports followed a certain structure and standards. For example, the financial statements of local governments follow certain accounting standards such as Generally Accepted Accounting Principles (GAAP). As mentioned in the intentional disclosure of information findings, as part of OG initiatives, the administration was moving toward greater simplicity and understandability of the information provided to citizens.

5.2.3.3.1 Simplicity and Understandability of the Information

While the formal reports of the city followed certain standards and structure, one trend that emerged in the data was a desire for simplicity and understandability of information. Under the OG umbrella, the city was trying to not only make the information more accessible but also make the reports and information easier to understand, especially for non-specialized users. For example, the city provided comprehensive and standard financial statements to its council and citizens. However, these formal reports could be difficult to understand for some citizens that are not specialized in accounting or finance. Prior to OG, this was a problem underlying many reports published by the city:

“But right now, it's really complicated because we're not easy to understand and so the big picture context on the digital services is to create a one-stop digital shop for people to get whatever it is that they need from us whether that is access to a service, access to information, or access to an opportunity to participate. Information includes everything from city Council what’s going on there to you know what's my garbage collection, we collect stuff the whole range. So, the motivation here is that we’re complicated and we want to simplify it for people to make it easier for people to hold us accountable by giving them a seamless citizen experience so the point is not to force people to use technology but to make sure they got the option to do so if that's what they prefer in any particular situation that they find themselves in them and this is a big challenge.” (OG Manager – emphasis added by the researcher)
The quote above illustrates how the OG manager acknowledges the need for simplicity during the process of developing OG plans, given that the provision of city information was often difficult for citizens to understand. As a result, a central objective of OG initiatives, and the OG manager, in particular, was to develop tools that could simplify how information is provided. The movement towards this goal can also be seen in the examples provided in Figure 5.10. For example, in the capital construction projects, the city not only published formal quarterly and variance reports but also included a very simple and easy to understand report on the project's timeline and budget. Similarly, in the financial reporting of the administration, there were targeted attempts to simplify the information for the general public:

“We consider in all of our reporting, the audience who the report is going to and try to ensure that the information is written in a way that is understandable and can be utilized in decision making.” (Treasurer – emphasis added by the researcher)

An example of formal reports published under OG initiatives are those of the department of infrastructure and development services on the progress reports major construction projects. These are published on a quarterly basis and then placed on the departmental website (see Figure 5.10). To make this information easy for citizens to understand, the city has provided some simplified dashboards to indicate how the city is performing in multiple areas. The deputy CAO of the city reaffirms the emphasis on making the information easy to understand without needing any expert knowledge to interpret the information:

“… we post that online now, we do all of our projects and it’s a simplified version so that even a guy like me could figure it out, where we deal with what’s the timeline, what’s the budget, where are we in terms of time and budget, so that project will be finished January, or it will be finished Q1 of 2019 so we are reporting on it now.” (Deputy CAO – emphasis added by the researcher)
Figure 5.10: Examples of simplified dashboards published for quarterly reports of major construction projects (Source: City’s website)

The instance provided in Figure 5.10 demonstrates how the information on construction projects was being purposefully simplified in the city. With a quick look at this information, it can be easily understood how well each project is performing. Colour indicators clearly describe that if the dashboard is green, then the project is going according to schedule. Conversely, if in yellow or red then to some extent the project is behind the schedule.

Under OG initiatives, the city developed a series of simplified performance dashboards that were published on the official city website. On these dashboards, the administration reported on over 40 performance indicators. Each indicator had a status which showed whether the administration was performing well in that area, was near its target, or in need of improvement:

“Successfully developed and launched The Count, the City’s first online public reporting dashboard which features 40+ performance metrics across seven areas of strategic
importance to the public. The tool also allows the public to comment on the dashboard and request other data they would like to see … “Report to the Community” will provide the public with an **easily accessible, digestible and plain language** report that demonstrates value, transparency and accountability. The approach aims to better utilize staff resources and existing information/data and will reduce the administrative burden on departments whilst providing a clearer snapshot of the City’s performance against important strategic goals” (Corporate Administrative Plan Report, Jan 2018 – emphasis added by the researcher)

In the quote above, it is clear that emphasis was placed on making information more accessible and easy to understand during the development of performance dashboards.

Additional instances of such dashboards can be seen in Figure 5.11. Once again, the administration used colour codes and icons to make the results not only easy to understand. Knowing what each icon means, the citizens could quickly find out how well the city was performing in each area.
Figure 5.11: Simplified performance dashboards developed as part of information disclosure under OG (Source: City’s website)
5.2.3.3.2 Use of informal language and affective visuals in new forms of information

Another characteristic that emerged in the analysis was the use of specific forms of the informal linguistic structure as well as using affective visuals such as GIFs, memes and emojis for information (i.e., real-time information) such as tweets. Such characteristics were unlikely to be observed in traditional formal reports provided in CA contexts. One of the councillors in the following quote reflects on the importance of simplicity for citizens engaging with these new types of information:

“[Information provided through] Annual reports, website, budget, budget variances, auditor reports, newspaper the tribune section, social media, really the numerical data about whether aligned item met target, is indicative of... that is the accountability measure, but it has no meaning to the average citizen so I believe most citizens are wanting their data in small, 140 character tweets or infographics that is easily accessible at the onset of budget or embedded in the annual reports, the annual reports that come in a 40 page text format are very unlikely to be read, infographic with pie-chart with budget actuals are really easy, digestible bits and pieces is probably what most citizens would want.” (Councillor 1 – emphasis added by the researcher)

The quote above also demonstrates that the city councillors recognized that the citizens desired information in an easy to understand fashion. It also demonstrates that social media platforms such as Twitter not only provide an environment for making the information accessible but also contribute to providing short and simplified information regarding the actions of the administration and individuals. Such simplicity is partly achieved by using informal linguistic structures. For example, in the instance shown in Figure 5.12, the administration tweeted “You spot ‘em we’ll fix ‘em.” Use of such informal language and slang phrases, especially in information that was provided over social media platforms, were evident throughout the data.
Similar to the use of informal language and slang phrases, another observation was the use of affective visuals in social media posts. These visuals include a new trend that is becoming popular among social media users - conveying a series of. It is beyond the scope of this study to discuss why such visual elements are being used, but it would be interesting to analyze the effect of such usage in future attempts. Figure 5.13 provides a few examples to illustrate this trend.
5.2.3.3 Open Government Data (ODG) Catalogue: Data Provision in new formats

As discussed in the intentional disclosure of information section, one type of information disclosure attributed to the OG movement is Open Data initiatives. In OGD the government basically provides an internal dataset for the administration which includes data often in a numerical and editable format, such as Comma Separated Values (CSV) or Keyhole Markup Language (KML). The value of such data provision is its reusability, which enables the users to use these datasets in other applications to develop new types of data product such as infographics or smartphone applications.

“Open data is the idea of making data openly available for everyone to use and republish as they wish, without the restrictions from copyrights and patents.

From [ODG website], you can access the raw data driving government forward. This can then be used by people to build useful applications that help society or investigate how effective policy changes have been over time. … Technical users will be able to create useful applications out of the raw data files, which can then be used by everyone” (City’s OGD website – emphasis added by the researcher)

The quote above emphasis on the characteristics of OGD such as reusability of the data. It also indicates the intention of the administration regarding the disclosure of such data. As it is indicated, the city intended to provide OGD for users to build valuable applications to benefit society. It is also indicated that ‘technical’ users could use OGD to develop new applications. While this questions the user-friendliness of OGD for the general public, nevertheless, OGD provided any user with access and ability to generate new applications or other information products.

The local government in this study had also created a separate section as part of the OG initiatives for their ODG catalogue. Overall, they had published 43 datasets as of 2017. Different formats for these datasets were made available and are presented in Table 5.3.
Table 5.3. City OGD catalogue data formats and format availability (Source: adapted from OGD website of the city)

<table>
<thead>
<tr>
<th>Formats</th>
<th>Definition</th>
<th>Number of datasets available in each format</th>
</tr>
</thead>
<tbody>
<tr>
<td>GeoJSON</td>
<td>GeoJSON is an open standard format designed for representing simple geographical features, along with their non-spatial attributes, based on JavaScript Object Notation (JSON). See Wikipedia for more information.</td>
<td>34</td>
</tr>
<tr>
<td>KML</td>
<td>An XML notation for expressing geographic annotation and visualization within Internet-based, two-dimensional maps and three-dimensional Earth browsers.</td>
<td>30</td>
</tr>
<tr>
<td>SHP</td>
<td>The ESRI Shapefile or simply a shapefile is a popular geospatial vector data format for geographic information systems software, developed by ESRI.</td>
<td>24</td>
</tr>
<tr>
<td>CSV</td>
<td>A comma-separated values (CSV) file is a Text file that stores tabular data (numbers and text) in plain-text format. Each line represents a record with individual fields typically being separated by a comma character.</td>
<td>12</td>
</tr>
<tr>
<td>ZIP</td>
<td>An archive file format that supports lossless data compression</td>
<td>1</td>
</tr>
<tr>
<td>GTFS</td>
<td>The General Transit Feed Specification defines a common format for public transportation schedules and associated geographic information</td>
<td>1</td>
</tr>
</tbody>
</table>

Three applications developed using OGD datasets from the city were showcased. I was also able to identify two other web applications that were used on the official website of the city that used similar datasets (e.g., tool for searching city employees). The groups of datasets provided in the city’s OGD catalogue, including examples and data format are provided in Figure 5.14.
The administration indicated the methods that citizens could get used to get involved with and use OGD. As the following quote illustrates, the administration encouraged users to develop new applications or visualizations (i.e., new data products) based on the OGD provided datasets:
“Applications: have you built something cool with our data? Share it with us through the Showcases page. You never know who might get excited! Visualizations: one of the challenges is making data come to life. Have you found a great way of displaying our data? Does it combine with other data to give a new insight? Show us your talent?” (OGD Website of the city – emphasis added by the researcher)

The quote above demonstrates that users could think of methods for transforming the data into another product. As a result of such processes, the shape of the data would be transformed into another form of presentation. For example, tabular data format could be presented with a graph. The perception of users may differ whether looking at the data in a visual form versus a tabular format. This finding has important implications for the conceptualization of CA, which I will discuss in the final subsection of this chapter.

This subsection was used to provide an overview of government practices with regard to providing new forms of information and OGD. The content and structure of such forms of information and data provision are completely different than how traditional forms of CA were discussed. I will discuss such differences and comparisons in the discussion chapter.

5.2.3.4 The Accessibility of the information: Tools for Accessing Specific Information

The medium that was used to transfer information to the forums had traditionally been through a paper/hard copy of each report. This form of information transfer was not accessible to many users. Throughout the history and the advancement of technology and advent of the Internet, contemporary public-sector governments can now publish reports in a softcopy, digital format on their official websites. Historically, this movement is most evident in the early stages of e-government initiatives. So, another area for understanding information provision was to identify how information was being transferred to the forum, and if there were any emergent codes with regard to such attributes.
The findings of the analysis indicate that ICTs have played a significant role in providing a modern platform for information to be transferred to users in an accessible format. Enhancing the accessibility of information through new formats was one of the priorities of the city while developing OG initiatives:

“In that role, our procurement department has been involved in working with [OG Manager] and the lab and trying to challenge processes and some of our own legislation to try and open up procurement and make it a little more accessible to the smaller players and the start-ups and things like that.” (Manager of IT – emphasis added by the researcher)

Furthermore, the quote above indicates that the administration also intended to make the information more accessible as part of their OG initiatives. One practice that they implemented was developing an online tool so that users could see all the bidding for procurement. By developing such tools, the administration intended to make information more accessible to its users.

Although providing information in digital and accessible formats contributes to information provision in a way that holds actors accountable, providing thousands of pages of information on websites could also result in information overload and confusion. Another finding relevant to making information more accessible and provision more effective and efficient was to provide modern tools that the citizens could utilize to find specific information:

“We’re a complicated institution and we do a couple hundred different things as far as individual services. … it’s typically a lot more than people realize and so and these are the government services that affect more than any other order of government that affect the day-to-day lives of the citizens … the way in which people are able to access us to meet doors into the institution to be heard, to share feedback, to have a complaint, to access services, all those kinds of things to access opportunities, to participate, the different ways in which people are able to do that are really important. … so, the big picture context on the digital services is to create a one-stop digital shop for people to get whatever it is that they need from us whether that is access to a service, access to information, or access to an opportunity to participate. Information includes
everything from city Council what’s going on there to you know what's my garbage collection, we collect stuff the whole range. So, the motivation here is that we’re complicated and we want to simplify it for people to make it easier to make it easier for people to hold us accountable by giving them a seamless citizen experience so the point is not to force people to use technology but to make sure they got the option to do so if that's what they prefer in any particular situation that they find themselves in them and this is a big challenge.” (OG Manager – emphasis added by the researcher)

The quote above indicates that the OG manager of the administration was striving to make digital information tools more accessible to citizens. One such attempt was developing an online tool that acts as an automatic guide for accessing information. It was intended to direct all information requests to relevant parts of the city website. Rather than searching through hundreds of web pages to find specific information, users could simply use this tool to directly access desired information.

Another example of tools that were developed to make the information more accessible was a tool that could extract information from council minutes’ reports. This tool would dig through long reports that the city publishes on its website after each council meeting, allowing the user to find specific lines of information that are personally relevant. A screenshot of this tool on the official city website is provided in Figure 5.15.

“So, one of the initiatives we’re working on through open government is a tool that will scrape those agendas and basically lift out the most important information for people, it doesn’t change the minutes, it skims those minute documents, says what was the item, what was the just of what they were trying to decide and what was the result of the vote, and that’s it. As opposed to very long chronologically ordered minute documents.” (Clerk’s Office Manager – emphasis added by the researcher)
“We’ve committed to operationalize something that is called […] and it’s an online digital portal that will evolve over time but will provide citizens with some of those digital services they want, a better more interactive user experience with the city in terms of getting information or completing transactions or even adding to the knowledge base.” (IT Manager – emphasis added by the researcher)

5.2.3.5 Conclusions of information provision analysis

In summary, I have explained the characteristics that were introduced in Table 5.2. The analysis revealed that information provision for the citizens follows both traditional practices that are enforced by law as well as new practices that are specific to OG initiatives. The new findings with regard to OG initiatives are the forms of intentional information disclosure practiced using ICTs. Such practices have new characteristics such as real-time disclosure, simplicity and understandability, and the use of affective visuals such as Emojis and Memes. It was also discovered that ICTs contributed to the accessibility of the information through ease of access. Lastly, OGD provides a new form of data provision which could be reused by the citizens to develop new applications or visualizations, triggering an accountability process.
5.2.4 Debate: Virtual Debate through ICTs

In this section, I explain the analysis and the findings of the study with regard to the debate phase of the CA process. Similar to virtual citizen forums, I label the debates that are conducted through ICTs as ‘virtual debates’ since they are conducted in a virtual environment over the Internet. Furthermore, I code the data based on the characteristics of debate from the conceptual framework, looking for segments of data consistent with those concepts. Subsequently, I looked for emergent codes for debate characteristics. To explain the findings, I first present instances of virtual debates between citizens and city officials, followed by a summary of all debate characteristics. I then provide an explanation of each characteristic of the observed virtual debates. This subsection ends with a conclusion on the findings of this study and provides implications regarding the contemporary CA debate.

5.2.4.1 Instances of virtual debate on Twitter

The data analysis of this study shows that OG initiatives not only enable citizens to have access to new forms of government information but through ICTs they create an environment for debate between citizens and officials. In this section, I demonstrate two examples of debates that show how CA debates are being exercised through ICTs.

It was evident in the analysis, the main focus of virtual debates through ICTs is information requests regarding service provision, or performance, of the administration. For example, when there are noticeable delays in road maintenance during the winter or when there is a delay in the bus schedule, there is a tendency for citizens to demand information regarding the lack of delivery/city performance. Instances provided in 5.16 demonstrate two events of such virtual debates.
Figure 5.16: Examples of an online debate between citizens and officials (Source: Twitter©)

Figure 5.16 demonstrates two instances of virtual debate between citizens and the city administration over Twitter. In the first instance, a citizen commented on the closure of a local
business in the downtown area, using the ‘@’ function of Twitter to direct the comment to the official city twitter profile as well as the mayor of the city. With that, the citizen had attracted the attention of both parties, necessitating a response in order remain accountable to the citizens’ concern. In this example, the mayor had responded, getting involved in a debate with the citizen regarding the parking issues that the citizen was pointing out. As a response, the mayor provided further information regarding how the city had pursued the parking issues in the downtown area. A second citizen became involved in the debate by pointing out the delay in resolving the issue. As a response to this third party, the mayor was able to provide further facts and information to the concerned parties. At the conclusion of the debate, the second citizen passed a judgement by voicing their general displeasure with the process and wished the administration luck in resolving the issues. The second instance provided in Figure 5.16 refers to the same issue regarding a lack of parking spots downtown, and its effect on local businesses. The debate follows the same pattern as the first example. The emergence of virtual citizen forums and the provision of timely information by the city officials could also be traced in this instance. I contributed to this debate by posing a question to the mayor regarding how the city would be obligated to respond to an issue that is reported on social media by a citizen. The mayor of the city responded as follows:

“We’re obligated to go and follow up on that issue that has been posted by the citizens.”
(Mayor)

In another instance of debate between a citizen and the city administration on Twitter in January of 2017, a citizen noticed a discrepancy between the time schedule of a bus route and what was scheduled on an OGD-developed app. After the citizen reported the issue on Twitter, the official Twitter account of the city referred the issue to the transit department. The transit department referred the issue to the app developer. The developer responded back that they had
used the OGD datasets to develop the app and blamed the problem on lack of recency of the city’s OGD dataset. More recently, I noticed that the city had used ICTs to provide up to date bus schedule data using Google technologies. The complete description of this instance can be found in Appendix G. This indicate provided further evidence that the city responds to virtual debates where citizens provide specific evidence of city issues.

Table 5.4 summarizes the characteristics of debate that I categorized based on both the study’s conceptual framework and emergent themes. In the sections that follow, I explain each category of this table and provide examples of data to corroborate this phase of CA in the study.

Table 5.4. Characteristics of the debate phase in accountability and study findings (Source: developed by the researcher)

<table>
<thead>
<tr>
<th>Characteristics of Debate</th>
<th>In the conceptual framework</th>
<th>In the CA analyzed in this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time and Locus</td>
<td>Formal face-to-face meetings (e.g., council meetings) in a scheduled time.</td>
<td>Instantaneous establishment over ICTs-enabled platforms. Often with no prior notice or schedule.</td>
</tr>
<tr>
<td>Structure</td>
<td>Permanent structures between a fixed actor and forum (e.g., a civic manager and a user council).</td>
<td>Temporary structures between any citizen(s) and any city official(s).</td>
</tr>
<tr>
<td>Format</td>
<td>Structured based on a formal agenda. The information provision follows a formal language for discussion and reporting.</td>
<td>Unstructured and informal dialogue between participants. No specific agenda or format is followed.</td>
</tr>
<tr>
<td>Archival Trace</td>
<td>Often times trace of the debate is transcribed and will be available to certain stakeholders. It would be possible that certain meetings would not be recorded.</td>
<td>Trace of the debate is always publicly visible over the Internet. It would theoretically remain accessible indefinitely.</td>
</tr>
</tbody>
</table>

5.2.4.2 Time and Locus of the Debate

In the forms of CA that were explored in the literature, the first salient debate characteristic would be the location the debate takes place (i.e., which ICTs enabled platform) and the duration of the debate. For example, when a user council meets to debate certain performance concerns, the meeting would be scheduled on a certain date and in a specific location. The debate might range from one to two hours or may even be extended to the next day.
All such characteristics are based on certain expectations and are known prior to the date of the meeting.

In the virtual CA debates identified in this study, the debate between the actors and the virtual citizen forums could be initiated instantaneously, without any prior notice or schedule. As the following quote by the deputy CAO illustrates, ICTs have created an expectation of prompt responsiveness and availability of the administration on a seemingly 24-hour response cycle:

“I think expectations have changed. There are no longer bankers’ hours, there’s no longer 9 to 5, you can do it anytime in the **24-hour cycle.**” (Deputy CAO – emphasis added by the researcher)

The location in which the debate takes place is in accordance with what ICTs-enabled platforms is used. In such environments, users can interact with each other at any time without any restrictions or any requirements, other than having access to such tools. In the first instance provided in Figure 5.16, the first citizen posted their initial question at 5:17 AM on Twitter. This posting initiated the debate, which could continue between users at any time thereafter. This highlights a more fluid and dynamic form of debate emergence in virtual environments that is not possible in traditional settings.

“Web 2.0 integration, we’re using that right now, you can go online, you can fill out a form online to request a delegate to council. So, you don’t have to call, you don’t have to write an email, you don’t have to write a letter, **you don’t have to come into the building,** we’ve offered a **Web 2.0 tool in the form of an online fillable form** to allow people to do that. I would argue that internet voting is a form of Web 2.0 to a certain degree.” (City Clerk – emphasis added by the researcher)

The quote above declares that modern technologies such as 2.0 technologies and other ICTs have facilitated the interactions between city officials and citizens. Such tools provide easy to access platforms which citizens can access from any place at any time. As a result, these
technologies also facilitate a virtual environment for debate between citizens and city officials, a trend identified in this study.

5.2.4.3 Structure of the Virtual Debates

The structures that exist between the actor and forum in the CA that was discussed in the literature suggests that such structures are predefined between specific actors and forums. For example, consider a user council that regularly meets to discuss the performance of a school or a hospital (Meijer & Schillemans, 2009). The members of the forum are static and the structures that exist between the members of the forum, the actors, and the agenda of the meeting are predefined and do not normally change.

While looking for such structures in the form of debates, I identified that debate could take place in the virtual environment between any users with any actors without any predefined agreements or structures between parties. In other words, the only requirement for the emergence of debate through ICTs is the availability of the actor in the ICTs-enabled environment. As an example, Figure 5.16 illustrates a debate between the virtual forum and a corporate actor. Figure 5.16 also illustrates that the virtual debate can be between the virtual citizen forums or an individual actor, for example, the mayor. The users can engage both the corporate actor and an individual actor at the same time by targeting them using ‘@’ on Twitter. The finding that was identified in this section demonstrates a temporary formation of a structure between virtual users. This could emerge between virtual citizen forums and the corporate actor, or virtual citizens and individual actors.
5.2.4.4 The format of the Virtual Debates

Observation of formal accountability meetings held by the city council suggests the use of a formal linguistic structure during such meetings. Similarly, in formal meetings between members of a user council, the use of both formal jargon and language could be found.

While in formal meetings, the linguistic structures between participants often follow formal structures. Conversely, the language being used in virtual debates is usually informal and the dialogue is not formally structured but rather conversation in nature. Similar to the use of affective visuals during the information provision phase, virtual debates possess characteristics such as slang phrases, affective visuals, or other forms of informal language. The virtual debates do not follow a standard format or agenda. Examples presented in Figure 5.16 illustrate the use of informal language between participants. The instance of virtual debate in Figure 5.17 demonstrates the use of emojis, informal structure, and acronyms (e.g., “DM” refers to a direct message). Such characteristics are unlikely to exist in formal debates.

While such characteristics of virtual debates differ from face-to-face interactions, there are also characteristics of face-to-face interactions absent from text-based interactions. For example, facial expressions, intonations, and other forms of valuable non-verbal communication are attenuated or not present at all in text-based debates. An example of a situation of attenuated non-verbal communication is when the actor uses live streaming video (e.g., Figure 5.1). While some of such features clearly visible during face-to-face interactions are possible to be seen by the forum, such debates follow a different structure and format.
5.2.4.5 *Archival Trace of the Virtual Debates*

In formal accountability relationships, oftentimes there are transcribed records of the debate between the actor and the forum. In certain situations, such traces do not exist due to issues with confidentiality, a lack of resources or inability to record a session. For instance, the minutes of the council meetings reported in Figure 5.5 were generated and published publicly after each meeting. Such trace is actually provided *ex-post* and is not available while the meeting is ongoing unless there is live media coverage.

In virtual debates, ICTs allow for an automatic and everlasting archive of the discussions that take place over social media platforms. For example, in Figure 5.16, an automatic log of the debate is created in real-time. The timestamp of the first post is automatically created and can be seen by every user. Every time that a reply is posted, a new timestamp is created for that post. So, basically an automatic, publicly available transcript of the debate between users is created, and theoretically, such trace could be accessed indefinitely over the Internet.

5.2.4.6 *Conclusions of CA debates analysis*

The findings of the debate analysis of CA suggest that characteristics of debates over ICTs differ from traditional face-to-face interactions. Although the characteristics of the debate that were discussed in the conceptual framework of the study were identified in the data, the nature of those characteristics was quite different in the ICTs-enabled environments. The virtual debates could be enacted over ICTs instantaneously at any time without restriction. Unlike the debates that fit under the conceptual framework, often taking place in formal meetings and in a face-to-face manner, the virtual debates are conducted over ICTs in a virtual environment. Additionally, the structure of virtual debates is temporary as they only exist to the extent an issue persists, or a conclusion is reached. Regarding the content of virtual debates, informal linguistics
such as the use of slang language was more common. Furthermore, there are elements of affective visuals such as memes and GIFs, which could be interpreted differently by different users in virtual debates. Lastly, the archival records of virtual debates are generated automatically by the ICTs and those traces can be publicly seen by others. Theoretically, the evidence of virtual debates remains accessible over social media indefinitely. These characteristics contribute to extending the conceptual understanding of accountability debates by adding new characteristics emergent from the data.

5.2.5 Consequences: Voice through ICTs

In this section, I explain the study findings with regard to the consequences phase of the CA process. I first coded the data based on the characteristics of consequences reported in the literature on the study’s conceptual framework. Subsequently, I looked for emerging codes in the data related to CA consequences. To explain the findings, I first present a summary of the characteristics of the consequences phase of CA in this study and compare them to the characteristics inherent in the conceptual framework. I then provide an explanation of each characteristic represented in Table 5.5, using data to illustrate each phase of the CA process.

Table 5.5. Characteristics of consequences in CA and study findings (Source: developed by the researcher)

<table>
<thead>
<tr>
<th>Characteristics of Consequences</th>
<th>In the conceptual framework</th>
<th>In the CA analyzed in this study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immediacy</strong></td>
<td>* The consequences could be effective immediately after the judgment is passed or it could be applied with a delay (e.g., firing an employee due to pressure by a user panel could be effective in a short period while voting a representative in or out of an office could take four years to be possible)</td>
<td>* The informal rewards and sanctions by the citizens would be immediately accessible on social media and ICTs-enabled platforms, while the effect of such consequences may take a while to be seen in other formal lines of accountability.</td>
</tr>
<tr>
<td><strong>Nature</strong></td>
<td>* In CA the nature of consequences would be informal as the citizens would not have a formal power to pass formal consequences.</td>
<td>* Informal rewards e.g.: o Getting praised and support on social media (e.g., following, liking, retweeting,</td>
</tr>
</tbody>
</table>
• Informal rewards e.g.:
  o Public recognition
• Informal sanctions:
  o Voice e.g.:
    ▪ Complains about poor performance
  o Exit e.g.:
    ▪ Leaving an organization and choose another service provider in competitive markets

5.2.5.1 The immediacy of the Consequences

The first characteristic discussed with regard to the consequences phase of CA is immediacy. Immediacy considers whether the consequences are applied immediately after a judgement has been passed or following a temporal delay. For example, voting a representative candidate in or out of an office usually takes a certain period of time to be enacted (e.g., a four-year term), while firing an employee in a bureaucratic system can be immediate.

This study revealed practices of informal rewards and sanctions by citizens enacted over social media. I label this form of consequence as a virtual consequence since consequences are applied in a virtual environment facilitated by ICTs. Virtual consequences identified in this study were applied immediately as timeliness is integral to ICTs-enabled platforms:

“When people are satisfied, they rarely, publicly acknowledge their satisfaction, but when people are unsatisfied, they take to public shaming very quickly, and that’s an unfortunate consequence of political climate across North America in my opinion.” (Councillor 1 – emphasis added by the researcher)

The quote above demonstrates the perspective of city councillors with regard to informal sanctions and the immediacy of posing such sanctions through ICTs. Various participants stated that the citizens post both rewards and sanctions immediately after satisfaction or dissatisfaction with an action, behaviour or city service.
An instance of immediate consequence on Twitter is provided in Figure 5.17. More specifically, a citizen had posted a picture along with a complaint regarding the misuse of parking spaces in the downtown area. Shortly thereafter another citizen commented on the post and voiced their shared disappointment. Such ICTs-enabled platforms provide the tools for immediate submission of such informal consequences. An instance of an informal debate between the mayor and citizens is also apparent in Figure 5.17.

![Image of a Twitter conversation showing a citizen complaint and a mayoral response]

Figure 5.17: An example of immediate informal sanction by the citizens (Source: Twitter©)

### 5.2.5.2 Nature of the Consequences

The nature of consequences according to Bovens (2007a) can be either formal or informal. Moreover, Meijer and Schillemans (2009) argue that in CA, citizens do not have the power to submit any formal consequences. They can only use informal consequences using voice or exit which were discussed in the literature review. In the sections that follow, I present the analysis of informal forms of rewards and sanctions found during analysis.
5.2.5.2.1 Informal Rewards

Numerous instances of giving appreciation to employees or the city administration for performing well in providing services or handling issues were found in both social media and interview data. The following quote demonstrates recognition of the use of social media by citizens to pose informal rewards to city officials.

“You get comments on social media like great job last night …, thanks for doing that, they informally reward you that way.” (Councillor 3 – emphasis added by the researcher)

The example provided in Figure 5.1 with regard to virtual forums also demonstrates an instance of appreciation by one of the citizens about the opportunity for citizen engagement. An interesting instance of informal reward was identified in an interview with one of the deputy CAOs of the city:

“We had one of our garbage collectors spend, there was a little kid bringing out their soothers, and she was at the age where she no longer needed them, and she was bringing it out to the curb to put it in the garbage. Our operator stopped, took the time to get out of his vehicle, knelt down to her level and was able to help her ease these things that were near and dear to her into the garbage. So, there’s an interaction there that took place within the little child and the child’s mother, if it was just all fiscally driven, that driver would have been penalized for that from a productivity perspective that wasn’t very productive, but from a relationship perspective and a service perspective, that guy did a great job. So, we reward those sort of things and we get a lot of feedback on social platforms around what wonderful service. So that’s a piece of it if it was just fiscal that would have been a bad decision, but because it's not always seen as fiscal, that was seen as a great decision. [… Sina: Did you hear about that on social media?…] Yes, that’s how it came to our attention. I think the mother initially posted it and there was a lovely shot of Eric, who was the actual operator and the kid, and she posted it and it went viral, I guess.” (Deputy CAO – emphasis added by the researcher)

The quote above indicates how citizens can use ICTs to pose informal rewards towards city officials and staff. This quote also suggests that the city can utilize comments to evaluate the behaviour of its staff.
To corroborate this quote, I browsed social media to find the photo and description of the event. The screenshot not only includes the initial post but also citizen reactions with regard to the positive behaviour of one of the city workers. Further evidence of this event is presented in Figure 5.18. The event reached several social media platforms and hundreds of users reacted to the gesture this employee made towards one of the citizens. Comments that were analyzed with regard to this event were mostly positive and appreciative of the behaviour. It is also important to point out the immediacy of the comments provided. Most social media interactions occurred between August 24th, 2016 until August 27th. The virtual forum in this instance slowly dispersed over time.
An interesting observation in this instance is that the city informally rewarded the behaviour of this employee following the informal rewards offered by citizens. From an organizational perspective, the city could have penalized the employee for delaying his responsibilities and doing something outside of his formal job description. The decision to reward versus punish highlights the impact of such virtual CA relationships on the strategic views of organizations and the potential for learning from CA.

5.2.5.2.2 Informal Sanctions

As discussed by Meijer and Schillemans (2009) regarding citizen accountability, informal sanctions available for citizens to use against public official actors in a non-competitive market
are completed through voice. Voice is an informal sanction in which citizens complain about lack of performance or regarding certain shortcomings. In this study, the only organization responsible for providing services to citizens is the local government. There are no other agencies for citizens to refer to if they are not satisfied with the quality of services provided by the municipal government. Therefore, exit would not be a suitable informal sanction for citizens looking to have their voices heard. The analysis of data revealed specifically how citizens are exercising voice over ICTs.

Results suggest that councillors do not have any formal reporting obligations to citizens about their conduct. However, the addition of ICTs such as social media has provided an opportunity for citizens to directly demand that councillors provide information about how they perform their duties. The following quote from one of the councillors of the city depicts a situation where he or she felt an obligation to respond to such a request:

“Recently, I was asked a question about my attendance in a meeting, whether I attended that meeting or not, the person who asked the question knew well what the answer was. They posted the minutes as part of the tweet, showing that I was not in the room at the time that that vote was called, it was a cheap shot….the intention of that tweet was to inform all of that person’s followers that they were questioning my attendance at that meeting, and at the same time they wanted me to respond why I did not attend, which was a very particular reason because it was a meeting which is public now where five members of the council left the meeting and quorum was lost, so it was very political. They were asking me for accountability in a way that it wasn’t about that, the question was not for accountability. It is very difficult…” (Councillor 1 – emphasis added by the researcher)

This instance demonstrates the use of publicly available information in other formal reports to initiate a virtual debate. The perception of the councillors with regard to posting publicly available questions over social media was that such statements by citizens demand accountability. The analysis also suggests that citizens could utilize ICTs to pose informal consequences to sanction elected officials:
“If they are just not happy with the service they got or they don’t like an answer they received, or they don’t like our politics, there is nothing that they could do formally, but they could make our lives hell through social media and that seems to be becoming more common if people are not satisfied with even the most minuscule of requests. I am seeing higher rate of people taking to social media to articulate and voice their displeasure…I don’t think that there’s any formal way that citizens can sanction a council other than voting them out when the four years are up or voting them in, I guess that’s your biggest reward or sanction. I don’t know, there’s probably some kind of legal recourse they can take, they can call the integrity commissioner, if they think that we have violated the code of conduct, they can contact the mayor or the integrity commissioner to do an investigation. But as far as even those, even if they found that somebody had done something wrong unless it was criminal, you don’t really lose your seat unless it was a criminal action, it would be up to you to resign or not.”
(Councillor 1 – emphasis added by the researcher)

The quote above demonstrates the perception of one of the city councillors on how citizens can use ICTs to informally sanction them. Interviews indicated that the most important reward or sanction for the councillors is re-election in the next election. The councillors also acknowledged that citizens could use ICTs to informally sanction them and as a result, they feel a sense of obligation to justify behaviours through virtual debates.

To corroborate the instance that was coded in the interviews with the councillors, I looked for instances of such incidents on Twitter. Figure 5.19 provides an example of a virtual debate between two of the councillors. Their debate focused on how they should have voted on a certain issue. Citizen posting of council meeting minutes is demonstrated in this example:
The instance presented in Figure 5.19 demonstrates how a virtual debate may be practiced in OG. More specifically, in cases where citizens complain about certain conduct in the city, councillors respond by feeling that they need to debate the issue. This may take the shape of reading and responding to blogs or social media comments that they believe run counter to their views or are simply inaccurate or misleading. The following quote demonstrates that not only do councillors feel their job has become more complicated and demanding due to the emergence of modern technologies, but they also feel a sense of obligation to respond to citizens in many instances.

“… that’s a lot of work in constantly trying to do [responding to online comments] that. You are doing it as an individual, so the city won’t go on there and correct stuff, its councillors that do it, so I do it for the newspapers. But, there is a nasty blogger in town, …, you may have heard of him, and he writes blogs with most of it is misinformation, and hyperbolic and all of that and in that situation, its best just to stay away from it, because there’s no point in drawing attention to it. But, so there’s a real negative consequence of stories like that and the misinformation that they put out, that people actually believe it. And it’s hard to respond to that and it appears every city has that type of thing going on, from colleagues I’ve talked to throughout the province.”

(Councillor 3 – emphasis added by the researcher)
The civic administrators also treat virtual consequences as a way of getting feedback from citizens. In some cases, when feedback involves a performance issue, administrators are afforded information that if deemed valid will help them to initiate an investigation.

The analysis suggested that when comments refer to a specific issue regarding lack of service delivery or performance, the managers take it more seriously. Not all posts are relevant, so the city’s official social media policy indicates that if the user posts do not comply with the social media policy of the city, it may be removed:

“If a post violates the City’s social media the City will hide or delete the post if possible. If removal is not possible, and the post is directed at an employee, the City will respond and ask the user to refrain from further disrespectful and inappropriate comments. If the user does not comply, the City may, ignore, mute or block the user.” (Social media policy of the city – emphasis added by the researcher)

However, in public social media platforms such as Twitter and Facebook, it would be not possible for the city to delete a post without contacting the original creator. Therefore, compared to other traditional forms of media providing voice to citizens, public social media platforms such as Twitter provide an environment in which the voice of the citizen remains primarily uninhibited. This facet of ICTs has implications that I will discuss in greater depth in the next chapter.

In conclusion for the analysis of virtual consequences, data suggests the use of informal rewards and sanctions on social media and other ICTs-enabled platforms is commonplace. Individual actors often respond to consequences by explaining their actions, while corporate actors (i.e., the administration) use comments as an opportunity for feedback loops and learning from citizen perspectives.
5.2.5.3 Conclusions of the Consequences Analysis

The consequences analyzed in this study demonstrate how citizens use ICTs to voice complaints regarding the performance of the administration or certain issues related to the city. The characteristics of consequences in CA analyzed in this study suggest that citizens can immediately pass informal consequences over ICTs. They can use tools such as social media to informally reward or sanction city officials. The new findings in this study relate to the immediacy of applying informal sanctions over ICTs and the various practices one may use to provide voice in the virtual environments. To my knowledge, there are no prior studies that discuss the use of accountability voice in ICTs. This study contributes to the literature by demonstrating how voice is being exercised by citizens over ICTs.

5.3 Chapter Summary

In this chapter, I presented the analysis of the data with regard to CA using a case of a local OG. A detailed analysis of the CA relationships in the case was provided. The findings suggest an important role of ICTs in providing an environment in which an emergent form of virtual citizen forum can develop. Such forums can interact with officials by holding them to account, having virtual debates, and informally passing rewards or sanctions. Examples of phases of accountability, along with unique characteristics of these phases and how they can emerge were discussed.

In the next chapter, I focus on providing a discussion about how these findings contribute to the literature and practice. I present a discussion on how such forms of CA found here can be compared to CA discussed in the extant literature. Furthermore, I discuss how the study findings both challenge and expand upon the current body of literature.
CHAPTER SIX - DISCUSSION: EXTENDING THE CONCEPTUALIZATION OF CA

6.1 Introduction to Chapter

In this chapter, I discuss research findings and describe contributions to literature. Additionally, I highlight managerial implications that can be derived from these findings. I engage the existing literature on CA and ICTs to highlight how the findings of this study complement and extend previous research. Furthermore, I discuss how these findings challenge the previous understanding of CA processes offered in the extant literature.

6.2 Research Contributions

In this study, I address the research question of how CA works in a local OG. In order to address this research question, a case study of a local OG in Ontario, Canada was deployed. A conceptual framework was presented in Chapter 3 that was later used in the collection and analysis of the data. Interviews with 13 officials in the local government, including elected and appointed officials, provided the data. This source of data was complemented by documentary evidence and data collected from ICTs-enabled platforms such as social media. Each source of data was coded and analyzed. Overall, findings revealed a form of CA that is empowered by ICTs in addition to formal institutionalized arrangements for accountability.

I discuss the contributions in two main sections. The first part of contributions is related to the literature of accountability in general and more specifically to CA literature. The major contributions to the literature are the identification of an emerging type of citizen forum as well as extending the understanding of the process of CA in OG context. In total, four primary conceptual contributions are made, with the discussion provided below. The second part focuses on the discussion of managerial implications with regards to the findings. I highlight two
potential threats that the public managers should approach with caution. These two are the potential for multiple accountability disorder and the issue of information overload.

6.2.1 Conceptual Contributions

In this study, I analyzed the elements of CA in a case of OG. The findings suggest that ICTs can provide a new channel for information provision, debate, and informal consequences. In addition, the OG context has provided an environment fostering the emergence of a new type of accountability forum and adjustments to the process of accountability. I discuss these in more depth in the following subsections.

6.2.1.1 Virtual Citizen Forums

The first element of CA that was analyzed was the citizen forum. My research identified a new type of emergent forum. Thus, I returned to the literature on accountability forums to identify what contributions this could make. The literature on accountability explains accountability forums and discusses different types of forums (O’Kelly & Dubnick, 2014; Schillemans & Busuioc, 2015; Yang, 2014). For example, Bovens (2007a) explained accountability forum as the significant other in an accountability relationship. He explained, “the accountability forum, can be a specific person, such as a superior, a minister or a journalist, or it can be an agency, such as parliament, a court or the audit office” (Bovens, 2007a, p. 450).

Specific to CA, the forum is composed of citizen stakeholders (Meijer & Schillemans, 2009). Bovens (2007a) stated that accountability research could focus on classification of forums. He identified five types of forums but emphasized that types of forums would not be limited to these five and in fact, there is a need for identification of other types of forums:

“Public organizations and officials operating in a constitutional democracy find themselves confronting at least five different types of forums and hence at least five different kinds of
accountability… Hence, public institutions are not infrequently faced with the problem of many eyes: they are accountable to a plethora of different forums, all of which apply a different set of criteria.” (Bovens, 2007a, p. 455)

My study extends the concept of citizen forum. I showed that a new type of forum has been emerged due to the diffusion of modern ICTs. This contributes to the literature on types of forums by adding a contemporary citizen forum that I entitled “virtual citizen forum”. To my knowledge, this is the first study which has identified this type of forum. I explained the characteristics of this type of forum such as how the forum emerges, who are the members of such forums, what are the period of membership in such forums, and how the forum gets dispersed. This explanation adds to the conceptual understanding of accountability forums by explaining how forums could emerge over ICTs.

Expanding on his accountability framework, Bovens (2009) extended the concept of accountability forum by introducing the concept of virtual forums. In general, “the accountability forum or the accountee, can be a specific person or agency, but can also be a virtual entity, such as, in case of devout Christians, God or one's conscience, or, for public managers, the general public” (Bovens, 2009, p. 185). He specifically referred to the general public as a virtual type of forum. However, he did not provide any explanation or empirical evidence to demonstrate how accountability relationships would operate when a virtual forum is present. The literature offers limited empirical support for the concept of the virtual forum and the research has remained limited in this area. My study offers empirical support for the concept of the virtual forum and presents an instance of such forums which is facilitated by ICTs in contemporary contexts. As such, this study complements the literature by expanding the concept of virtual forums.
Colleagues of Bovens in the Utrecht accountability group argued that a greater conceptual understanding of the concept of forum is needed. Specifically, when it comes to the reasons and incentives as to what shapes the behaviour of a forum and why and how it is shaped:

“More refined theoretical expectations as to the role of forums and when forums are more likely to take up a passive or an active role should be developed and reflected in accountability theory. A better understanding of the reasons, incentives and motivations that shape the behaviour of different forums is needed, moving beyond taking the role of forums in accountability for granted.” (Schillemans & Busuioc, 2015, p. 207)

My study contributes to this literature by specifically explaining how the virtual forum is shaped. In addition, I contribute to this literature by explaining the characteristics of the temporary life of such forums. Moreover, this research has explained the characteristics of this type of forum, including how it emerges, triggers a process of CA, and how it is dispersed. This extends the literature on accountability by providing a new type of forum adding to those previously described (e.g. Bovens (2007a); Romzek and Dubnick (1987); Stewart (1984); Sinclair, 1995). In addition, this study provides empirical support for the concept of a “virtual forum” (Bovens, 2009), and the role of ICTs in the emergence of such forums.

6.2.1.2 Information provision and Debate in OG

The process of CA consists of three main phases including information provision, debate, and informal consequences (Meijer & Schillemans, 2009). In this subsection, I discuss how the current study contributes to our understanding of the first two phases of the process of CA. The first phase of the process of accountability between citizen forum and public administration is the provision of information by the actor (i.e., the government). In CA, the citizens should rely on publicly available information that is provided by the government in accordance with laws or through demands for information using the freedom of information regulations (Sugiyama, 2016).
“If public administrators do not provide the information needed or if citizens do not have access to crucial data due to privacy or security rules, they will or cannot engage in the democratic activities of monitoring, deliberating and participating.” (Ruijer, Grimmelikhuijsen, & Meijer, 2017, p. 51)

The findings of this study provide empirical evidence for various information provision channels in the context of OG that are facilitated by ICTs. The case study revealed the attributes of timeliness coupled with informal linguistic structures used in such information provision behaviours. Although the accounting literature on the information disclosure emphasized on the impact of timeliness as one of the dimensions of disclosure (e.g. Gustavsson & Wänström, 2009), the prior understanding of information provision that was discussed in the public administration literature did not include the use of informal linguistic structures in such information.

Schillemans and colleagues (2013) make a similar argument that innovations in public sector government that are facilitated by ICTs, would have an impact on CA. The authors identify several factors making this possible:

“[Innovative] forms of accountability make a clear break from the standardized “same procedure as last year” type of information provision in traditional accountability. The accuracy, timeliness, and clarity of the information provided in all the initiatives are often higher.” (Schillemans et al., 2013, p. 425)

My study complements Schillemans et al. (2013) findings by demonstrating how exactly timeliness is working in real-time information provision. In the interactive map application of the city, it was shown that when a service request is created by the citizens, an automatic timestamp is attached to the request order instantly. Such information is readily available for every user to review and comment on. These findings clarify the notion of timeliness which was left without definition in Schillemans et al. (2013).
Moreover, my study demonstrated that OG initiatives are attempting to change the content and structure of the information provision by making them more simplified and understandable for users without expert knowledge. This complements and extends the notion of ‘clarity’ that remained as a word without much explanation or definition in Schillemans et al. (2013). Instances were cited in my study to demonstrate how the government is making information more accessible using modern software technologies. Addition of such notions extends the contribution of Schillemans et al. (2013) with regards to accountability in innovative contexts.

Schillemans and colleagues (2013) provide the following explanation as to how technologies may facilitate such forms of accountability:

“[In innovative initiatives such as OG] governments exploit the possibilities that digital and 2.0-technologies have on offer to tailor the provided accountability data to the specific demands of the accountability forum or situation. In doing so, these digital, technology-dependent accountability mechanisms increasingly succeed in combining the gist of a diversity of sources of information, thus opening up opportunities for conflicting insights and cognitive stimuli for learning-policy actors.” (Schillemans et al., 2013, p. 425)

My study also highlights how virtual CA relationships emerge where modern ICTs have facilitated instantaneous two-way interaction in the local OG that was studied. Citizen use of ICTs to tailor their demands for accountability and vocalize any governmental concerns was empirically demonstrated in several instances. Overall, this provides evidence that social media allows for a unique and complex level of attendance and information sharing which empowers users of these web-based systems to join in, collaborate and share diverse information and engage in a conversation with one another (Bertot, Jaeger, & Grimes, 2012).
Schillemans et al. (2013) also discuss the novelty of such types of information and the ability for citizens to have an active role in initiating accountability in various contexts. For example, they highlight how modern ICTs can create a direct channel of communication between the government and citizens that bypasses the “traditional filter” of news and media. There are fundamental differences between traditional media and social media which lies in the user-generated content. In social media, there are many interactions by the general public to generate an open dialogue. However, in traditional media, there is only one-way interaction (Bertot, Jaeger, & Grimes, 2012, p. 82). Social media has allowed people to interact directly with their representatives and government officials instantaneously. Furthermore, the use of government social media has increased openness and accountability by enhancing citizen participation and engagement in decision-making and policy development, facilitating openness and transparency efforts, and reducing corruption (Stamati et al., 2015). Thus, citizens have become consumers and co-producers of information (Petrakaki, 2017). My study extends the conceptualization of CA due to the emergence of ICTs such as social media. This study has provided additional characteristics of various elements of an accountability relationship (i.e., forum, information provision, debates, consequences).

With the introduction of social media, the Internet has changed from a source of information to a way of correspondence with trusted people who hold influence over the rest (Hanna et al., 2011, p. 272). Social media creates a space that not only allows but suggests governments must provide more detailed information for the public that they represent (Bertot et al., 2012).

Despite emphasizing the role of technology in changing the nature of CA phases, Schillemans and colleagues (2013) left several remaining questions. For example, the authors did
not provide an in-depth description as to what is meant by information being more accurate or clear. This study complements such studies by offering an in-depth description for the attributes of new information provision (i.e., intentionally disclosed, timely, simplified and easy to understand, accessible) within the innovative context of OG and explaining how such information is being used by citizens. This study also adds to the literature by providing an explanation for how citizens use OGD and how using OGD mediate the information provision phase of CA. It was demonstrated that citizens are empowered by modern tools such as smartphones; which they can use to collect data and subsequently use that data to pass judgement. Publicly visible platforms can then be used to publicize information and/or judgement, which can trigger a virtual CA process.

The debate phase of CA takes place when members of the forum meet to discuss the actions and behaviour of the actor (Schillemans, 2008). This study provides a description of the debate process between citizens and public officials over social media and other ICTs. In doing so, this study provides empirical evidence demonstrating how the debate between citizens and public officials works on 2.0-enabled ICTs. Study findings presented in Table 5.4 suggest the unique characteristics of virtual debates such as timeliness, structure, format, and archival traces of virtual debates. These characteristics (i.e., instantaneous formation, temporary structures, use of informal linguistic, automatic generation of the archival trace) help to distinguish this form of debate from the traditional understanding of debate present in extant accountability literature. Thus, this study adds to the literature on CA by providing the characteristics of virtual debates held over ICTs. Such conclusions are partially inline with scholars such as Wright (2007), who studied “Futurum” as a virtual form of a public forum in which users can connect and have a discussion about public policies over the Internet.
My study contributes to the literature of accountability by first introducing the concept of virtual debate. These debates are about the behaviour and conduct of the actors, but they take place over ICTs. The accountability literature does not discuss the characteristics of accountability debates in much detail. Specifically, the literature does not provide any evidence on using informal linguistic structures and affective visuals in CA debates. My study found several novel features of virtual debates over the ICTs channels. For example, frequent use of informal linguistic structures, and affective visuals such as memes, or GIFs (“graphical interchange formats,”) were evident. The importance of meaning and information that is implicit in such communication elements have been discussed in the literature predominantly in the area of communication and linguistic research (see for example Highfield & Leaver, 2016; Tolins & Samermit, 2016). Tolins and Samermit (2016) argue that online users “use GIFs either as affective responses displaying their stance toward prior talk or as co-text demonstrations of affect and action. The use of GIFs represents a novel form of an embodied re-enactment made possible within the technological advances of the communicative system” (Tolins & Samermit, 2016, p. 75).

6.2.1.3 Utilization of Voice through ICTs

Another contribution of this study is that it explains the utilization of citizens’ voice as an informal consequence through ICTs. Two forms of informal consequences (i.e., exit and voice) are discussed in the literature for use against public actors in cases wherein forum is not satisfied with the performance or behaviour of a public actor (Paul, 1992). Voice remains the only consequence option when there is a monopoly of service provision; like in the case of OG in local Canadian governments. Meijer and Schillemans (2009) discuss how citizens use voice in public organizations such as schools, hospitals and land registry offices. However, there is little
evidence as to how ICTs can enable voice over such platforms. This study offers some insights into how voice is being exercised over ICTs by citizens.

Prior research has highlighted the positive impact of ICTs use in public administration context. For example, Song and Lee (2016) reported that citizen use of social media services is positively associated with one’s perceived effect of social media in fostering government transparency, which, in turn, is positively related to one’s trust in government” (p. 445). While such findings support the role of ICTs in promoting transparency, the prior literature on how such platforms can be used as a channel for informal consequences is limited. My study provides an explanation as to how ICTs are used by citizens to express dissatisfaction and informally sanction public officials for lack of satisfactory behaviour. Conversely, the study also demonstrates how citizens use such technologies to informally reward public actors for satisfactory behaviour. The perceptions held of city officials with regard to such behaviours were analyzed and explained, with findings offering empirical support to the literature on informal consequences.

6.2.2 Managerial Implications

From a managerial perspective, it is important to consider the implications of the growing complexity in the accountability relationships that were identified in this study. In the subsections that follow, I highlight two issues that this research identified in light of these contemporary trends. The threats of multiple accountability disorder and information overload could potentially emerge in OG context. Bureaucrats and politicians who intend to implement OG initiatives and deal with citizen engagement practices need to carefully approach these issues and have strategic plans to remedy them in case they emerge. This section highlights the
potential for these issues given: a) the added complexity and number of potential accountability relationships, and b) the amount of available data.

6.2.2.1 The multiple accountability threat

As it was discussed earlier in this chapter, the emergence of modern ICTs has contributed to the enhanced potential for direct CA between a bureaucratic agency (i.e., civic administration) and citizens. Moreover, the formal institutionalized accountability mechanisms that exist between the bureaucratic agency and the political representatives (i.e., council) remain in place as a formal oversight to monitor and control the performance of the administration. Altogether, these accountability mechanisms could potentially contribute to what the literature refers to as “multiple accountability disorder” (Koppell, 2005).

Multiple accountability disorder happens when public managers “desire to please all external accountability forums, they sway and put off making decisions, and thereby end up meeting none of the accountability demands” (Schillemans, 2015, p. 437). Bovens (2009) describes several issues that may arise if public managers face multiple accountability relationships between different stakeholders. Problems such as “multiple accountability disorder” (Koppell, 2005), excessive accountability obligations (Schillemans, 2015), “tangled web of accountability” (Romzek, 2011), or “accountability dilemma” (Behn, 2001) all to some extent diminish the performance of public managers. According to Messner (2009):

“there are cases in which multiple accountabilities act upon a manager or organization. If different stakeholders raise conflicting demands, then this requires the accountable self to speak in several languages at the same time” (Messner, 2009, p. 919).

Schillemans (2015) concludes that “processing the information demands of multiple accountability costs loads of time” (Schillemans, 2015, p. 436). With regard to multiple
accountability, Schillemans (2015) identifies several frustrations that public managers may deal with, such as: “substantial demands on the organization’s time, poor follow-up, an unproductive preoccupation with details, negativity and mistrust, and ambiguity and uncertainty, which can result in multiple accountabilities disorder” (p. 438). In the context of innovative accountability mechanisms like OG initiatives, Schillemans and colleagues (2013) argue that “the innovative accountability mechanisms further contribute to the existing institutional complexity. Their multifaceted character implies that decision-makers need to put considerable opportunity costs in terms of time and resources into accountability processes” (Schillemans et al., 2013, p. 409).

Therefore, from a managerial perspective, the problem of multiple accountability might be a concern for the future success of OG goal achievement in local governments. The organizations who are adopting such practices should consider such threats when incorporating these initiatives in their strategic plans.

As it was discussed in Figure 6.1, the emergence of virtual CA in the city has generated new accountability relationships between the citizens and public officials. This provides the potential for multiple accountability issues. Specifically, in part two of the conceptual model in Figure 6.1, the managers of the city could be both accountable to the data transformers and citizens as well as the council. By publishing the following quote in the OGD licence of the city, the managers have discharged their responsibilities regarding any potential errors or issue in the data:

“The Information Provider is not liable for any errors or omissions in the Information and will not, under any circumstances, be liable for any direct, indirect, special, incidental, consequential, or other loss, injury or damage caused by its use, or otherwise arising in connection with this license or the Information even if specifically advised of the possibility of such loss, injury or damage.” (City’s OGD Licence)
However, the findings of this study suggest that citizens still hold the city to account if an application was developed based on OGD and if there is an error. So, a suggestion for the city would be to better inform the citizens regarding the OGD policies and also evaluate the multiple accountability issues if there was any.

6.2.2.2 Information overload

The emergence of new technologies such as social media and smartphones has contributed to a surplus of information referred to as Big Data (Arnaboldi, Busco, & Cuganesan, 2017). The problem with myriad types of information is that it is unstructured (i.e., does not follow any specific standard format or template) and it requires certain skills to organize and subsequently analyze. Therefore, it may be too costly to analyze and make sense of this type of information, especially for average citizen stakeholders. While the end goal of having information at one’s fingertips is to hold the government accountable, having too much information can cause some issues in passing accurate judgement. This phenomenon is known as information overload (Eppler, Martin J.; Mengis, 2004). After conducting a systematic literature review on information overload, Eppler and colleagues (2004) found that information overload can cause the quality and accuracy of a decision to suffer. The authors also reported that information overload may contribute to reduced levels of individual satisfaction and motivation as well as delayed decision making.

In this study, a trend that was observed in OG is one toward providing increased amounts of information (e.g., OGD applications, proactive information disclosure by the citizen using OG tools or ICTs). Therefore, the threat of information overload is real and could affect the efficiency of the service provision in the city. The ease of use of ICTs can also result in overload. For example, using the interactive map application that was described in chapter 5, the citizens
could potentially report many irrelevant incidents or issues in the city. Any service request should, therefore, be authenticated and prioritized. The managers need to think about methods to authenticate the legitimacy of service requests.

The managers of the city should revisit its policies regarding how they are going to deal with the surplus of information which is produced by the citizens. Strategic planning should be set in place that carefully outlines how to deal with these issues.

6.3 Modes of citizen participation in the virtual CA relationships

In this section, I discuss my observations in the findings in comparison to the CA conceptual framework of the study. I provide an illustration of these observations in form of a conceptual model which was constructed according to the elements of CA emergent in this study. Figure 6.1 depicts 2 conceptual models that demonstrate an extension of the process of CA according to study findings. Models 1 and 2 were developed to represent two extended forms of CA that I was able to identify. In the subsections that follow, I describe the elements and processes of each model.

![Figure 6.1: Modes of citizen participation in CA in the local OG (Source: Developed by the researcher)](image-url)
6.3.1 Mediated information in virtual CA

The first form of virtual CA found in this study takes place when OGD is used and the data is transformed by a third party. This type of virtual CA is depicted in part 1 of Figure 6.1. This form of CA that the data revealed can be best exemplified by referring to OGD initiatives in the city that were already discussed. For example, the civic administration had provided data in terms of an OGD catalogue of the city. Among the citizens, users had the ability to manipulate the data via generating new product (e.g., visualizing the data) or generating new applications based on OGD datasets. In essence, these citizens could utilize available datasets and generate information based on the data provided. Information provision in this regard took a particular shape. For example, the bus schedule application that was demonstrated in the data analysis exemplifies this process (please see Appendix G, subsection 15.3 for the complete instance of this event). The bus schedules were provided in a tabular format, but the application developed using such data depicts the information using a map. In such cases, the data and the information generated from that data differed in shape and presentation, influencing citizen perceptions.

In cases where data could be transformed by others, a new information product is developed. Although the producer of the account (e.g., datasets) remains the government, the data is manipulated, and its nature has been changed to a different information product. Thus, the accountability relationship between the producer of the account and the accountability forum is mediated by a third-party actor. The debate between the producer of the account and the accountability forum could still take place on social media platforms using ICTs. However, this type of virtual debate differs in the sense that the actor is not formally mandated to be responsive. As explained in the data analysis, if the number of followers or the attention of citizens piqued for a certain post or comment on social media, then the actor would be more
likely to feel a sense of obligation to get engaged in the online debates with the virtual forums. Subsequently, the virtual forums can use informal consequences (i.e., voice) over ICTs to pass informal sanctions against the actor(s) and hence complete the CA process.

Prior conceptualization of information provision in the accountability literature suggests that the actor provides the information for the forum without any interception (Bovens et al., 2014). My first observation in terms of the CA process, in this case, was that a third party (e.g., application developer, data visualizer) may transform the data that is provided by the government officials into a new form for citizens. This is also briefly discussed by Schillemans et al. (2013) that “accountability data released to the public can then be taken up and re-released in different shapes, and thus become dynamic” (Schillemans et al., 2013, p. 420). However, Schillemans et al. (2013) did not explain how exactly such process works or what exactly they mean by dynamic. My study complements the literature of accountability by demonstrating that the information provision channel that was conceptualized by Bovens could be mediated and the data could be changed to a different form and type. To my knowledge, the mediation of information and concepts such as information distortion or errors in the data were not discussed in the public administration accountability literature. My study also shows how the process of mediating the information channel works by providing instances of how information provision could become dynamic when a third-party actor manipulates the information.

What I observed was that the government is intentionally, and proactively provides information for the citizens so that they can transform it and call the government to account. They are doing it because they believe it improves learning, efficiency, and democratic processes. I observed that this is happening in the city. It is worth noting that this practice is common in the corporate world. Whenever financial reports are submitted, analysts transform it
and others will use that to call the CFO to account. Similarly, my analysis demonstrates the same process in the public sector.

### 6.3.2 Alternative initiation of the CA process

The second type of virtual CA process that I observed in this study occurs when the virtual citizen forum acts as an information collector and the CA process starts when information is made public. This type of virtual CA is depicted in part 2 of Figure 6.1. The differences between this instance and part 1 of the model are in regard to how CA is conceptualized. Accountability literature suggests that the first phase of CA is initiated when an actor provides information for the citizen forums (Bovens, 2007a; Meijer & Schillemans, 2009). The findings of this study to some extent challenge such understanding. It was found that the first phase of the CA process in certain conditions is not the provision of information by the actor but the dissemination of information that has been collected by the forum. Research refers to such processes but does not offer an extension for the process of accountability. For example, Schillemans et al. (2013) have discussed *Citizen-Initiated Accountability* as forms of accountability that “are not exclusively about government giving an account of its actions, but are also about citizens actively calling public organizations to account” (Schillemans et al., 2013, pp. 422–423). This study complements such findings by adding a new phase to the conceptualization of the process of CA, which is the public dissemination of information over ICTs.

With new forms of information available, citizens can hold both elected and appointed officials to account over ICTs. The analysis suggests that in this type of CA, the process of CA does not necessarily begin with information provision by an actor. In such contexts, the citizens are capable of using modern tools for collecting data and based on their self-collected data they
can provide information to other citizens by posting such information on publicly visible platforms using ICTs. Such visibility of information can trigger public attention to certain issues, such as a lack of performance or lack of responsiveness by an actor. Similar to the first type of virtual CA discussed in part 1, the actor in this type is free to get engaged in virtual debates as a means to justify information, explain their behaviour, or provide more information regarding the questions posed by members of the virtual forums. There is no formal obligation for the actor to engage in virtual debates. However, posting a sensitive issue can often create a sense of obligation to respond. Finally, the actor may face informal consequences using voice which are made public over ICTs. Such consequences, for example, could be blaming or disparaging certain individuals or the city administration which were exemplified in the findings.

I observed that the citizens are collecting data and call the public officials to account. Moreover, I identified instances where the city was not supposed to account for something that was not part of the policy, but the citizens expect them to account even for things that are not part of the policies. There is a potential that accountability has become ex-ante. Future studies could look at the pressures that are generated through these interactions.

6.4 Chapter Summary

This chapter provided a discussion on how the findings of this research compliment, extend and to some extent challenge the existing literature on CA. The conceptual contributions and managerial implications of this study to the literature of CA were also discussed.

Studies such as Schillemans et al. (2013) highlight the instances of how innovations in public sector governments are changing CA. This research extends such studies by providing empirical examples as to how innovations in ICTs have provided an environment that a virtual
form of CA relationship emerges. This study also provides emerging insight into the analysis of elements of CA, such as the explanation of a new type of virtual citizen forums using a case of local OG. Such findings complement previously held understanding of CA discussed by other scholars (e.g., Meijer & Schillemans, 2009). The contributions of this study are primarily associated with new insights into how CA works in the context of OG.

The final chapter of this dissertation will conclude this study and provide a summary of what has been done. Furthermore, it will provide some insights for theoretical implications and future research opportunities considering the limitations of this study.
CHAPTER SEVEN - CONCLUSIONS

7.1 Overview of the Research

This research attempted to address the research question of how the entire CA process works in a local OG. This study began with a review of the literature on accountability. The focus of the literature review was to identify what accountability is; How it is conceptualized; The different components of accountability; Which specific type of accountability is relevant to the context of OG; And finally, what research gaps remain in the literature.

The thesis continued by presenting the methodology that employed to address the research question. The methodology chapter presented the design of the study and justified a single case study design. Data collection methods and analysis procedures were explained in this chapter.

The thesis continued by presenting the conceptual framework of the study. It presented Bovens’ (2007a) model as a suitable framework for organizing the data and analysis. The value of this framework for use in the study was two-fold. First, it provides a set of parsimonious criteria to evaluate whether a relationship qualifies as an accountability relationship. Second, it provides two key concepts regarding the analysis of an accountability relationship. It provides both the elements of such relationships and the processes of an accountability relationship between an actor and a forum.

The conceptual framework chapter was followed by an empirical chapter for the analysis and findings from the data. To address the research question of this study, I conducted a case study in a local Canadian government that had recently implemented OG and is recognized as a leader in implementing OG in Ontario. The dataset of this research included data from semi-
structured interviews with 13 recruited participants from city officials and was supplemented by archival documents and online content collected from the official website of the city and online sources, including social media such as the mayor’s blog, Twitter, Facebook, and OG applications that were developed and implemented specifically for the city.

I analyzed the elements of accountability relationships between the citizens and public government. Results indicate an emerging CA relationship within the city. Data analysis revealed instances of new CA relationships that were emerging specifically through the use of ICTs. It was found that citizens were using modern tools such as smartphones, and social media to directly interact with the city officials and hold them to account. Instances of how citizens have used certain tools to initiate CA were observed and reported out. Finally, the unique characteristics of such CA relationships were discussed. In the section that follows, I summarize the major findings and contributions of this study.

7.2 Summary of the Major Findings and Contributions

This study found the emergence of a new type of accountability forum that I labelled “virtual citizen forum”. Such forums were found to have unique characteristics that distinguish them from the conceptualization of forums offered in the accountability literature. Empirically, it was shown that virtual citizen forums’ membership is not explicitly defined, nor does it follow any specified membership requirements. Members can be anonymous, and the period of their membership is also undefined and can vary in temporal duration. The size of such forums was found to be dynamic, growing or decreasing in size during its lifespan. The change in size may change the power relationship between the forum and actor. Lastly, the emergence of the forum
was explained to be dynamic. It could be initiated spontaneously through an event in the city where citizens were motivated to express concern regarding an issue.

Another finding in this study was related to understanding the processes of CA. All three phases of the process of virtual CA found in this study had unique characteristics distinguishing them from what was conceptualized in Bovens (2007a) model. First, real-time information provision was illustrated through the use of new OG tools. Most notably, the use of affective visual elements in information provision and online debates between citizens and officials was reported. Moreover, an emphasis on simplicity and understandability of the information reported in virtual forums was discussed.

With regard to informal consequences, this study demonstrated how voice is exercised by citizens over ICTs. It was shown that new OG tools and ICTs have provided an environment in which citizens can voice their dissatisfaction and complaints, with the process serving as an informal consequence against the local government. Similarly, instances of using ICTs for the informally rewarding satisfactory behaviour of city officials were demonstrated. For example, it was demonstrated that citizens provide positive comments through ICTs to support actions that they support.

The main contribution of this research is presented in Figure 6.1. In this figure, I have made a conceptual contribution by adding the emerging virtual CA to the conceptualization of accountability. This addition has two consequences. First, it demonstrates that the information phase of such processes could be mediated by data transformation by citizens. Along with this vein, I discussed how such processes work. More specifically, citizens or other parties may transform the presentation of the information provided in virtual forums. The data, in its new
shape, could then be perceived differently. Nonetheless, citizens might still hold the initial actor to account although the data has been transformed by another party.

Second, I demonstrate how citizens can trigger the CA process by collecting their own data, particularly through the use of ICTs. Prior conceptualizations of CA suggest that the process of accountability is initiated when the actor provides information to the forum. This study identified that citizen forums can trigger the process by publicizing self-collected information. Despite Boven’s (2007a) accountability framework suggesting that actors provide the information to the forum, this case illustrates that the forum could generate self-collected information and publish it over ICTs, to trigger an instance of CA. Thus, this study argues for an extended conceptual model to expand our understanding of CA in an OG context.

7.3 Theoretical Implications

Bovens (2007a) framework of accountability is based upon a principal-agent view of relationships in democratic contexts. He notes that “the relationship between the forum and the actor can have the nature of a principal-agent relation — the forum being the principal, for example, parliament, who has delegated authority to a minister, the agent, who is held to account himself regularly about his performance in office” (p. 451). Furthermore, he emphasizes the principal-agent views of such relationships in democracies by stating that “accountability is exercised along the chain of principal-agent relationships. Voters delegate their sovereignty to popular representatives, who, in turn, at least in parliamentary democracies, delegate the majority of their authorities to a cabinet of ministers. The ministers subsequently delegate many of their authorities to their civil servants or to various, more or less independent, administrative bodies.
The mechanism of political accountability operates precisely in the opposite direction to that of delegation” (p. 455).

Principal-agent theory suggests that tension is present in a contract relationship between the principal and an agent, due to the differing interests of both parties (Eisenhardt, 1989; Jensen & Meckling, 1976). Agents are self-interested utility maximizers who will put their own egotism before the interests of the principal when consequences are absent. External control methods to ensure accountability are favoured by principals who view agents from the principal-agent perspective. These methods of oversight and monitoring provide instructions for the agents and constrain their discretion (Dicke, 2002). The use of different systems of accountability to warrant submissive behaviour by the agent is a large focus in the accountability literature (Broadbent & Laughlin, 2003). Broadbent and Laughlin (2003) argue that contracts and accountability systems allow the autonomy of the agent to be overcome.

In public administration literature, the principal-agent theory posits the agency as one in which “the agents executing or performing public duties seem to or run the risk of becoming independent of their political or administrative principals” (Schillemans & Busuioc, 2015, p. 195). These issues are referred to as self-serving bias. In this relationship being described, the agent holds information and can decide whether and to what extent he or she shares the information with the principal. This is known as the information asymmetry issue (Eisenhardt, 1989). Accountability as a mechanism is known to be used by the principal to control the agent and thus mitigates self-serving bias and information asymmetry (Strøm, 2000). Through accountability mechanisms, principal can hold the agent to account and obtain information regarding the performance of the agent.
While agency theory is among the most commonly used theories when it comes to accountability research (Schillemans, 2013), extant literature identifies certain limitations for the use of agency theory in public domain accountability. An issue that has been discussed is that of the distinction between ‘principal’ under agency theory and the notion of ‘forum’ in accountability relationships. Schillemans and Busuioc (2015) distinguish accountability forums from principals by identifying seven unique discrepant empirical findings related to forums. They argue broadly that the principal-agent view of accountability relationships is limited. More specifically, when it comes to studying accountability relationships between citizens and a democratic public government agency, the label of principal-agent relationship would not be appropriate. Conceptualizing such accountability relationship as a forum-actor relationship with unique characteristics of the forum and actors remains a more appropriate choice (Schillemans & Busuioc, 2015). In this study, I found a type of forum consisting of citizens and actors with roles in civic administration, as councillors, and as city managers.

Laughlin (1990) provides a theoretically informed framework for accountability relationships between two parties. He posits that accountability relationship starts with the delegation of responsibilities from the forum to the actors “with some expectations surrounding the transfer” (p. 95). At the heart of these expectations is the notion of exchange. This view is also acknowledged by Bovens et al. (2014) conceptual consensus of accountability where they state that accountability is a relational concept in which there is an exchange between two parties. The exchange here is the transfer of resources and the provision of information in return. This exchange was also part of the accountability relationships analyzed in this study.

In my study, citizens transferred their financial resources by paying taxes and delegated the responsibilities of providing city services to the local government. In return, citizens and their
representatives demand information as to how the administration has used the financial resources. Traditionally, the administration provided various financial and performance reports in order to render their account to the citizens. This is a singular form of exchange which has been discussed by Laughlin (1991). He puts this exchange as one type of transfer and includes the demand for information as part of the transfer of the resources. My study extends the understanding of how accountability relationships work by extending the characteristics of exchange. What my study shows is that there also exists a continuous demand for information by the citizens through the use of ICTs. Therefore, information provision is not just a singular type of demand that citizens ask for, which results in a set of reports at the end of the year on the conduct of the government (i.e., ex-post demand for information). The new channel of information exchange is continuous and malleable because it can evolve and change instantaneously. Through social media, citizens can demand information regarding any issue that they observe in the city and government officials feel the obligation to provide information in return. This channel of information is facilitated through ICTs and is completely absent from Laughlin’s accountability framework.

In order to articulate how and why this element has become part of the accountability relationship, institutional theory can provide some insights. From an institutional perspective, there are institutional norms associated with each of the elements of accountability relationships discussed by Laughlin (1991) and Bovens (2007a) within a democratic context. The norms that are associated with accountability are different in the realm of the state as opposed to the realm of society. A democratic government consists of several distinguishable elements. A regime or system of governance, the rulers, the citizens, the public realm, and a competition between different views and parties all constitute important elements (Schmitter & Karl, 1991). Within
different realms, there are certain institutional constraints that underlie what democracy means. The structure of a democratic government is informed by these institutional constraints. Governments are structured based on certain laws and policies that are institutionalized and normalized over time. For instance, there is an expectation that the local government reports annually on the usage of financial resources.

Citizens expectations create certain social norms within the broader arena of a democracy. These expectations are generated based on what society deems appropriate. These social expectations generate institutional pressures that can influence the actor’s behaviour (Dimaggio & Powell, 1983). To add complexity to the situation, social norms and expectations are changing and evolving over time (Downs, 1987). For instance, in this study, it was found that the emergence of ICTs facilitated an environment in which citizens expect information provision and justification of government conduct. Such expectations did not exist in the same fashion prior to the emergence of ICTs, particularly with regard to immediacy. The unique characteristics of ICTs and the emergence of unique forms of interaction between the citizens and public officials differentiate them from traditional forms of media (Bertot, Jaeger, & Grimes, 2012). These factors create institutional pressures affecting the broader arena of democracy. Within the state arena, certain institutional norms and expectations exist for a democratic organization. Within the social domain of government operations, there are also certain social norms and expectations. These two set of norms sometimes are aligned with each other but may conflict as well.

ICTs enable focus, articulation, and mobilization of social norms in ways not previously possible (Orlikowski & Barley, 2001). My study demonstrates that through ICTs, social norms and expectations held by citizens are mobilized and relayed to government officials quickly and
efficiently. The continuous demand for information by citizens mobilizes social expectations and becomes an institutional influence on public actors’ behaviour when interacting with citizens (e.g., the street-level bureaucrats, the civic managers, and the citizens’ representatives). The city creates and adjusts its institutional norms to accommodate social norms. To sum up this subsection, it can be concluded that ICTs do not fundamentally change how accountability functions, but they do fundamentally change how accountability relationships work because of this continuous and visible demand for information. ICTs enable public visibility of the exchange of expectations and norms, and this interaction influences the behaviour of public actors.

7.4 Limitations

According to Hancock and Algozzin (2006), “Limitations are factors that may affect the results of the study and are generally beyond the control of the researcher” (p. 75). It is important to note that OG has been adopted and implemented differently in various organizations and have implemented their own tools. While the main principles of OG are the same, each local government has tailored OG based on their specific needs and implemented unique tools. Repeating studies of CA in other OG contexts may result in other findings and further our understanding of how CA works in OG.

As discussed in the literature review section, accountability has been conceptualized by various frames and types. In this study, I chose a framing that was aligned with the objective of my study. It is advisable to consider other framings and study if the accountability relationship has changed under other frames in an OG context. Future studies could explore the relevance of other types of accountability in contexts similar to Canadian OG.
Third, in this study, I assumed that transparency and citizen participation were present. It is plausible to expect that in cities where OG initiatives have been adopted and implemented successfully, an environment is created that supports transparency and participation. Even though the instances of data disclosure and citizen participation were sufficient for my conclusions to hold, future research should adopt a more critical lens and measure both transparency and citizen participation. It would be interesting to study how accountability operates under various levels of transparency and citizen participation.

It should be also noted that the demographic characteristics of the users of social media and modern ICTs are perhaps most commonly found within a certain population. More specifically, the literature suggests that younger people are more inclined to use such tools and technologies (Duggan & Brenner, 2013; Perrin, 2015). Future research should consider whether age or generation play a role in understanding the impact of virtual CA.

7.5 Suggestions for Future Studies

Future research endeavours could focus on conducting similar case studies to expand the conceptual model that was proposed in this study. This would help to extend the phases of the CA process. Specifically, focusing on developing a measure which can compare the CA outcomes in traditional versus OG contexts would be a valuable attempt. Specifically, the accountability outcomes could be evaluated in different contexts and compared between traditional and OG contexts. As it was discussed in studies such as Schillemans et al. (2013), the potential of learning from citizens in innovative contexts such as OG is quite substantial. There is a need for more research to evaluate and compare such outcomes at different levels of government in Canada, including at the local, provincial, and federal level.
Future research could also consider investigating the tension between formal institutionalized accountability arrangements (i.e., council and CAO) and the virtual CA. It is important to understand whether such tension can be conceptualized with regard to ambidexterity in the organizations, and what the optimal balance between such arrangements would look like.

As it was discussed in the context of this study, one of the drivers behind OG adoption was that by taking such initiatives, governments could “rebuild trust” with citizens. Future studies can focus on evaluating the effectiveness of such claims by understanding whether OG and virtual CA impact the perceived level of trust held by citizens. Moreover, it would be interesting to pursue a study that looks at multiple accountability issues and whether such issues remain a concern in an OG context. This would allow researchers to parse out how trust varies between different stakeholders (i.e., council, citizens, and administration).

The analysis of Big Data with regard to virtual CA, such as social media content, requires the use of computer analytics. Future studies can focus on analyzing such data to quantify the percentage of data that confirms or disconfirms the percentages of citizen participation in OG. Furthermore, studies can also evaluate the impact of OG on citizen learning and the patterns of learning that could emerge with regard to such interactions.

This study identified the use of elements of communication in virtual debates held between citizens and city officials. While the importance of such communicational elements has been highlighted in the literature of other disciplines, the accountability literature does not offer much insight into how such elements might impact the debate between actors and forums. Identification of such elements in my study opens a pathway into future research as to how
citizens perceive such information and subsequently how they act upon it in terms of holding the public actors to account.
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https://doi.org/http://dx.doi.org/10.2139/ssrn.2012489
APPENDIX A - ETHICS APPROVAL CERTIFICATE

RESEARCH ETHICS BOARDS
Certification of Ethical Acceptability of Research
Involving Human Participants

APPROVAL PERIOD: February 3, 2016
EXPIRY DATE: February 3, 2017
REB: G
REB NUMBER: 15DC008
TYPE OF REVIEW: Delegated Type 1
PRINCIPAL INVESTIGATOR: Baker, Ron (ron@uoguelph.ca)
DEPARTMENT: Department of Business
SPONSOR(S): N/A
TITLE OF PROJECT: Accountability and the Role of Accounting: A case of Open Governments

The members of the University of Guelph Research Ethics Board have examined the protocol which describes the participation of the human participants in the above-named research project and considers the procedures, as described by the applicant, to conform to the University's ethical standards and the Tri-Council Policy Statement, 2nd Edition.

The REB requires that researchers:

- Adhere to the protocol as last reviewed and approved by the REB.
- Receive approval from the REB for any modifications before they can be implemented.
- Report any change in the source of funding.
- Report unexpected events or incidental findings to the REB as soon as possible with an indication of how these events affect, in the view of the Principal Investigator, the safety of the participants, and the continuation of the protocol.
- Are responsible for ascertaining and complying with all applicable legal and regulatory requirements with respect to consent and the protection of privacy of participants in the jurisdiction of the research project.

The Principal Investigator must:

- Ensure that the ethical guidelines and approvals of facilities or institutions involved in the research are obtained and filed with the REB prior to the initiation of any research protocols.
- Submit a Status Report to the REB upon completion of the project. If the research is a multi-year project, a status report must be submitted annually prior to the expiry date. Failure to submit an annual status report will lead to your study being suspended and potentially terminated.

The approval for this protocol terminates on the EXPIRY DATE, or the term of your appointment or employment at the University of Guelph whichever comes first.

Signature: Date: February 3, 2016

L. Kuczynski
Chair, Research Ethics Board-General
Thank you for agreeing to speak with me. The information that you share with me will be used to support the development of my Ph.D. thesis in Management at the University of Guelph. My Ph.D. dissertation will be published publicly on the University of Guelph website and will be accessible for you to review the findings of this study. I anticipate that this study will have some managerial implications that will be useful to your organization. In the case of personal inquiry, I will provide a copy of the final report of my study to the management board of this organization. As explained in the consent letter, my research is centred on investigation of the accountability relationships between local open government and the citizens of the city. The following research questions will be specifically investigated:

How should the accountability relationship of the City to its electors work, and how is it actually functioning?

I had sent you my interview questions. I will be asking you those questions to help me obtain information towards answering these research questions. For this research, I’m not promising to keep your identity or your responses confidential, unless you request me to keep your identity confidential. I expect the data that I’m collecting to be publicly available but if there are information that you want me to keep confidential please let me know. In my report, I will not refer to your name explicitly, but there is a probability that people can infer your name given your title. If you request that I keep your identity confidential, I will not use your name, title, and the name of the organization.

If you have any question about the consent letter, please let me know. The interview will last approximately 1 hour. The interview will be voice recorded. I will then transcribe the interview and send you a copy in case you may require any changes. I will make sure that nothing against your intention will be disclosed publicly, by getting your approval of using the information in the transcript draft. However, if you do not have any concerns about the transcripts and I do not hear back from you within 2 weeks, I will proceed with using the transcripts as is.

Do you have any questions before we begin? Please do not hesitate to stop me at any time if you do have questions, or would like me to clarify the question.

**Let’s begin!

Exploring accountability relationships:

Now, let’s talk about the accountability relationships of the city. In this research, I will take a narrow definition of accountability as a social relation or mechanism that involves an obligation to explain and justify conduct. This implies a relationship between an actor (the City), and a forum (the citizens), with the potential for consequences following accountee’s behaviour. I would like to know how is the accountability relationship of this city to its citizens is actually working.

In your role in this local government, could you please explain:
A. How is the accountability relationship of the city to its electors supposed to work?
B. What are the factors that have shaped the way accountability is mobilized? Why was Open Government chosen? Please tell me about the history, critical moments, when things happened, who was involved, how decisions were made...
C. What was the goal/expectation of the citizens/council/municipality from Open Government?

How is accountability mobilized? Please consider specific examples, for instance, consider implementation of ………

In this specific example:

1. Can you please explain how the City is held accountable to the citizens? For example, I’d like to know:
   a) What are the obligations to the citizens?
   b) What are the reporting obligations?
   c) What are the accountability demands/requests from the citizens? (what the city is expected to report on)

2. For the same case:
   a) How does the City inform the citizens about its conduct? What reports are provided to the citizens of the city? What are the different types of information that are provided? What accounting information is provided for the citizens?
   b) How does the City hear back from the citizens?
   c) I am interested to know if you think that the accountability arrangements, i.e. the way the City’s performance is discussed, are effective. Does the accountability arrangement yield both you and the City an accurate, timely and clear diagnosis of important performance dimensions? For example, does it make the City anticipate, plan, be proactive? Are there lessons learned that follow from performance feedback and stakeholder dialogue?
   d) What are the consequences of meeting or not meeting citizens’ expectations? Are there any sort of formal rewards/sanctions available? How about informal rewards/sanctions?

3. What is the role of accounting (accounting department) in this process?

Finally, I would like to take this opportunity to thank you for participating in this interview. I was wondering if you could please introduce me to others whom I may interview?

- Are there any internal reports, or documents regarding OG and accounting that are not publicly available and I can access for my analysis? e.g. reporting manuals that staff use.
<table>
<thead>
<tr>
<th>Checklist</th>
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<tbody>
<tr>
<td>Privacy of the interview place was checked and was discussed</td>
<td></td>
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<tr>
<td>Purpose of the study was explained</td>
<td></td>
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<tr>
<td>Confidentiality of the information was explained</td>
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<tr>
<td>Possibility of follow-up interviews was discussed</td>
<td></td>
</tr>
<tr>
<td>If applicable, consent letter was signed</td>
<td></td>
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<tr>
<td>If applicable, oral consent was obtained</td>
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</tbody>
</table>
APPENDIX C - COMPLETE CODEBOOK OF THE STUDY

- The red boxes represent the data-driven codes
- The black boxes represent the concept-driven codes

(Source: Developed by the researcher)
APPENDIX D - OG HISTORY

Following the 2008 US presidential election, the Obama administration proposed a new initiative for an “unprecedented level of government transparency”, termed Open Government. Despite not being a new concept, President Obama revived this historically known ideology in 2009 in his Memorandum to the Heads of Executive Departments and Agencies (McDermott, 2010). The initial proposal in his memorandum was used to paint a “big picture” framework for OG which could be expanded upon and used to guide directives and policies. Foundational to the proposal was that OG was to be built on principles of participation, collaboration, and transparency.

A large percentage of OG literature originates from Obama’s 2009 Open Government Directive (Jetzek, Avital, & Bjørn-Andersen, 2013; Wirtz & Birkmeyer, 2015). Perhaps this is because in this directive Obama outlines the three principles of participation, collaboration and transparency that are integral to the functionality of OG. In his memorandum, Obama stated “We will work together to ensure the public trust and establish a system of transparency, public participation, and collaboration. Openness will strengthen our democracy and promote efficiency and effectiveness in Government” (Obama’s Memorandum of January 21, 2009 cited in Yu & Robinson, 2012, p. 197). Overall, it was proposed that the government has three functions in OG. First, the government should be transparent in order to provide citizens with information on what their government is doing. Second, the government should encourage public engagement in decision-making processes. Third, the government should be collaborative, cooperating among executive departments and agencies at all levels of government, and the private sector (McDermott, 2010; Yu & Robinson, 2012). Over time, public organizations interested in implementing OG initiatives have adapted each of the three principles to fit their needs and
interests. In a systematic review of the contemporary academic literature on OG, Wirtz and Birkmeyer (2015) offer the following definition for OG:

“Open government is a multilateral, political, and social process, which includes in particular transparent, collaborative, and participatory action by government and administration. To meet these conditions, citizens and social groups should be integrated into political processes with the support of modern information and communication technologies, which together should improve the effectiveness and efficiency of governmental and administrative action.” (Wirtz & Birkmeyer, 2015, pp. 382–384)

Led by the Obama administration in 2011, eight countries came together to form an international partnership called Open Government Partnership (OGP) to promote OG in different countries. OGP defines its purpose as “a voluntary, multi-stakeholder international initiative that aims to secure concrete commitments from governments to their electors to promote transparency, empower citizens, fight corruption, and harness new technologies to strengthen governance” (“Open Government Partnership (OGP),” 2015). Furthermore, OGP states, “OGP’s vision is that other governments become sustainably more transparent, more accountable, and more responsive to their own citizens, with the ultimate goal of improving the quality of governance, as well as the quality of services that citizens receive” (“Open Government Partnership Mission and Goals,” 2015).

In 2016, the OGP reported 70 country members, including Canada. According to the publicly accessible government websites in Canada, OG is implemented at all layers of the public government including federal, provincial, and local governments (Canada’s Third Action Plan on Open Government, 2016). By 2018, Canada had adopted OG and implemented its policies and initiatives into three published action plans. In a report published in September 2016, the Information and Privacy Commissioner of Ontario articulated how OG should be implemented at the municipal government level. This report summarized that “the concept of
Open Government is based on the core belief that the public has the right to access the records and proceedings of government.
APPENDIX E - CASE BACKGROUND AND CONTEXT

13.1 Structure of the Local Governments in Canada

At the core of public government distribution in Canada, there exists local government, which basically falls under the provincial government in Canada (Tindal et al., 2013). Territorial and provincial governments depend on municipal governments to fulfill local services for people. Local governments can have significant political and economic impact on societies. Municipal governments in Canada raise and spend billions of tax dollars each year to provide public services that meet the needs of municipal residents. For instance, the City of Toronto’s 2015 Annual Financial Report indicates that they spent over $10 billion in city services, with a total revenue collected from taxes of close to $4 billion (City of Toronto Financial Report for the fiscal year ending, 2015).

Local governments in Canada also have an impact on the lives of citizens. For example, many of the daily services that people rely on are provided by municipal governments. Services such as maintenance of local road networks, airports, parks and recreational sites, police services, water and sewage services, garbage collection and recycling all fall under municipal control. Additionally, local governments/municipalities typically are responsible for policy making that directly affects local communities (Tindal et al., 2013). As a result of such services, local governments is said to be the “closest to the people” (Tindal et al., 2013, p. 1). Thus, the lives of citizens are directly impacted by local governments and the interaction between citizens and public governments are more prominent in the context of local governments (Tindal et al., 2013). Such impact naturally generates a high level of demand and expectation of efficiency, responsiveness, transparency, and accountability by public forums and citizens. The main responsibilities of local governments in Canada are categorized into three main activities by Guy
(1995, pp. 378-381). Namely, it is the role of local government to: a) provide services like those described above, b) act as a regulator through laws, ordinance and other forms of conduct and c) collect taxes on properties and services:

1. Providing Services
   - Municipal governments “deliver the basic housekeeping services necessary to ensure the survival of Canadians in organized communities of densely concentrated populations... These services include police and fire protection; water supply; collection and disposal of garbage and sewerage; maintenance of streets and sidewalks, including streetlights; and the maintenance of other public places, such as boardwalks and sports arenas. They operate buses, subways, and streetcars; run airports; manage food and farmers’ markets, and participate in the administration of port facilities. They also operate schools and libraries” (Guy, 1995, p. 378).

2. Acting as Regulator
   - “In the course of providing necessities and amenities as well as coping with social problems, most municipal governments make and enforce a wide variety of regulations prohibiting or requiring certain kinds of behaviour. The most elemental form of municipal regulation is the enforcement of federal and provincial criminal laws, local ordinances, and by-laws that declare illegal certain kinds of conduct - such as homicide, assault, theft, and break and enter - that are usually injurious to life, person, and property” (Guy, 1995, p. 379).

3. Collecting Taxes
   - “Municipal governments must extract the increasing costs of providing their services, attending to their civic responsibilities, and regulating the behaviour of their corporate and private citizenry...The single largest chunk of revenues raised by municipal government administrations comes from taxes on property” (Guy, 1995, p. 381).

Table 13.1 demonstrates local governments in Canada according to their types (e.g., city, Indian reserve, municipality) based on the Statistics Canada census for 2016. As cell value in the total row in this table indicate, the total number of all local governments in Canada is over 5000 as of the year 2016. The province of Ontario, in which this study was conducted, has a total of 575 local governments and 46 cities. Among these, 33 municipalities have claimed to be open municipalities (“Canada.ca: Open Government Across Canada,” n.d.).
Table 13.1. 2016 Census data on local government divisions in Canada (Source: “Statistics Canada - Census subdivision types by province and territory, 2016 Census,” n.d.)

<table>
<thead>
<tr>
<th>Census subdivision type</th>
<th>CAN</th>
<th>NL</th>
<th>PEI</th>
<th>NS</th>
<th>NB</th>
<th>Que</th>
<th>Ont</th>
<th>Man</th>
<th>Sask</th>
<th>Alta</th>
<th>BC</th>
<th>Yuk</th>
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<tr>
<td>CY – City</td>
<td>149</td>
<td>3</td>
<td>2</td>
<td>...</td>
<td>...</td>
<td>46</td>
<td>10</td>
<td>17</td>
<td>18</td>
<td>50</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>IRI – Indian reserve</td>
<td>949</td>
<td>3</td>
<td>4</td>
<td>26</td>
<td>18</td>
<td>27</td>
<td>140</td>
<td>77</td>
<td>165</td>
<td>75</td>
<td>412</td>
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<tr>
<td>MU – Municipality</td>
<td>102</td>
<td>...</td>
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<td>...</td>
<td>...</td>
<td>65</td>
<td>37</td>
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<tr>
<td>RM – Rural municipality</td>
<td>358</td>
<td>...</td>
<td>...</td>
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<td>...</td>
<td>...</td>
<td>...</td>
<td>62</td>
<td>296</td>
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<td>T – Town</td>
<td>698</td>
<td>274</td>
<td>8</td>
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<td>25</td>
<td>148</td>
<td>107</td>
<td>14</td>
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<td>VL – Village</td>
<td>518</td>
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<td>44</td>
<td>11</td>
<td>2</td>
<td>258</td>
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<td>112</td>
<td>96</td>
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<td>1,285</td>
<td>575</td>
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13.2  The Evolution of Open Government in Canada and the Province of Ontario

According to the federal government of Canada, the federal government has strived for enhancing transparency and access to information since 1977 (see Figure 13.1). In 2012, the federal government published its first OG action plan, providing a summary of the main milestones leading to the adoption of OG initiatives in Canada (Canada’s First Action Plan on Open Government, 2012, pp. 2–3). These milestones are provided in Figure 13.1.

Table 13.2. Progression of OG in Canada (Source: Canada’s First Action Plan on Open Government, 2012, pp. 2–3)

- **1977 – Privacy Commissioner**: appointment of Canada’s first Privacy Commissioner to protect and promote the privacy rights of individuals.
- **1983 – Access to Information Act**: Canada became one of the first countries to enact federal access to information legislation almost three decades ago.
- **1983 – Information Commissioner**: appointment of the first Information Commissioner in Canada to ensure that individuals' rights to information under the Access to Information Act are respected and that government operates within a culture of transparency and fairness.
- **1983 – Privacy Act**: legislation enacted to place limits on the collection, use, and disclosure of personal information, and provides Canadians the right to see and correct personal information the Government of Canada holds on them.
- **2003 – Proactive Disclosure**: began publication of information on government operations to allow Canadians and Parliament to better hold the Government and public sector officials to account.
- **2005 – Public Servants Disclosure Protection Act**: legislation enacted to give federal public sector employees a secure and confidential process for disclosing serious wrongdoing in the workplace and protection from acts of reprisal.
- **2006 – Federal Accountability Act**: Government of Canada brought forward specific measures to help strengthen accountability and increase transparency and oversight in government operations.
- **2007 – Conflict of Interest and Ethics Commissioner**: first appointment of agent of Parliament to help appointed and elected officials prevent and avoid conflicts between their public duties and private interests.
- **2007 – Public Sector Integrity Commissioner**: appointment of the first Public Service Integrity Commissioner to enable public servants and the general public to disclose wrongdoings committed in the public sector.
- **2008 – Commissioner of Lobbying**: agent of parliament first appointed to ensure transparency and accountability in the lobbying of public office holders to increase the public's confidence in the integrity of government decision-making.
- **2011 – Open Government Initiative**: on March 18, 2011, the Government announced its commitment to an open government initiative along three main streams: open information, open data, and open dialogue.
- **2011 – Open Data Pilot Project**: launched an Open Data Portal – data.gc.ca – which now has more than 272,000 datasets from 20 departments and which has already resulted in over 100,000 dataset downloads since its launch.
- **2012 – Access to information Request Summaries**: all departments are now publishing summaries of completed ATI requests monthly on their websites.
- **2012 – Modernized Values and Ethics Code**: the Government issued its enhanced Values and Ethics Code of conduct for all public officials.

Similar to the federal government, provincial governments in Canada began to promote access to information and transparency through legislation. More specifically, the province of Ontario initiated legislation starting in 1988 with the Freedom of Information and Protection of Privacy Act. Table 13.2 provides important milestones with regard to access to information initiatives in Ontario, which eventually led to adoption of OG initiatives in 2012 and 2013.
Table 13.3. History of OG progression in Ontario (Source: “Open by Default – A new way forward for Ontario,” n.d.)

- **1988**—*Freedom of Information and Protection of Privacy Act* is established to provide public access to government records while safeguarding personal information held by government.
- **1990**—*Environmental Assessment Act* sets out a planning and decision-making process that encourages public participation to ensure the environmental effects of a project are evaluated prior to construction. A posting on the environmental registry is required under the act to provide information to the public about government legislation, policies and programs.
- **1991**—*Municipal Freedom of Information and Protection of Privacy Act* is established to provide public access to records held by local government organizations, such as municipalities, school boards and police while safeguarding personal information.
- **1993**—*Environmental Bill of Rights* is established and sets out minimum levels of public participation that must be met before decisions of certain types of policies affecting the environment. The act also establishes the Environmental Registry as a means of providing information to the public.
- **1996**—*Public Sector Salary Disclosure Act* requires publication of public-sector salaries that exceed $100,000.
- **2006**—*The Citizen’s Assembly of Electoral Reform* is established to make recommendations in regard to what electoral systems should be adopted in Ontario.
- **2009**—*Ontario Citizens’ Council on Drug Benefits* is created to provide advice from the perspective of Ontario citizens on the province’s drug policy.
- **2009**—*Accommodation Review Committee* is formed to review, via public consultation, the future of schools and provide direction to school boards for decision-making.
- **2012**—*Ontario’s Open Data Portal* is launched.
- **2013**—*Open Government Initiative* is established.

The Open Canada website which had been implemented by the federal government to provide the tools and reports on the progress of OG in the federal government provided the information about adoption of OG initiatives in all three levels of government in Canada. Figure 13.2 illustrates the map of Canada and all open provinces and open municipalities across Canada in 2017. As it is shown on this map, there are five open provinces and 91 open municipalities in Canada (“Canada.ca: Open Government Across Canada,” n.d.).
Figure 13.1 illustrates the open municipalities that are spread around the province of Ontario, Canada. As of 2017, there were 33 open municipalities reported in Ontario (“Canada.ca: Open Government Across Canada,” n.d.). The red dots in the map indicate the open municipalities. The yellow dots are the open municipalities that have only adopted OGD. The dark blue provinces are open provinces. In the following section, I focus on describing the organization that was studied.

13.3 City Government Organizational Structure

The selected city was a single-tier municipality governed by a council-manager system (Tindal et al., 2013). The citizens vote for a governing body, which in turn delegates responsibilities to an administrative body. The structure of the municipal government is
stipulated by the Ontario Municipal Act of 2001 (“Municipal Act, 2001,” n.d.). Generally speaking, three main stakeholders constitute the actors in the relationship between the city government and its citizens: the citizens, the city council (elected officials i.e., politicians), and the administration (appointed management).

At the time this research was conducted, the city council consisted of twelve councillors and a mayor. The mayor and members of the city council were serving four-year terms without term limits. Voters transferred their power to the councillors through a democratic election taking place every four years. Citizens could cast a vote towards their favourable candidates (councillors and mayor) and elect them for a council seat. There were 6 wards in the city and each ward was represented by 2 council seats. Therefore, the responsibility of governing over the conduct of city administration is that of the council.

Council responsibilities included monitoring the operations and financial performance of the city, analyzing and approving budget proposals of the administration, determining spending priorities, and policy decision making. Furthermore, the council exerted the power of oversight on the conduct of the city administration and they could make collective judgements about certain conducts of the administration by demanding information from the Chief Administrative Officer (CAO) of the city.

Civic administration was managed by the CAO and three sub-departments. Each department was managed by a deputy CAO. The deputy CAO’s reported directly to the CAO and were responsible for managing their own department. Figure 13.3 demonstrates a simplified overview of these relationships.
Figure 13.2: Simplified overview of the organizational structure of the city (Source: Developed by the researcher)

A model that illustrates the conceptualization of the city government regarding their accountability relationships between the main stakeholders was attained during the data collection which can be seen in Figure 13.4. According to one of the deputy CAOs of the city “civic administration worked closely with council” to design this model in which the accountability relationships can be described between the main stakeholders.
The way that Figure 13.4 could be interpreted according to the research participants is that there are three main stakeholders involved in the city with regard to accountability relationships. The community (i.e., the citizens) sits at the top in terms of priority. The civic administration and the council together form the local government but also are unique stakeholders given their different relationships with citizens. The community pays taxes to the administration and in return, the administration is accountable for providing services to the citizens. The administration is also accountable for providing reports of “value for money”, meaning that they account for how efficiently the money of taxpayers is being utilized for services.

The second accountability relationship is between the citizens and the council. The citizens vote for their councillors and in return, the council is accountable for providing leadership and report the results of their efforts to the citizens (e.g., they should report how they vote in different council meetings on certain policies or budget approvals).
accountability relationship is between the council and the administration. The administration is accountable to report its performance to the council and the council acts as an overseer to the performance of the administration. These three perceived relationships were held by members of the city and serve to represent what they view as ideal accountability relationships.

Figure 13.5 presents the idea that was behind the adoption of OG in the city. The city administration referred to the traditional understanding of the citizens from their relationship with the local government as a vending machine. In this analogy, it was described by the officials that the citizens put their money into the machine and receive a product/service in return. This mirrors the relationship between paying taxes and receiving a product/service, as illustrated in the following statement:

“In a very traditional sense, and I believe we are moving away from that into something a little more interactive, but that traditional sense I think its been coined that vending machine model where you put the money in and you get something back, so its sort of the same sense here that we collect the taxes through the budget process and then, in turn, the residents’ businesses receive a service back for that, of money that changes hands through the tax process. So, the accountability relationship is along the way they might see some variance reports on the quarter, and then before you know it 12 months has gone by and we’re back into the budget process again so that same traditional model. I’d say historically that’s where we’ve been and we’re evolving away from that into something that involves the citizens a little bit more, a little bit more engagement but a little bit more interactive in regards to so what am I paying for, so its the service I think. The accountability comes because when people know what service they’re buying, that accountability is since very clear, versus I just give you money and I hope you plough the streets, I hope you insert whatever service that may be.” (Deputy CAO – emphasis added by the researcher)
The local OG of this study intended to have direct CA relationship with the citizens. Both models that were presented above suggests that the city intended to change their relationship with the citizens. Furthermore, they intended to achieve this by implementing OG. According to the evidence collected from the official city website and research participants, one of the reasons that the city adopted OG initiatives was to change the social relationships between the administration and the citizens.

Similarly, the OG action plan of the city clearly indicates that the city government intended to move away from an indirect accountability relationship with the council, to directly engage citizens in order to change traditionally held views on governance. This goal was claimed to be achieved through the use of innovative technologies.

The analysis suggests that changing the relationship between city administration and the citizens was among the reasons for adopting OG. I will present the history of the adoption of OG in the city in the next section.
13.4 The Evolution of OG and its Historical Milestones in the City

In this subsection I use archival and interview data to explain the historical evolution of OG in the city. The intention of this section is to provide some background information as to how and why the city decided to adopt and implement OG initiatives and who were the key actors in such a process.

According to two main actors, who encouraged and supported adoption of OG, the process of adoption of OG in the city began out of a need for rebuilding the trust with the citizens in year 2011/2012. The local government realized that the citizens were losing their trust in their local government:

“It evolved out of an understanding that the local population, the citizens, the taxpayer were losing trust in their local government, so how do we restore trust…” (Councillor 3 – emphasis added by the researcher)

After consultation with academics, the city council and administration had discussions around the themes such as how they could learn from other public organizations, the private sector, and best business practices to become “more efficient, transparent, and accountable”. The councillor also explained that the leadership group were trying to become more principle based on performance rather than simply adhere to rules and legislation and discharge their responsibility at its minimum:

“[The themes were around] … becoming more performance-based rather than compliance-based so rather than thinking about always judging ourselves, what we complied with the legislation, we met the minimum standards, it’s sort of going beyond that, beyond compliance and being more principle-based and saying what kind of contribution can we actually make as a local government as opposed to just complying with legislation.” (Councillor 3 – emphasis added by the researcher)

One of the main city managers affirmed the principle-based movement of the government. However, the managers also emphasized the role of technologies and ICTs in such a
process. According to the managers, one of the results of accepting the fact that the government needed to become principle-based was a change in the organizational structure. The administration had decided to add a new sub-department and created jobs for positions such as OG manager and community engagement coordinator.

Reviewing the initial OG proposal of the city which the administration prepared and presented to the council in 2012, revealed that the city initially envisioned OG as follows: “to create a fully transparent and accountable City which leverages technology and empowers the community to generate added value as well as participate in the development of innovative and meaningful solutions” (OG report, emphasis in original).

In the same report which was presented to the council by the city clerk, it is emphasized that OG is facilitated by technologies, and it is intended to enhance citizens participation. It was also reported that such movement was “most apparent at the local levels” in Canada:

“Open Government […] is an attempt to improve the connection between government and citizens - not only to increase democratic participation but also to encourage and support innovation and economic development. Open Government is facilitated by technology … Government at all levels have already begun to embrace this new reality, but progress is most apparent at the local levels, especially in Canada.” (OG proposal report – emphasis added by the researcher)

The key person in developing and proposing OG plans to the city council was the former city clerk who later became the manager of IT and innovation in the city. This participant also emphasized the role of technology and how looking at other municipal governments and their achievements in OG initiatives influenced the city to pursue the same path:

“I started with the city about five years ago and I had always been interested in the relationship between technology and governance, and the convergence of the two. I had always looked at open government materials, reading early on a lot of it again was around data and the power of big data, and stuff like that. So, when I was interviewed here, my boss actually said we’d like to pursue open government. I asked him what that meant, he
said he wasn’t really sure but at that point, it had gained some traction in **other municipalities who had open data catalogues and their citizens were engaged and building apps and doing analytics and stuff.** I was sort of mandated to come up with something, and to be frank its why I liked taking the job because I had the opportunity to build this from ground up.” (IT Manager, Former Clerk – emphasis added by the researcher)

The IT Manager also explained the process of developing OG action plan. An interesting observation in the process of developing the OG action plan was the use of ICTs to openly collect citizens feedback and consolidate such feedback in the development process. I will explain how such systems work in section 5.2.6. The following quote from the city manager of IT and the key person who was in charge of developing the action plan describes the evolution of OG action plan in the city:

“I started doing the work, developed the framework, which really seated those principles [Participation, Innovation, Transparency, Accountability], along with, … just cataloguing initiatives that were deemed open government or not by other public agencies, and that is what I presented to council. So, they approved the framework, with a commitment, that I had a commitment essentially to developing an action plan. And that’s when I put the call out and got people interested […] Basically, what we set out to do with the action plan was to co-produce it with the community right up to establishing some benchmarks on continuous improvement of the program […] And, we held a series of workshops, we had an online survey, we went out into the community to get testaments and opinions. We built the **action plan in full transparency by using a tool that collected ideas** that people could essentially create ideas off other ideas. That culminated in a **completely open action plan development process**, so it wasn’t we go away create an action plan, get a few inputs, comments and do some consultations.” (IT Manager, Former Clerk – emphasis added by the researcher)

After approving the action plan and OG proposal by the council, in 2015, the council approved the budget for allocating a job for OG manager who was responsible for implementing the OG action plan in the city:

“[Administration] talked to Council in 2012 about open government and what we hoped it could be. Through 2012 to 2014 working with citizens, talked about their priorities and what open government would look like and what kind of things they wanted and then getting the action plan passed through city Council which happened in August of 2014 and after that **the action plan called for the creation of a dedicated resource which**
was me. So, it wasn't me automatically, the job was created and then I was hired in June of 2015 to do it.” (OG Manager – emphasis added by the researcher)

In the latest version of the website that was developed for OG initiatives in the city, the emphasis on citizen participation, accountability and technology was most apparent:

“Open government is about the relationship between you and your public servants. It’s about governing with people rather than at people. It’s about building trust and accountability between citizens, elected officials and municipal administration. It’s about modernizing our services with our citizens and businesses in mind. And it’s a long game. A game best played together.” (City Website – emphasis added by the researcher)

“So, the accountability relationship is along the way they might see some variance reports on the quarter, and then before you know it 12 months has gone by and we’re back into the budget process again so that same traditional model. I’d say historically that’s where we’ve been and we’re evolving away from that into something that involves the citizens a little bit more, a little bit more engagement but a little bit more interactive in regards to so what am I paying for, so its the service I think. The accountability comes because when people know what service they're buying, that accountability is since very clear, versus I just give you money and I hope you plough the streets, I hope you insert whatever service that may be.” (Deputy CAO – emphasis added by the researcher)

Such a vision set the basic principles of OG for the OG manager to develop tools and mediums that could facilitate achieving these goals. In the following section, I will describe the OG initiatives that were developed and implemented by the city administration.

13.5 OG Initiatives and the Role of ICTs

A list of all OG initiatives that I was able to identify in the data is provided in Appendix F. The explanation of all of these initiatives would not be within the scope of this research and would prolong this dissertation, therefore, I will only focus on the description of the initiatives that emerged from the data analysis in which citizens were directly interacting with public officials over ICTs.

As I discussed in the introduction of the context, the perception of the city from the adoption of OG suggests that ICTs play a significant role in implementing OG. The analysis of
OG action plan revealed the emphasis of the city on using ICTs for provided innovative solutions for citizen engagement, transparency, and accountability. Analyzing the initiatives that were implemented in the city as part of OG initiatives also highlights the apparent role of ICTs.

Among the initiatives that the city implemented with regards to its OG development, two ICTs initiatives stood out in the data analysis phase of this study because these two OG applications were referred to by interview participants or documents related to events. These applications had the capacity for real-time interaction between citizens and public officials. The traces of such interactions could be publicly seen by other users and the information that was provided over these tools became available instantaneously after the interaction between users. Most participants referred to these applications and the OG website of the city also highlighted these applications as new tools that were provided as part of OG initiatives. The first application was an interactive online survey tool which could engage and collect citizens suggestions and ideas for improving the city services or solving problems. The second application was an interactive map in which the citizens could request a service or report a problem. In the following subsections, I will describe these applications, explain how each application worked, and what were the differences between these applications and prior methods that the city used to respond to requests.

13.5.1 MindMixer: an online community engagement application

The city purchased access to an ICT which is designed and developed for engaging the citizens and collect their ideas. This application provides a verity of digital tools such as polling systems for ideas, public commenting, surveys, and data analytics on the participants, such as a number of interactions on each topic or number of comments. Moreover, there are innovative presentation of the progression of each idea and the status of each idea which indicates whether
the city is considering the idea and implementing it. Through this tool, the city could hear about the ideas that citizens have regarding the services and improvements that they desire.

The main difference between this application and previous forms of online surveys is that the comments and suggestions are publicly visible for all the participants. So, for example, if a citizen suggests that the city should create a tool for waste collection schedules, other participants could rate, comment, and share the idea. The city officials who are ‘listening’ to these ideas are also identifiable through the tool. The officials can also comment or change the status of each suggestion.

This tool demonstrated an example of citizens’ engagement in the local OG of this study. Use of ICTs had facilitated the collection of ideas by simplifying the interactions between city officials and the citizens. Figure 13.6 demonstrates an instance of using this application for collecting citizens ideas for OG action plan. As it can be seen in this image, 276 interactions were conducted in this instance of the survey. Also, an interaction between one of the city managers and a citizen with regards to an idea could be seen in this figure.
13.5.2 311 GIS: Non-emergency service request mobile application

The first application that was developed and integrated into the city as a result of collaborative online surveys (i.e., MindMixer) with the citizens was an interactive map
application which citizens could use to request a non-emergency service or report a problem in the city. The users could use their smartphones to take a picture or videos and attach to the problem that they were reporting. Every user with access to the Internet and a digital device that met the required software technologies could access the map of the city and browse through the requests that other users reported. There were no costs associated with using this application for the users. However, the city reported an investment of $16,800 to set up this application and for ongoing technical support, maintenance and hosting fees the city reported a cost of $14,000 per year.

Examples of problems and service requests that could be reported using this app according to the city’s website were included in the app description as provided in Table 13.3.

Table 13.4. Summary of reportable issues using the map application (Source: The official application's web page)

<table>
<thead>
<tr>
<th>Type of issues that could be reported using the interactive map application</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Animal or wildlife concern, coyote sighting</td>
</tr>
<tr>
<td>• Building or property maintenance concern</td>
</tr>
<tr>
<td>• Donation bin concern</td>
</tr>
<tr>
<td>• Dumping, trespassing, or encroachment</td>
</tr>
<tr>
<td>• Fireworks concern</td>
</tr>
<tr>
<td>• Idling vehicle</td>
</tr>
<tr>
<td>• Long grass, messy yard or tree hazard</td>
</tr>
<tr>
<td>• Newspaper box concern</td>
</tr>
<tr>
<td>• Noise or nuisance party</td>
</tr>
<tr>
<td>• Parking problems</td>
</tr>
<tr>
<td>• Sign, or poster concern</td>
</tr>
<tr>
<td>• Bylaw officer compliment or complaint</td>
</tr>
<tr>
<td>• Giant Hogweed</td>
</tr>
</tbody>
</table>

The city claimed that this application could enhance efficiency, transparency, and accountability. The following quote from the city website demonstrates how such a system was helping the administrative operations to become more efficient and effective:
“Using the system, you can report a problem from anywhere, and you get updates about when and how the City is responding to your concern. You get an email confirming that we’ve received your request, and you get notifications when it is approved, in progress and complete. Also, we can respond to your concerns more efficiently, and track our activities more effectively. For example, rather than responding to service calls as they come in—driving from one end of the City to the other—the 311GIS map app shows clusters of activity, so we can respond to multiple calls in one area. Our tracking and reporting activities are consolidated into one system; reducing the time we spend on data entry and other clerical activities.” (City Website – emphasis added by the researcher)

In an interview that the mayor had with a local media channel, the mayor explained that since citizens could transparently see how the city staff were responding to these requests on this online interactive application, this would enhance the transparency of the administration. When collecting data, I browsed through this application and noticed that each user request had a timestamp and a request status. When a citizen reported a problem, a new entry would have been created and a pin would have been shown on the location of the problem on the map. Furthermore, citizens could comment and see the name of staff who were attending the problem along with updates that were posted and the status changes during the process of rectifying the issue. The users could also share their requests on social media such as Facebook or Twitter using the functions that were provided on this application. Figure 13.7 illustrates an instance of a report on this application along with the updates and status changes that were provided by the city staffs.
The above section illustrated the analysis of the context of the study and the innovations that were implemented using ICTs as part of the OG initiatives. The organizational structure and parties involved in the local government and CA relationships were identified. In the section that follows, I will provide the analysis of the CA arrangements that were identified in this study.
# APPENDIX F - OG INITIATIVES IMPLEMENTED IN THE CITY

<table>
<thead>
<tr>
<th>OG initiatives (Source: synthesized by the researcher)</th>
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</thead>
<tbody>
<tr>
<td>• Change in the structure of the organization</td>
</tr>
<tr>
<td>– A new department was integrated into the organizational structure</td>
</tr>
<tr>
<td>– New jobs were created (e.g., OG manager)</td>
</tr>
<tr>
<td>– New staffs were hired (e.g., an employee who took the position of OG manager)</td>
</tr>
<tr>
<td>• Open City Website: A new website was developed for centralizing OG tools, services, information, and progress reports.</td>
</tr>
<tr>
<td>• User Guide to the Local Government: A step by step guide which used web technologies to inform the users about how the government is performing its responsibilities and how the citizens could find information about the government.</td>
</tr>
<tr>
<td>• Constructions interactive map and monthly updates in a simplified format: The users could be informed about the current state of each construction project that was done in the city in the past, the present, and are planned for the future.</td>
</tr>
<tr>
<td>• Open Government Data (OGD): “Data produced or commissioned by government or government controlled entities and is open – that is, it can be freely used, reused and redistributed by anyone” (“Open Government Data,” n.d.).</td>
</tr>
<tr>
<td>– 43 group of datasets by Sept 2017</td>
</tr>
<tr>
<td>– e.g. Financial Information Return (FIR), Public Transit data in General Transit Feed Specification (GTFS) format, Police occurrence data</td>
</tr>
<tr>
<td>– 3 applications were showcased which were developed by the citizens using the datasets in the Open Data Catalogue.</td>
</tr>
<tr>
<td>• Budget simulator: An online tool that citizens could use to suggest budget allocation for different purposes and see an interactive simulation of how the money would be spent based on their suggestions.</td>
</tr>
<tr>
<td>“This year [2015], the City increased opportunities for the community to provide feedback on the budget. Through the pilot of an online budget simulator, the community was asked to provide input on which services should receive more or less funding (operating and capital services) and if additional funding should be allocated for ageing infrastructure. Input provided by September 21 has been included in the proposed budget for Council’s consideration.” (City official Website)</td>
</tr>
<tr>
<td>“During the 49 day pilot period, 387 visitors viewed the online budget simulator. Of the 73 responses, 62 (85%) were from within the city limits. That is an overall response rate of 16 percent from the community.” (Budget Simulator Feedback Report, 2015)</td>
</tr>
<tr>
<td>• Digital city services: a centralized ICT tool that directed information requests from the citizens to specific links that could provide the requested information automatically. This would have made the information provision more accessible for the citizens. The following list provides examples of information that could have been accessed through the “I want to” web tool:</td>
</tr>
<tr>
<td>– Open Data Portal</td>
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<td>– Performance dashboard</td>
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<tr>
<td>– Park Finder</td>
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</tbody>
</table>
– Snow plow tracker
– Look up employee contacts
– Find your waste collection schedule
– Street Tree Ownership Map
– How to dispose of a waste item
– City social media feeds
– Transit accessibility support app
– Bids and tenders
– Search City Council minutes
  • This tool enabled the citizens to search through hundreds of pages of text content from the city council meetings. This made the process of achieving information regarding the council meeting much faster and simpler.
– Building permits or inspections
– RSS feeds for City websites

• Civic accelerator: an innovative model to engage businesses to identify city problems and provide innovative solutions for solving the problems

• Open Communication: accumulate citizens’ suggestions for improvement in the city
  – Roundtables
  – Online surveys (see MindMixer app at the end of this table)

• Community Engagement Framework: a detailed plan for improving community engagement
  “Local government works better when we’re all in this together.” (Mayor)

• Enhanced integration of social media
  – New official blogs
  – New social media handles
  – New Email addresses

• Audio and video recordings of the council meetings since 2012

• Bid Opportunities: bids and tenders
  “Effective April 1st, 2017 the City will connect to a national, online network of more than 100 public sector organizations as it accelerates the evolution of its online procurement management practices. Vendors will be able to download a preview of the bid documents without registering as a plan taker. They will also be able to access more than 100 other Canadian, public sector organizations’ bid opportunities including education, energy, police, and health.” (City official Website)

• Plow tracker:
  “During residential plow outs, Plow Tracker shows City and contractor plows work together to clear roads. On other days, Plow Tracker shows City plows doing regular winter road maintenance like using salt, sand, and brine to keep the roads clear of ice. Plow tracker also shows primary, secondary roads and residential roads. The City plows primary roads first, then secondary roads. Residential roads are plowed after at least eight centimetres of snow. Residential plow outs are typically completed within 24 hours after the snowfall stops.” (City official Website)

• 311 GIS app: an interactive application that citizens can use smartphones or computers to report city problems and request a non-emergency service. Each service request has a timestamp and a
status. Citizens can also comment publicly on each request. They can also share on social media or post add a picture to the request.

| • MindMixer: |
| “Leveraging the power of the Internet and social media, MindMixer’s online engagement tools connect organizations with community members who might not otherwise get involved.” (MindMixer’s Website) |
| “A powerful online engagement platform that has helped more than 1,200 organizations start conversations with people who care about their communities.” (City website for MindMixer) |
APPENDIX G - EXAMPLES OF EVENTS WHERE CA WAS ENACTED

ICTs platforms provide an opportunity for citizens to interact with public officials and trigger virtual CA processes. The analyses that were provided in Chapter Five demonstrated how such virtual citizen accountability could operate. In this appendix, I provide evidence from the data and present three complete events of CA which were enacted through ICTs.

15.1 Event 1: The Swimming Attire Policy Change

The first instance that I will describe demonstrates how citizens used ICTs for triggering a virtual CA process and what happened during this process. This instance demonstrates by publicizing the actions of one of the public employees over ICTs citizens can initiate a CA process. This incident happened in 2015. The following quote by one of the research participant highlights the essence of this incident:

“…I’m thinking of back the issues of swimsuits … so a young girl, I think she was four years old, took off her T-shirt at a splash pad and the probably 16-year-old lifeguard asked her to put it back on because she was a girl. And, that blew up internationally [on social media]. Something that could be considered a pretty small incident, it’s a really touchy time for the type of policy in this time ... [what happened next?] So, they just went with the national lifeguard society policy instead of our policy. But, I think for some people, even if it wasn’t the people in that department, some people are like this is what can happen if your policy isn’t up to the times. It can really backfire.”

(Community Engagement Coordinator – emphasis added by the researcher)

To corroborate the data that was collected from the latter interview, I searched through Twitter and found the instance that the interviewee mentioned. The analysis of the debate between the citizens, councillors, and the city administration demonstrates that after this incident was captured by popular public news such as Canadian Broadcasting Corporation (CBC) and Microsoft News (MSN) the city took certain steps to revise the policy regarding the issue that was brought up originally by the first citizen. Figure 15.1 provides some instances of the virtual debates and virtual consequences that the virtual citizen forums passed with regards to this issue.
This issue eventually resulted in formal actions by the administration and council to change the swimming attire policy of the city. This event exemplifies a complete process of virtual CA. The public visibility of such issues could result in the attention of traditional media. It could also attract the attention of other social media users which is also known as viral.
spreading over the Internet. Such attractions could be one explanation for formal actions by the local government regarding the change in policies.

15.2 Event 2: The Construction Project Misfortune

Another example from the data that could be used to explain how ICTs have provided an environment in which virtual CA could be triggered is provided in this subsection. This instance happened when the administration was working on a capital project in which an old bridge in the city was being replaced with a new construction. Due to certain new rules, the height of the bridge from the ground had to be shortened. However, due to certain limitations in the location of the bridge such as underground infrastructures, the height of the new structure obstructed passage of trucks. This issue was taken to social media platforms by citizens and had created a chain of jokes and criticisms:

“There was a capital project replacing a bridge, and it’s a hundred-year-old bridge, it was a railway bridge. New rules meant it had to come down this far, underground infrastructure was there so they could only go down a little bit further so the trucks can’t go under the bridge. Our staff were just crucified with social media for being incompetent … there were cartoons about him [the engineer that was involved] that spread so that would be an example. Nobody wanted the real story, the story that the engineers were incompetent and hadn’t designed the bridge well was the story people wanted. Social media, and then the media’s social media, the media’s blogs, and then into the papers as well.” (Councillor 3 – emphasis added by the researcher)
Following this incident and the amount of attention that it took from the citizens in online platforms, the administration traced back and discussed the issue at hand. According to one of the interviewees, the problem that was identified was the lack of a communication unit with the engineering department. This problem then was taken to higher units and finally resulted in a policy change:

“The one criticism that you can make was they did a poor job at communicating the technical reasons why no trucks could be under it [the bridge]. At the time, they had a public information meeting but they didn’t communicate that at the public information meeting so when we worked back the issue when we looked at the sort of project management of capital projects like this, there was no communication part of project management within the engineering department so now project management for capital project includes a communication piece, and the communications department is engaged in that piece. So, there is a sanction that lead to a change in approach and policy, an informal one and lead to a change in the management of the capital projects, so that’s an example.” (Councillor 3 – emphasis added by the researcher)

Similar to the first example that was discussed, this instance demonstrates that publicity and visibility of civic issues on social media could be picked up by traditional media such as news. It could also initiate a chain of events which could potentially lead to formal change.
this instance collection of information and transforming the information to visual elements such as GIFs or Memes took the attention of news. This could be discussed as one explanation which triggered the formal lines accountability of the government.

15.3 Event 3: Use of OGD and the Mediated Information

In an instance that is presented in Figure 15.3, a virtual forum was formed to hold the city administration to account on Twitter in January 2017. This accountability instance was triggered when a citizen noticed a discrepancy between the time schedule of a bus route and the information that was provided in a smartphone application that was developed using the OGD of the city. After the citizen reported and posted the issue on Twitter, a virtual debate was initiated regarding this issue with the city officials. The official Twitter account of the city (i.e., corporate actor) referred the issue to the transit department by using their official Twitter handle (i.e., another corporate actor). The transit department referred the issue to the app developer by using the official Twitter handle of the developer. The developer responded back that they had used the OGD datasets to develop the app and blamed the problem to lack of recency of the datasets in OGD of the city. The virtual forum was dispersed when the citizen passed an informal consequence by voicing the fact that the city has to update the OGD. More recently, I noticed that the city had used ICTs to provide up to date bus schedule data using Google technologies.
Figure 15.3: An instance of mediated information provision by a citizen who developed an application based on OGD (Source: Twitter© and the official city’s website)

This instance demonstrates the fact that when data that was provided by the city was transformed by another user the provider of the initial data was called to account to justify the errors by the virtual forum. However, the analysis suggested that the producer of the account (i.e., the government) is discharging the responsibilities of the accuracy of the data such as errors or omissions to the third-party actors:

“The Information Provider is not liable for any errors or omissions in the Information and will not, under any circumstances, be liable for any direct, indirect, special, incidental, consequential, or other loss, injury or damage caused by its use, or otherwise arising in connection with this license or the Information even if specifically advised of the possibility of such loss, injury or damage.” (OGD Licence of the city – emphasis added by the researcher)
This would mean that if citizens notice any discrepancies in the information or the data that was used in a third-party application that was developed based on OGD, the government would not be accountable to justify those errors. This event demonstrates the evidence for the conceptualization of CA that was offered in this study with regards to the mediation of information provision channel.