OPEN GOVERNMENT PERFORMANCE:

AN ANALYTICAL FRAMEWORK FOR ORGANIZATIONAL DESIGN

by

ALEXANDER INGRAMS

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ABSTRACT OF THE DISSERTATION

Open Government Performance: An Analytical Framework for Organizational

Design

By ALEXANDER INGRAMS

Dissertation Director:
Dr. Suzanne Piotrowski

This dissertation addresses the topic of open government design and

performance. Open government reforms are increasingly numerous worldwide,

and this study seeks to develop analytical concepts and models to understand

internal organizational changes that take place in public agencies when they

implement open government reforms, and how these designs can be evaluated.

The central research question posed by the dissertation is: 'What is the

association between organizational design and open government performance?'

In addressing this question, the focus is on three components of organization

design in open government programs: organizational structure, organizational

processes, and the macro-factors that shape organizational design. There are two

sub-questions within the central research question: (1.1) 'How does

organizational structure contribute to open government performance?'; (1.2)

'How does organizational process contribute to open government performance?'

Additionally, a secondary question addresses the macro-level factors of

organizational design and performance: (2) Do macro-level factors shape

organizational design capacity in open government?

To address these questions a mixed methods approach is taken, involving

content analysis, two case studies, and regression analysis. The case studies

involve document analysis, participant observation, and 35 semi-structured

interviews with senior decision-makers working on two open government

programs in the United Kingdom and United States as part of the Open

Government Partnership (OGP), a multi-country compact to promote openness

in government. These case studies are of a healthcare services and a law

enforcement open government program, respectively.

The core result of the dissertation is the establishment of an analytical

framework of open government processes. The framework includes key

performance indicators that can be used to evaluate open government structures

and processes. This framework is comprised of four structural factors:

institutional, environmental, technological, and managerial, and three themes of

the organizational processes: consultation, governance, and strategy. The

dissertation concludes with discussion of how the results contribute to public

administration theory on open government. The study extends scholarly

understanding of how organizational design factors are crucial to open

government performance. Public managers, who work at the intersection of

organization and environment, must navigate complex inter-organizational

information and tasks. By developing an analytic framework of such work, this

dissertation offers knowledge of organizational design that can be used in an

area of reform currently being adopted by many different types of country

governments and at different governmental levels.

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Acronyms

API
Application Program Interface

CSO
Civil Society Organization

DEG
Digital Era Governance

FOI
Freedom of Information

GDP
Gross Domestic Product

ICT
Information and
Communications Technology

IMO
International Multilateral
Organization

IRM
Independent Reporting
Mechanism

NAP
National Action Plan

NHS
National Health Service

NPM
New Public Management

OGP
Open Government Partnership

OSTP
Office of Science and
Technology Policy

IEP
International Experts Panel

UK
United Kingdom

US
United States

Glossary of terms

Analytical framework
An organized model presented in narrative or diagrammatic form that features several interrelated concepts and processes. It can be used for analyzing the roles played by the component parts an organization, structure, or process, and it provides a foundation for creation of theoretical propositions and theory-building.

Conceptual model
A narrative or diagrammatic representation of a complex idea or relationship that is used to for purposes of conceptual simplification or explication.

Digital-era Governance (DEG)
A public management reform movement focuses on three key shifts in government: 1) the *reintegration* of government operations; 2) *Needs-based holism* of services; and 3) *Digitization*.

Independent Reporting Mechanism (IRM)
The system used by the Open Government Partnership (OGP) to independently evaluate the performance of open government action plans.

Information and Communications Technology (ICT)
Electronic technology designed to facilitate complex information management and faster communication.

New Public Management (NPM)
A public management reform movement associated with ideas of the book "Reinventing Government" by David Osborne and Ted Gaebler. NPM aims at making government more efficient and effective through managerial autonomy and adoption of business practices.

Open government
A collection of government policies associated with the use of information and communications technology (ICT) to create transparency, accountability, and foster synergies between governmental and non-governmental actors.

Open Government Partnership (OGP)
A global compact of countries committed to advancing open government policies. It was set up by Brazil, Indonesia, Mexico, Norway, South Africa, the United Kingdom, and the United States in 2011.

Open government commitment
An individual open government program or policy designed and undertaken by a member government of the Open Government Partnership.

Organizational design
According to Burton and Obel (2004), organizational design is, "a normative science with the goal of prescribing how an organization should be structured in order to function effectively and efficiently."

Process
As defined by Davenport (2013, 5), a process is "a structured, measured set of activities designed to produce a specific output."

Structuration
The theory developed by the sociologist, Anthony Giddens. Structuration explains sociological or organizational phenomena in terms of two parts – structure and agency – and considers their interaction to be the main influence shaping a society or organization's characteristics and functioning.

~ Introduction ~

What is open government?

1. Open government and transparency: conceptual definitions and background –

2. Implications for open government scholarship: the central problem to be

solved– 3. The importance of designing open government policies effectively – 4.

Research strategy

1. Open government and transparency: conceptual definitions and background

Government transparency is part of a quest of the public and government itself for

better governance (Piotrowski and Van Ryzin, 2007). Open government as a

scholarly research topic emerged from theory of government transparency, and

the topics continue to overlap considerably having similar theoretical challenges.

The quest for open and transparent government has led scholars to highlight the

difficulty of defining what these concepts mean, and to ask whether there are

certain types or amounts of transparency that should be targeted rather than

universal adoption under all circumstances (Pollitt and Hupe, 2011;

Grimmelikhuijsen, 2012). Transparency can be defined in many different ways: it

can be a tool of regulation (Fung, Graham, and Weil, 2007), a cognitive

dimension of organization (Meijer, 2013; Wirtz et al., 2016), an institutionally

embedded set of relationships (Dawes et al., 2016; Weil et al., 2006), a strategic game for principals and agents in the marketplace of information (Lindstedt and Naurin, 2010), or a window to look into and out from organizations (Heald, 2012).

Computer-mediated transparency is an especially difficult area of transparency theory; the sheer amount of digital information about government makes transparent communication and accountable relationships between citizens and the government harder to manage. This problem is also a concern for open government initiatives, which have been adopted in several different countries and used as a popular policy tool (Ingrams, 2016; Sandoval-Almazan and Gil-Garcia, 2016; Wirtz, et al, 2016). According to McDermott (2010) open government reforms aim to incorporate efforts to improve government transparency. However, in open government reforms, in addition to being transparent, a government is expected to make public agencies better at including citizens in producing policies and programs through public participation, and to share resources and knowledge through collaboration. In 2011, the largest open government initiative to date, the Open Government Partnership (OGP), was founded. The OGP is an international multilateral organization (IMO) that was initially composed of the country members, Brazil, Indonesia, Mexico, Norway, the Philippines, South Africa, the United Kingdom, and the United States. However, today it has grown in size and includes 75 country members. The OGP has adopted the three components, transparency, public participation, and collaboration, and has promoted a program implementation and evaluation system

advancing those three components of open government with the help of information and communications technology (ICT).

Open government has thus evolved out of transparency policy to become a specific type of government reform platform that encompasses a range of policies and processes associated with the use of ICT. Open government has included policies and programs involving access to information, social media, open data, data on spending and other governmental processes, and the use of online meetings or comments forums (Jaeger and Bertot, 2010). Open government reforms seek to harness all of these policy tools but each of the policy areas could also stand alone as a particular type of open government policy or program. For example, access to information reforms can be undertaken without taking on broader transparency reforms that could be described as 'open government'. These broader open government approaches are used in ways that are much more extensive in their range of policy applications. For this reason, rather than being used as a label to characterize a value or property of public organizations as being open, open government is being used as a title for a whole category of program initiatives aimed to reform the process of the management and organization of public agencies.

In order to distinguish the range of topics that fall under the open government umbrella, I conducted a systematic survey of scholarly literature to identify the main topics of open government being developed in empirical works by scholars across all academic disciplines. I performed a keyword search of "open government" in titles, abstracts, and keywords of the academic journal

archive Web of Science, a comprehensive online citation and indexing platform

for scientific publishing (full table of results in Appendix 1). The search in the

journal database between 1990 and 2016 returned a total of 297 articles and

conference papers across 33 journal titles. Eleven topics of open government

literature were identified. The five most frequently studied topics were open data

(41%), general open government (15%), transparency (14%), citizen participation

(11%), and access to information (9%). However, there are ten different topic

areas of open government identified in total (the remaining seven are open

innovation, budget openness, geographic information systems, open education,

open science, and intergovernmental collaboration), which each represent a

different program area adopted within the overall framework of open government.

Open government is thus a diverse collection of program areas that all pertain to

reforming the organizational design of government towards more openness, and

which are in need of common frameworks to understand their shared

characteristics and performance dimensions.

The definition of open government I adopt in this dissertation is based on

Meijer, Curtin, and Hillebrandt's (2012) core ideas of monitoring, influencing,

and information: Meijer, Curtin, and Hillebrandt's (2012, 13) view openness of

government as measure of, "the extent to which citizens can monitor and

influence government processes through access to government information and

access to decision-making arenas". I integrate the foregoing discussion and

analysis of open government as a reform platform of different technologies and

policies that organizes this quality of openness. Given this diversity of policy and

program areas within open government, I define open government as a *composite program of government reform that seeks transparent and citizen-centered creation, communication, and maintenance of public information*. Transparency remains one of its core building blocks in addition to broader organizational designs that are citizen-centered in that they involve the other commonly cited planks of open government, public participation and access to information.

2. Implications for open government scholarship: the central problem to be solved

Having defined open government and distinguished its main characteristics, I now will turn to addressing and elaborating upon a central problem in current scholarly knowledge on the subject. A secondary problem of the dissertation will also be outlined. These problems motivate the selection of questions and research strategy that will be adopted for the dissertation.

The central problem: the association between organizational design and open government performance

The association between open government design and performance is a problematic area because most existing theoretical tools in public administration are not suited to the challenges of organizational theory in an age of open government. Classical theories of design and performance in public agencies drew

strongly from rational design models of organization, especially regarding the work of Max Weber, and at the turn of the 19th century in the writings of later Victorian scholars such as Woodrow Wilson (Sayre, 1958). In these models, public agencies form a closed system that is rigidly hierarchical and dependent on the expert wisdom inherent in the educated classes. Within such a system, goals and interests are defined from the top and the execution of tasks is simply a case of putting the pieces of the machine together in the best way. Authority was an important part of the Weberian system because without it the top of the hierarchy would be undermined and the organization would not function properly.

However, if government processes are about creating openness, there will be greater challenges to rational, hierarchical authority. Decades of public administration scholarship have already shown how public administration reforms have eroded rational authority. Since Herbert Simon's influential work, *Administrative Behavior* (1965), public administration scholars have accepted that, while public administration may take a rational approach to decision-making that involves collecting information and then letting senior decision-makers choose among the best courses of action using the information, at some point other material interests shape behavior, leading to decisions that are not optimal. One of Simon's disciples, Nils Brunsson (1982) went further than Simon by arguing that it is not just possible but *necessary* for public organizations to be irrational in this way. According to Brunsson, if organizations only could make rational decisions using available information they would not be able to respond

spontaneously to the political, economic, and social challenges of their environment, and would decline as a result.

Brunsson's theory highlights a novel way for addressing the modern day performance challenges of open government. The implication of Brunsson's logic plays out in specific ways in the case of the link between open government design and performance because open government aims to improve openness by increasing information flow between public agencies and their environment. Open government organizational design will therefore lead to accelerated processes of tension as organizations try to achieve rational goals of transparency while responding to countervailing forces of the environment. Further, by encouraging public participation and collaboration, public organizations take on an additional layer of complexity, and they multiply the process of exchange between the organization and the environment of the participating public or the collaborating organizations. There is thus a fundamental difficulty for public organizations in open government structures and processes because, while open government aims to adhere to essential values of openness such as accessibility for citizens and transparency, organizational processes and decision-making may influence citizen access and public accountability in a myriad of different ways that may not be optimal for performance. Given these unique challenges to open government design, it is important to establish new frameworks for understanding what is distinctive about the organizational design involved in open government reforms and how it relates to performance.

A notable challenge to our current way of thinking about open government and performance is that the three core components of open government – transparency, collaboration, and public participation – are all focused on internal changes to the way organizations establish core organizational *structures* and *processes*. Organizational structures and processes, which involve areas such as public participation or transparency of decision-making, are different from organizational *inputs* such as fiscal resources, or organizational *outputs* such as numbers of products or services. But despite this organizational design oriented type of reform in open government, scholars have not investigated what characterizes these structures and processes as part of ordinary organizational theory such as decision-making, governance, and strategy. The empirical frameworks of organizational designs that link the diverse components such as participation, transparency, and collaboration under the umbrella of open government have not been well understood. Scholars talk about the three components, but there is little empirical understanding of what characteristics link them in organizational structures and processes, and how these designs should be evaluated to improve open government performance. Transparency, collaboration, and participation include specific government programs such as geospatial information systems, open innovation, and open data, but these are ostensibly very distinct technological and organizational areas with different kinds of goals, actors, inputs and outputs. How are we to approach open government performance as a unified program of reform without understanding what common structures and processes are involved across these diverse areas of policy?

Meijer, Curtin, and Hillebrandt (2012) have provided one possible conceptual lens for placing open government structures and processes in organizational theory. They sum up the aspects of open government in the concepts of *vision* and *voice* because open government is both about providing access to information that citizens can see and use and about providing a forum of political and civic action that enables citizens to express preferences and be involved in public policy decision-making. The open government conceptualization of vision and voice implies that open government involves designs that both enable citizens to see government information and to access government decision-making. In another study, Meijer (2013) argues that there are three organizational characteristics to transparency; the *cognitive* characteristics that allow individuals to perceive and understand information pertaining to transparency; the *strategic* characteristics that appreciate the motivations that individuals and organizations have for being transparent; and the *institutional* characteristics that explain how embedded aspects of organizational processes, norms, and structures enable transparency. However, beyond transparency processes, scholarly approaches to understanding the organizational structures and processes in the broader construct of open government have not been advanced.

Other extant research of organizational theory has addressed open government, but only through the lens of specific kinds of technology such as social media. Lee and Kwak (2012) present a social media open government maturity model with five stages: initial conditions, data transparency, open

participation, open collaboration, and ubiquitous engagement. Each of these stages represents a further step forward in integrating broad social and political elements into organizational processes. Studies of open government evolution tend to agree with the Lee and Kwak (2012) model. According to Horsley (2006), open government reform in non-democratic countries or emerging democracies can take years to grow, and is more effective to the extent that it can be designed at multiple levels of government so as to create the kinds of integrated processes that both Lee and Kwak (2012) and Meijer, Curtin, and Hillebrandt (2012) refer to. But what exactly are these organizational designs that are used by governments in open government initiatives, and how do they perform, beyond specific kinds of technology such as social media, across transparency, collaboration, and public participation programs? Following the structure/process dichotomy of organizational design, this dissertation will address this central problem through two research questions: (1.1) how does organizational structure contribute to open government performance? And, (1.2) how does organizational process contribute to open government performance? These two questions are part of the central research problem outlined above that is addressed in this dissertation.

A secondary problem: the macro-level foundations of open government organizational design

In the previous discussion of the central research problem of this dissertation, it was argued that scholarship of the subject of open government lacks

understanding of how open government organizational design relates to open government performance. However, there is another important step further back in this causal theory that concerns where those organizational design capacities themselves come from. Are stronger open government organizational design capacities merely the result of micro-level factors in the internal decision-making and leadership of the public organizations or are there differences in the macro-level environment concerning economic and political factors that provide a foundation for the design capacity? This is a *secondary* problem addressed in the dissertation. However, it is also an *important* problem to address because, while open government supporters often assume that open government is an ingredient of an even greater public value known as 'good governance', most research on various other ingredients of good governance such as media freedom (De Mesquita and Downs, 2005; Freille, Haque, and Kneller, 2007), democratic elections (Aslaksen and Torvik, 2006; Torvik, 2009), social equality (Wilkinson and Pickett, 2010), and bureaucratic expertise (Farazmand, 2009; Palombara, 2006) have been developed empirically to the extent that we now know about their specific macro-level antecedents. Understanding of the macro-level factors underpinning organizational design is important to give us a fuller picture of organizational design in open government performance. It is problematic that we know little about the macro-level antecedents of open government given that open government is assumed to be a positive thing for good governance (Noveck, 2009). Are the antecedents similar to antecedents of other ingredients of good governance such as fair rule of law or democratic elections? Or does open

government relate to a different set of antecedents? These questions concern organizational design and are therefore integral to building a comprehensive picture of organizational design and open government performance.

While this is an important problem to address, it is of secondary importance in this dissertation because macro-level factors are less directly controllable by public managers and open government policymakers. Internal organizational design, unlike macro-level economic and political factors, is directly controllable by policymakers and public officials, and therefore offers a good first step as a practical approach to improving open government performance. On the contrary, macro-level factors require very different macro-level interventions and are difficult to directly control. They are important for scholars of public administration to take up, but are not focused on in great depth in this dissertation. Rather, the dissertation will attempt to draw a few initial conclusions about macro-level factors using statistical analysis, and to tentatively incorporate the results into the final analytical framework. This secondary area in the research will be addressed through a third research question, which is, 'do macro-level factors shape organizational design capacity in open government?'

3. The importance of designing open government reforms effectively

The rapid rise of open government, coupled with the capacity of ICTs to continue growing in their ability to manage and share large quantities of information, means that open government is likely to remain a top organizational reform priority in governments around the world. While there is a nascent open

government research agenda in public administration, scholars frequently

highlight the normative and practical limitations of existing theory regarding

frameworks of organizational action and performance impacts (e.g., Linders,

2012; Meijer, Curtin, and Hillebrandt, 2012; Trivellato, Boselli, and Cavenago,

2014). Open government achievements in some countries are contravening

conventional concepts of democratic performance. Traditionally strong

democracies such as Sweden and Canada do not perform highly in open

government initiatives such as the OGP, while countries that are emerging

democracies with structural governance problems such as Montenegro or Mexico

are winning admiration for their open government innovations[1]. Many advanced

democratic countries eschew the chance to join the OGP, while other poor

performing democracies are eager to join in order to demonstrate their openness

credentials[2]. So how does a "closed" or "semi-open" government become "open"?

And how does one "open" government become more open than another open

government? What organizational design practices do high achieving open

government countries possess that make them successful? In earlier reform efforts

such as New Public Management (NPM), the focus was on whether the outcome

of efficiency through privatization and decentralization was achieved. Open

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[1] In 2014, Montenegro won a Gold Award for its open government program to foster citizen participation in economic regulation. https://www.opengovawards.org/2014results. Last accessed 10/20/2016.

[2] A recent OECD report cites that the country Myanmar, recently opening after decades of dictatorship, is seeking eligibility for OGP qualification status, and has made several other steps towards transparency. http://www.oecd.org/mena/governance/Open-Gov-Review-Myanmar.pdf. Last accessed 10/20/2016.

government represents a new way of thinking about structure and process that needs new theoretical models and best practices.

It is important to design open government effectively because otherwise the benefits of open government will not be obtained. A multitude of benefits of open government in the long term have been suggested in scholarly literature. These include economic benefits generated from the contribution of large datasets to the knowledge management industries (Janssen, Charalabidis, and Zuiderwijk, 2012), improving citizen trust of the government through bringing information and participation closer to citizens (Welch, Hinnant, and Moon, 2005), making government more effective by gaining policy knowledge and information about preferences from citizens (Pina, Torres, and Royo, 2007), making government more efficient by digitizing government communications (Brown, 2005), and encouraging politicians and public officials to behave more responsibly (Bertot, Jaeger, and Grimes, 2010). In order to realize these benefits of open government, scholars should help ensure that the concept of government openness retains its original meaning of transparency and accountable processes rather than becoming a narrow and technical meme connoting the mere digitization of modern governance practices (Catlaw and Sandberg, 2014; Chadwick, 2003; Harrison et al., 2012; Schumann, 2007). Open government is a relatively new field of scholarship and it needs to have a clearer idea of its conceptual parameters and its best practices and methods for public administration professionals.

4. Research strategy

The research in this dissertation probes the two aforementioned problems in the theory of open government. The central problem is that it is unclear how performance differences in open government relate to the work of public managers in organizational design. The secondary problem is that it is unclear whether there are macro-level economic and political factors that account for why some open government design capacities are more effective than others.

The dissertation lays out a research strategy to address these problems and to develop the field of open government in public administration. The research seeks to build a rich case-generated picture of the organizational design practices associated with open government reforms. Table 1 details the central and secondary research questions that will be addressed by the research. To address the central problem of the association between organizational design and performance, the research question posed is, 'what is the association between organizational design and open government performance?' This question seeks to identify what the important organizational structures and processes are for performance. It therefore addresses these two components of organizational design in separate chapters using different methods before bringing them together in a unified analytical framework of organizational design and performance. Finally, the secondary problem is addressed by posing the question, 'do macro-level country factors shape organizational design capacity in open government?'

Table 1. Central and secondary research questions

Research questions

---

1. What is the association between organizational design and open government performance?
1.1. How does organizational structure contribute to open government performance?

- What structural factors should be involved in assessment of open government performance?

- How should structural factors be assessed within an analytical framework of organizational design and open government performance?

1.2. How does organizational process contribute to open government performance?

- What process factors should be involved in assessment of open government performance?

- How should process factors be assessed within an analytical framework of organizational design and open government performance?

Secondary question:

2. Do macro-level country factors shape organizational design capacity in open government?

The findings of the research addressing these questions are used to

develop an analytical framework of open government organizational design and

performance. In the broadest sense, a framework can be defined as a

representation that "explains, either graphically or in narrative form, the main

things to be studied – the key factors, concepts, or variables – and the presumed

relationships among them" (Miles and Huberman, 1994, 18). However, according

to Stanley (2012), an analytical framework is not quite as extensive as a *theory* in its claims to replicate reality. Rather, it involves interlinking concepts through processes or causal or analytical relationships, and then using this framework as a theory-building tool. Shields (1998) stated that frameworks can be of many types and that the exact type depends on the types of questions being asked by the research and the methods being used. In Shields' schema, the analytical framework of the type used in this research is primarily a form of 'understanding research' and 'exploratory', rather than being, 'explanatory', or 'predictive', because it poses questions about ideal types and how current practices can be moved closer to ideal types through a process of conceptual development and organization.

Open Government is a relatively new concept in public administration. The novelty of the concept means that it still needs more conceptual refinement by scholars in order to distinguish it from related concepts such as transparency, open data, and freedom of information. So far, public administration research has not addressed what organizational design practices of open government are in open government reforms nor how organizational design is associated with high performing open government programs. The aforementioned objectives aim to plug a current gap and shortage of research in empirical literature on the topic of open government. The findings produced by the research can be used to guide public administrators and policymakers on effective approaches to open government reform and organizational design. The analytical framework will provide scholars and practitioners with a way to analyze and improve the

performance of open government. It will invite further investigation to establish empirical proof for the where and what of how organizational design operates as well as encourage deeper investigation into best practices of open government reform design at a comparative country level. Finally, the two-country case study approach of the research will add to our knowledge of public organizations across the 75 county members of the OGP, but additionally in two different, but important, geographic contexts used as case studies, the US and the UK.

The dissertation draws on two theoretical perspectives - organizational design theory and structuration theory - to understand open government structures and processes and the relation of such structures and processes to performance. Figure 1 shows a conceptual model of the three levels of the organization that will be addressed. The inner organizational design levels are the organizational design components of structural and process factors. Lastly, the outer layer is the macro-level that influences organizational design through the larger organizational environment.
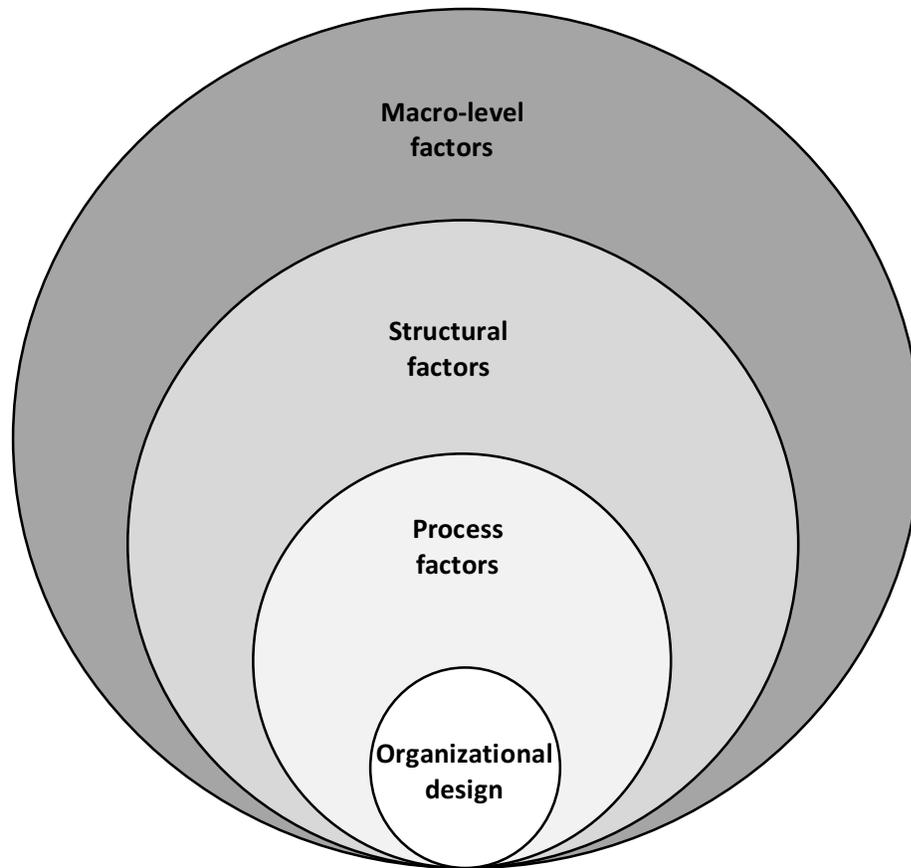
Figure 1. Three levels of organizational design and performance

The development of the analytical framework will be based on the three

levels of organizational design and will build upon this basic model in several

steps. Firstly, in Chapter 2, the theories of organizational design and structuration

theory will be put forward, and the first stages of a conceptual model will be

developed using a literature review of the structural factors of organizational

design that are related to open government performance. Structuration is the

theory that structures in society and organizations, such as hierarchies or inter-

organizational partnerships, and human behavior are intertwined; structures shape

human behavior but at the same time behavior is continually altering structures (Giddens, 1984). Structuration takes the holistic perspective of organization and society that external structure and internal agency process are intertwined; they are complementary forces that influence each other. However, while structure and process are part of a continuous stream, in order to understand the unique character of both structure and process it is necessary to develop knowledge of them in separate steps before understanding their interdependent reproduction and change over time. The dissertation therefore focuses on the prior conceptualization, which Giddens (1979) called *synchronic* description as opposed to second way, called *diachronic*. The structural component of the analytical framework meets the call of some scholars for organizational models that account for the dynamic between structural, external factors, and internal factors (Shangraw and Crow, 1989). The findings from the literature are developed into propositions regarding the association of open government organizational structural factors with performance. Secondly, in Chapter 3, knowledge of the three core internal organizational processes – governance, consultation, and strategy – is developed using thematic content analysis. Unlike the results of the literature review of structural factors, which leads to empirical propositions being put forward, the results of the thematic analysis are represented in a detailed description, or 'inventory', of open government processes. The structural factors of open government are similar to structures associated with performance in other areas of public administration research such as open data, e-government, and ICT adoption. However, internal organizational processes are

unique to open government. In the absence of prior literature on these unique aspects, the inductive approach of thematic analysis is adopted. Starting from Chapter 3, the analytical framework will turn to the purpose of making some preliminary assessments of the performance question by (1) looking into the differences in the results of the content analysis for a sample of high- and low-performing countries, and (2) testing the relationship between organizational design variables and open government performance using regression analysis. In the next two chapters (4 and 5), the association between organizational design factors and performance is explored through a qualitative analysis of two best practice country case studies focusing on two policy areas – law enforcement in the United States (Chapter 4) and healthcare in the United Kingdom (Chapter 5). The case studies involve content analysis of interviews, analysis of four narrative episodes in the cases, and analysis of news articles, official reports, blogs, and participant observation relating to open government in the two countries. In Chapter 6 the results of the case studies will be used to generate a list of key performance indicators (KPIs) from the structural propositions and the inventory of open government processes. Finally, in order to address the secondary research question, Chapter 7 will turn to testing a model of macro-level political and economic factors of high performing open government design capacities. The concluding chapter will present the final analytical framework including structural factors, processes, KPIs, structural performance questions, and macro-level factors.

~ Chapter 1 ~

Methodology

1.1. Mixed methods design – 1.2. Data sources and context: The Open Government Partnership – 1.3. Multi-country regression – 1.4. Country case studies – 1.5. Content analysis – 1.6. Performance as compliance – 1.7. Discussion and conclusions

1.1. Mixed method design

To address the research questions, this dissertation uses a mixed method research design. Methodological tools include (1) regression models estimating the performance of open government design factors, (2) thematic content analysis, and (3) rich descriptive analysis of open government initiatives in two different country contexts. The thematic analysis, a regression analysis, and case study analysis address the central research question. A second regression model addresses the secondary research question by taking the capacity of those organizational design factors from the first regression model along with some additional organizational process factors as the dependent variable and estimating the effect of macro-level country economic and political factors. Table 1.1 details the specific methodology and expected research outputs for each of the research questions.

Table 1.1. Methods and outputs used to address each research question

Method	Output

Central research question: 1. What organizational design factors are associated with higher open government performance?

1.1. How does organizational structure contribute to open government performance?	**Methods used to address questions 1.1 and 1.2:**	
	1. Two cases studies of open government programs in two different high performing open government countries. The case studies include (a) content analysis; (b) document analysis; (c) interviews; and (d) participant observation.	1. Step 1 of the analytical framework: structural factors and organizational processes.
1.2. How does organizational process contribute to open government performance?		2. Step 2 of the analytical framework: key performance indicators (KPIs).
	2. Regression analysis using OGP data on the design and performance of over 2,000 open government programs in 50 countries.	3. Regression estimates.

Additional methods used for question 1.2 only:

3. Content analysis of IRM progress reports to develop a thematic analysis of the themes and sub-themes discussed in the evaluation of processes involved in the design and implementation of national action plans

4. Comparison of the thematic analysis in five high- and five low-performing countries.

4. Thematic analysis codes for organizational processes.

5. The inventory of open government organizational processes

Secondary research question:

2. Do macro-level country factors shape organizational design capacity in open government?

5. Regression analysis using OGP data on 50 countries and secondary data on macro-level political and economic characteristics of countries from sources such as the World Bank

6. Regression estimates

7. Step 3 of the analytical framework: integration of structural factors, processes, macro-level factors, and KPIs.

Mixed methods research has become increasingly important in social science research. According to Cresswell (2003, 4), "to use only quantitative or qualitative methods falls short of the major approaches being used today in the social and human sciences." Starting with Campbell and Fiske's path-forging 1959 study, which employed multi-method matrices, social scientists have argued that reliance on a single method with its attendant weaknesses and biases can be insufficient for research that intends to address a broad range of empirical cases or to build comprehensive theory. Instead, triangulation between different methods can help to neutralize the biases of single methodological approaches (Cresswell, 2003). Another advantage of the mixed methods approach is that it integrates both the postpositivist and constructivist philosophies of quantitative and qualitative methods, respectively, and adopts a pragmatic philosophy that applies the best insights from either approach depending on a 'what works best' basis. The advantage of quantitative approaches such as the statistical analysis used in this dissertation is the generalizability of conclusions drawn from analysis of a large number of observations. However, the problems and questions addressed in this dissertation concern a new topic in the field of open government on the relationship of the organizational processes that are unique to open government initiatives and therefore existing theories cannot be directly applied to answering the questions. Instead, an exploratory qualitative approach is also needed. Qualitative research provides "a means of accessing unquantifiable facts about the actual people researchers observe" (Berg, 2002, 8).

But mixed methods research is difficult and requires a well-thought-out strategy to determine how the conclusions derived from the different methods can be reconciled. It involves careful integration of quantitative and qualitative approaches in several possible configurations depending on the chronological ordering of the methods and the degree of comparison and dialogue that takes between them. Research strategies can be *sequential*, using one method after the other to address shortcomings or develop variables that can then be addressed better by a second methodology. They can also be *concurrent*, which involves addressing the same models or variables and work through methodological synergies as they emerge. Finally, they can also be *transformative*, which means that a specific theoretical lens is used that depends on a design with both qualitative and quantitative components (Cresswell, 2003). The mixed methods research strategies used in this research are *concurrent triangulation* and *sequential explanatory*; the research will use quantitative and qualitative methods to address the same research question, but draw on different cases and data to provide different kinds of results and interpretation. The research will also be sequential in that each methodology will be used to refine the possible variables and case selection used in the other methodology in different phases.

The scope of the research is focused on the OGP. As noted earlier, the OGP is a multi-country membership organization made up of 75 countries. Member countries must meet a minimum standard of openness in the laws and constitutions of their governments in order to join the Partnership. On a two-year cycle, the member countries produce an open government national action plan

(NAP) consisting of specific programs (the 'commitments'). As part of the OGP process, the commitments are assessed and coded for their success as open government initiatives by an independent evaluation called the IRM. These commitments (for clarity, called 'programs' hereafter) will be the basic measurement unit of open government initiatives used in this research.

The mixed methods approach of this research addresses both structural and process aspects of organizational design in open government. It uses thee methods: 1) regression analysis; 3) content analysis of Independent Reporting Mechanism (IRM) progress reports; and 4) country case studies with interviews and content analysis, other document analysis techniques, and in-depth narratives called 'vignettes'. The first stage of the analytical framework will be developed using a reading of the scholarly literature on open government, organizational theory, and structuration theory, which will result in the construction of a structural model of open government. In two different models at the program and country levels, regression analysis is employed to test whether organizational design variables are associated with open government performance. The regression analysis will test empirical hypotheses derived from reading of the scholarly literature. Both the quantitative and the qualitative analysis will be tied to the research question and operationalized to measure the research constructs identified from previous literature on the topic of open government. Thematic analysis in Chapter 3 establishes the three core open government processes, the thematic typology, and the full inventory of open government processes, which is the second stage of the analytical framework development. The case study

approach in Chapters 4 and 5 provides an in-depth analysis of organizational design where the structural constructs from the literature review and the thematic typology from the content analysis is applied and developed. The third stage of the analytical framework will be developed in Chapter 6 by bringing together the structuration model, the three core organizational processes, KPIs, and performance questions about the relationship between structural factors and organizational processes. The quantitative and qualitative aspects of the study therefore serve different purposes but are also interdependent and can be used for triangulation of results. Chapter 7 tests the influence of macro-level factors on organizational design capacity. The final version of the analytical framework incorporates the macro-level factors, and is presented in the conclusion.

1.2. Data sources and context: The Open Government Partnership

In the United States, the plans for open government were set out early in the 2008 presidential campaign of Barack Obama. The policy platform of his campaign was directly contrasted with the perceived secrecy and lack of popular appeal of the Bush White House in the prior administration (Coglianese, 2009). During the Bush years, there had been a steady increase of pressure from advocacy organizations to reform government transparency. Obama then expressed his intention to make government more open from his first day in office when he issued the Memorandum on Transparency and Open Government as well as a Memorandum on the Freedom of Information Act, which affirmed the administration's commitment to FOI as the bedrock of accountability and

transparency in government (Evans and Campos, 2012; McDermott, 2010). The Memorandum also used the threefold definition of open government – transparency, public participation, and collaboration – that has come to be widely adopted as the mantra of open government reforms as well as a lens for conceptualizing open government scholarship (McDermott, 2010; Sandoval-Almazan and Gil-Garcia, 2016).

The next step towards open government taken by Barack Obama came with the founding of the OGP. The global aspirations of the open government movement of the OGP were clear from the start. The launch of the OGP took place at the United Nations in New York, and the core group of countries was intended to cover several of the world's continents and key economic powers. But the OGP was also a monumental point in the history of open government because it gave definition to the concept, distinguishing open government from transparency or specific kinds of open government legislation such as freedom of information. The OGP also created a system of evaluating governmental processes, which turned the attention of scholars and transparency practitioners to the organizational basis of open government reforms.

Today, over five years after its founding, the OGP is composed of 75 member countries from all continents and a variety of different economic and political backgrounds. The 2015 Strategic Plan of the OGP puts forward four core goals of the organization:

1) To maintain high-level political leadership and commitment to OGP within participating countries;

2) To support domestic reformers with technical expertise and inspiration;

3) To foster more engagement in OGP by a diverse group of citizens and civil society organizations; and

4) To ensure that countries are held accountable for making progress toward achieving their OGP commitments.

The rapid expansion of the OGP's membership from an initial eight to 75 countries in six years is a remarkable rate of growth. Membership in the OGP includes countries that are in the top ten highest for gross domestic product (GDP) in the world such as the United States, France, and Brazil to countries with small economies such as El Salvador and Cape Verde. There are countries with long histories of transparency such as Sweden, and other countries such as Chile and Georgia where information was tightly controlled by dictatorships until the 1990s. The OGP holds annual summits hosted by members that are attended by thousands of representatives from member governments as well as international representatives from the business sector, nongovernmental organizations, and academia.

In order to join the OGP, countries must meet certain eligibility requirements. These requirements set a basic level of government transparency necessary to make improvements in open government and are not intended to cover a comprehensive range of democratic indicators. The requirements are

measured using a points-based system that includes four criteria: (1) fiscal

transparency, (2) access to information, (3) public officials' assets disclosure, and

(4) citizen engagement. Points are awarded in *fiscal transparency* for having an

executive budget proposal and audit report according to the assessment of the

Open Budget Survey. On *access to information*, countries receive scores for

having a constitutional provision guaranteeing access to information. For *public*

officials' assets disclosure, maximum points are achieved if a country has a law

requiring public officials to disclose information on assets. Finally, on *citizen*

engagement, countries are measured on the civil liberties indicator of the

Economist Intelligence Unit Democracy Index. Countries do not need to achieve

in every single category so long as they meet 75% of these requirements. In

addition to meeting these eligibility requirements, countries must demonstrate that

they have prepared to be engaged in the open government planning and evaluation

procedures of the OGP. Countries must formally endorse the Open Government

Declaration and deliver an action plan detailing concrete steps of how specific

open government programs will be designed and implemented, and they must also

commit to using independent reporting of their progress in meeting goals.

Reporting requirements involve cooperation with the IRM (discussed below) and

the production of two yearly self-assessment reports; the first covering progress in

the consultation, design, and implementation of the countries' NAPs, and the

second evaluating whether the implementation has gone according to plan. The

Open Government Declaration was adopted at the founding of the OGP in

September 2011. It declares a commitment to four principle areas of work: (1)

Increasing the availability of information about governmental activities; (2)

Supporting civic participation; (3) Implementing the highest standards of

professional integrity throughout a country's administration; and (4) Increasing

access to new technologies for openness and accountability.

The IRM is the performance assessment and quality control mechanism of

the OGP. The IRM manages and monitors the quality and progress of countries'

NAPs, and ensures that the planning and performance reporting of the NAPs

meets certain standards agreed to by the countries when they join the OGP. These

standards and processes are primarily set out in the OGP Declaration of Principles

and the Articles of Governance, which include pledges to support the core values

of open government through civic participation, openness, and accountability as

well as country compliance requirements such as submitting progress reports. In

physical terms, the IRM is a staff team made up of six people in Washington, DC.

The IRM works closely with the OGP steering committee and the International

Experts Panel (IEP), which is made up of country experts from the member

governments and oversees quality control in the IRM process. The IRM conducts

evaluation training for the IRM researchers in Washington, DC, and other

locations around the world. IRM researchers are responsible for writing the

country progress reports. The IRM also works with country governments to

ensure that the governments adhere to the two-year cycle of NAP planning,

implementation, and evaluation. The IRM database uses quantitative data

generated in the IRM process according to a standardized format for measuring

and assessing scores of organizational inputs and outputs in open government initiatives.

IRM researchers are carefully selected by the IEP. The researchers are normally from the same country that they are assigned to assess in order to ensure that the researchers have local knowledge of the way governmental processes of the country work and have some familiarity with local civil society networks. While this in-country approach is an advantage, it may also come with a risk of bias on the part of the researchers. To mitigate this problem, IRM researchers are given a training course on open government evaluation through the OGP. There is also an IRM evaluation manual that standardizes the assessment process and there is a permanent IRM secretariat to oversee the process and ensure quality control and consistency in the data. IRM researchers are carefully chosen to all be highly adept in evaluation and analysis. They are experienced professionals normally from academic or journalistic backgrounds with in-depth knowledge of government and transparency in particular. Furthermore, as OGP countries have already passed the eligibility requirements that include having basic legal protections for civil society and the media, and a having a public records system that is legally required to comply with public records requests, the IRM researchers are not at a high risk of censure or government pressure to write biased assessments that paint their governments in a more favorable light.

The governance of the OGP is designed to strengthen relationships between government and civil society as well as to ensure a balance between these two stakeholders and protect impartiality. The Steering Committee of the

OGP is composed of government and civil society and there is a rotating

leadership with two government co-chairs and two civil society co-chairs. The

OGP Support Unit constitutes the secretarial function of the organizations.

According to the OGP website, the Support Unit, "is designed to maintain

institutional memory, manage OGP's external communications, ensure the

continuity of organizational relationships with OGP's partners, and support the

broader membership."[3] The OGP Articles of Governance enshrine these

principles as well as establish the governance arrangements of the organization

itself as just described.

The funding of the organization evidences a further way that the

organization relies on the synergies of civil society and the government as its

financial support comes from both sectors. On the civil society side, the main

funders are the Omidyar Network, the Hewlett Foundation, the Ford Foundation,

and the Open Society Foundation, all of which in 2015 donated a total of around

nine million dollars. Among these civil society foundations, the Omidyar Network

and the Open Society Foundation have gradually increased their support of the

OGP as part of their long-term interest in fostering the 'open society' and

promoting the use of ICTs in finding better solutions to solving public policy

problems in civil society and government. The sources of funding from

government coming principally from the Department for International

Development in the United Kingdom and the United States Agency of

International Development. However, starting in 2015, the OGP began a

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[3] http://www.opengovpartnership.org/who-we-are/ogp-support-unit-staff. Last accessed
10/20/2016.

recommended allocation from participating governments that is calculated
according to each country's income level. The recommended amounts range from
$25,000 USD for low income countries to $200,000 USD for high income
countries.

Figure 1.1 shows the NAP development and implementation process for
countries that are members of the OGP. The OGP initiatives begin with the
decision and preparation made by national governments to join the organization,
which itself may be a lengthy process involving political and administrative
procedures. Key individuals either inside or outside of government may be the
ones who lead the call to join the OGP. Once OGP members, governments must
undertake a concerted effort to include important stakeholders in a consultation
process that determines what individual programs are made in the NAP as well as
sets the ground for the range of roles that different organizations will plan in
implementation. In the next stage, implementation, the program or policy set in
place during NAP development is put to the test; the steps of the plan are
unrolled, and institutional arrangements including accountability mechanisms
through other government agencies, civil society, and the public are used to
ensure that milestones are met. During implementation, divergences from the plan
are addressed and are responded to on an ad hoc basis as necessary. Together,
there are seven steps in the implementation of NAPs: 1. Submit letter of intent to
join OGP; 2. Develop action plan in close collaboration with civil society; 3.
Present action plan at OGP Steering Committee meeting & post online; 4.
Complete first full year of action plan implementation; 5. Publish 1st year self-

assessment, including intent to remain active in OGP; 6. Publish first IRM Report;

7. Update action plan in collaboration with civil society.[4]
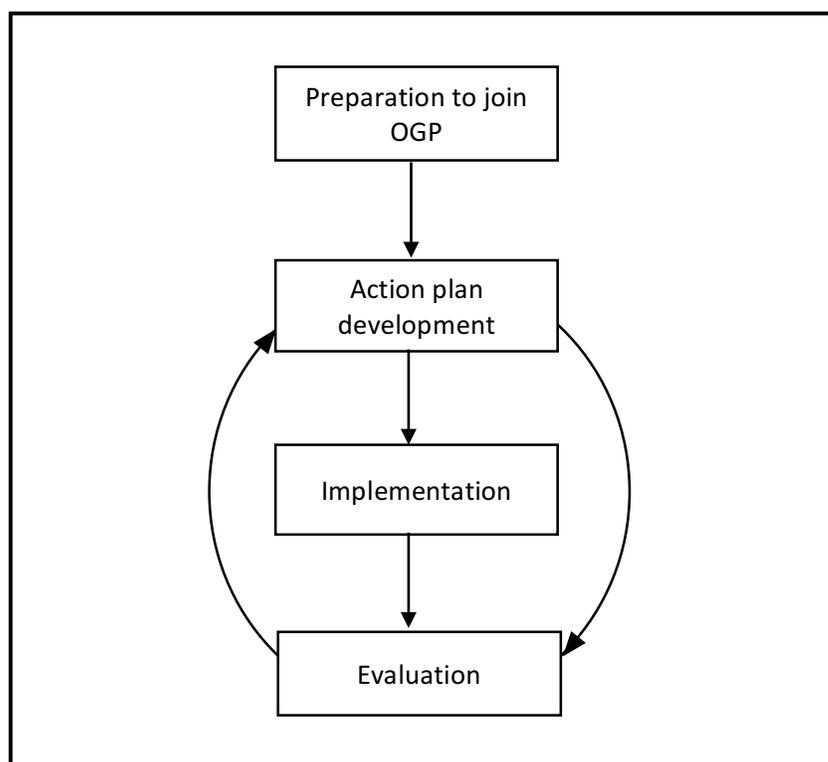
Figure 1.1. Flow diagram of NAP design and implementation process

1.3. Multi-country regression

Quantitative data for regression analysis will be obtained from several secondary

sources. In the first regression model, the dependent variable of open government

program success will be operationalized using OGP data. The dependent variable,

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[4] Timeline information obtained from OGP webpage, "Dates and Deadlines," Last accessed on 2/18/2017 from http://www.opengovpartnership.org/node/1356

open government program performance, is operationalized in three different ways using data from the OGP to measure initiative compliance in terms of its: 1) progress towards its implementation; 2) level of potential impact; and 3) level of effectiveness. Several of the independent variables are also operationalized using OGP data. These are design variables such as allocating accountable officials, using performance measurement and milestones, and creating goal clarity as well as design characteristics estimated in a second model addressing the secondary research question of macro-level factors that includes a variable regarding the quality of the consultation process. In the second model, which operationalizes macro-level indicators of a country's political and economic capacity for strong open government design capacity, other secondary sources of data will be relied upon. The other data sources are the World Bank's data on gross domestic product (GDP) as well as other structural variables from the World Bank's World Governance Indicators. Measures of informational rights and the strength of civil society come from the OGP and the Bertelsmann Transformation Index, respectively.

1.4. Country case studies

The analytical framework of open government organizational design will be applied in two in-depth open government case studies:

1) An open government program for police transparency in the United States.

2) An open government program for citizen-centered health care in the United Kingdom.

In order to investigate open government organizational design and performance-related factors, two countries that have high achieving 'open' governments were selected: the United States and the United Kingdom. These country case selections fulfill the research purpose of assessing examples of best practice in open government. Best practice research is a method for ascertaining knowledge of things that work in a practice setting, especially in areas of government reform where exemplary models are helpful (Overman and Boyd, 1994). The best practice countries selected in this dissertation needed to be countries that demonstrate the mechanisms of organizational design involved in higher open government performance. The selection of cases starts with the identification of the universe of potential cases, which, in the case of a variable such as openness in governments, may theoretically apply to any government. However, this research is primarily interested in country cases so only national level governments are considered. In order to narrow the universe further, the OGP serves as a convenient sample of national governments that is large in size (75 countries) and presents a range of different regions, government types, and linguistic and cultural country differences. Another advantage of the OGP sample is that the membership is based on a standardized procedure for assessing countries and producing comparable data, and the membership of the governments is set to a specific performance standard whereby countries must

meet a set of open government requirements in their political, administrative and constitutional system.

The next step of the case selection involved narrowing down the OGP countries to a smaller sample size that can be used for making empirical inferences to inform the questions asked in the research. As the motivation for the case selection here is to address the question of the kinds of organizational design that are associated with higher open government performance, a basis is required for selecting countries that are examples of high open government performance. In order to identify a population of such countries, an index ranking of countries with the most frequently 'starred' programs from the data generated from IRM evaluation reporting was used (see Appendix 2). A high starred program is an open government initiative that is determined by the IRM to have high potential impact in a relevant realm of open government endeavor, and which has achieved significant progress towards completion. A starred ranking index is thus an indicator of high open government performance. As the research of the dissertation seeks to develop an analytical framework for the relationship between organizational processes and open government performance, the sample selection was focused on the countries with a higher starred proportion of programs. The ranking has Brazil (1), Mexico (2), the United States (3), Croatia (4), and the United Kingdom (5) in the top five countries in the index. As three of the top five countries (Brazil, Mexico, and Croatia) as well as the remaining top 20 countries do not use English as a government or national language, they were excluded as possible case countries. This elimination left the United States and the United

Kingdom, which were selected as the case study countries. The United States and the United Kingdom are strong selections for open government performance for several other reasons. Both countries have a long history of engagement with open government concepts and policy initiatives (Shkabatur, 2012). The United States was an early adopter of open government legislation such as the Administrative Procedures Act (APA) in 1946, the Freedom of Information Act (FOIA) in 1966, and the Electric Freedom of Information Act in 1996 (Shkabatur, 2012). The APA set in place legal requirements for U.S. government agencies to consult the public on the governmental regulations development process. While the United Kingdom was a later FOIA adopter, it had advanced open government policies at a national level much earlier such as with the publication of a Green Paper on open government and the Croham Directive in the 1970s, which were motivated by the idea that there needed to be more public policymaking informed by other government departments and citizens (Clark, 1986). Both countries were also founding members of the OGP and have been assessed to be among the world's most transparent countries[5]. The countries score highly on good governance indicators (Hood, 2006) and they have earlier been the focus of research by scholars because of their strong traditions of public participation and accountability (e.g., Vigoda, 2002).

The next step for the case selection was to identify suitable cases of open government programs within the country contexts of the United States and the

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[5] For example, the Open Budget Index has ranked the United States and the United Kingdom in the top ten or five countries in the world for the openness of government budgeting since 2010. Data available at http://www.internationalbudget.org/opening-budgets/open-budget-initiative/open-budget-survey. Last accessed on 11/25/16/

United Kingdom OGP NAPs. This selection process for the specific case program

within the two case countries also proceeded systematically. While the country

selection of the US and the UK involved intentionally sampling from best practice

countries that are high performers in open government, the selection of the

specific open government programs within those countries is motivated by a

broader purpose. The research aimed to investigate the program development and

organizational design in real time during their planning and implementation

before the performance evaluations that normally come at the end of the program

have been conducted. This enabled better access to the decision-makers of the

program and access to events by the researcher for participant observation and

information gathering. Thus, for the programs, rather than being the best practice

examples from within best practice countries, the programs were selected on a

'most informative' basis to identify cases that provide further insights that are

useful for developing scholarly understanding of open government processes.

Several criteria proposed by the researcher allow for program selections that

address the research questions of the dissertation and provide meaningful lessons

that can be drawn from the analysis: (1) the open government policy areas

selected for research needed to be salient policy issues in an ordinary setting of

government that exist not just for the purpose of open government policy but for

core purposes of government; (2) the program areas should be areas of central

interest in public administration literature; (3) the programs must be part of the

NAPs of the selected case countries, the United States and the United Kingdom;

(4) the programs must traverse at least two of the components of open

government (transparency, participation, and collaboration) in order to effectively address the goal of the research to understand organizational design across the core components of open government; and (5) the program areas are not the same policy areas in each country so that conclusions about organizational design and performance will not be unique to a specific policy area of government, but will instead offer a couple of policy examples of organizational design.

The most recent NAPs of the United States and the United Kingdom feature 45 and 37 programs, respectively. In order to identify appropriate program case studies from this large population of program areas, the NAPs were carefully read, existing scholarly knowledge and understanding of the contemporary policy context was used to identify the ones that are most pertinent to the criteria, and the researcher also consulted the program director of the IRM for advice on the selection. Using this process and the four aforementioned criteria, the following two programs were selected.

1) A program for police transparency in the United States

The NAP of the United States includes a program titled, 'Build Safer and Stronger Communities with Police Open Data'. This is the specific program selected in the best practice case study of the United States, and which will hereafter be referred to as the *police transparency program*. Recent years in the United States have been marked by several high profile cases of police shootings and it will be valuable to see how policymakers and politicians responded in the police

transparency program to address the issue using open government programs. The NAP of the US has committed to addressing this program through a wide network of stakeholders including numerous cities and organization such as the Office of Science and Technology Policy in The White House and the Domestic Policy Council as a leading civil society organization. According to the wording of the NAP, the goals of the program are, "to improve trust, bring better insight and analysis to policing efforts, and ultimately co-create solutions to enhance public safety and reduce bias and unnecessary use of force in policing." The methods the NAP states will be used to achieve these goals are (1) to, "highlight and connect local open data innovations in law enforcement agencies;" (2) to bring together, "26 participating jurisdictions including New Orleans, Knoxville, and Newport News, [that] are working side-by-side with top technologists, researchers, data scientists, and design experts;" and (3) to "to build out more resources such as playbooks and technology tools to help jurisdictions easily extract and publish data".[6]

The police transparency program meets the four aforementioned criteria for selecting an open government program that is a highly informative case. Firstly, the program is clearly a part of the United States NAP so that the specific set of organizations and actors can be identified for the purposes of carrying out the analysis. Secondly, police transparency is a salient and mainstream policy issue that is part of the ordinary work of government. Thirdly, police transparency

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[6] The Third National Action Plan of the United States, 2015-2017. Washington DC: The Open Government Partnership. Page 16. Last accessed on 11/25/16 from http://www.opengovpartnership.org/sites/default/files/final_us_open_government_national_action_plan_3_0_0.pdf.

has been identified as a critical area of government transparency (Open Society

Justice Initiative, 2006). It is also an area of transparency that relates to public

safety and life/death issues that De Fine Licht (2014) says is an area that is

difficult to render meaningful for citizens. It therefore requires more attention

from public administration scholars. Fourthly, the police transparency program

satisfies the criteria of spanning at least two of the three areas of open government

because it involves committing to transparency improvement through open data,

creating solutions to citizen trust and police legitimacy through public

participation of "communities" in policymaking, and developing task forces

involving collaboration between police, the United States Justice Department, The

White House, and civil society organizations.

2) A program for citizen-centered healthcare services in the United Kingdom

The citizen-centered health services program sets the target that "NHS England

will be improving the quality and breadth of information available to citizens to

support them to participate more fully in both their own health care and in the

quality and design of health services which will result in greater accountability of

NHS England."[7] National Health Service (NHS) reform has been a contentious

topic in the United Kingdom in recent years and there has been a concerted effort

to improve the efficiency of public health spending in addition to improving

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[7] The Second National Action Plan of the United Kingdom 2013-2015. Washington DC: The Open Government Partnership. Page 37. Last accessed on 11/25/16 from http://www.opengovpartnership.org/sites/default/files/20131031_ogp_uknationalactionplan.pdf

performance in key areas. Public health is one of the major public policy areas in public administration theory and represents one of the key areas that has potential for improvement using open government approaches. As the UK seeks open government approaches to public health data, this will be an important program design area that relates strongly to all the areas of open government: public participation on health review boards, transparency of the review process, and freedom of information policy during a time when the government is seen as trying to clamp down on FOIA requests. One of the goals of the commitment is for NHS England, the organization running the open government program of the United Kingdom, to develop a Patient and Public Participation Network (https://ppilaymembers.wordpress.com/) that will improve patient access and develop better health practices. In addition, the commitment said NHS England would gather public input on a system for citizens to become more involved in NHS decision-making called NHS Citizen (https://www.nhscitizen.org.uk/).

The citizen-centered healthcare services program also meets the four aforementioned criteria for selecting an open government program that is both a best practice example from the UK and a highly informative case in that country. Firstly, it is an official program included in the UK NAP. Like the topic of police transparency, transparency in health care delivery is also a salient policy issues that can be studied in an ordinary setting of government that exists not just for the purpose of open government policy but for the core purpose of government. It is also a life/death area of policy of the kind that De Fine Licht (2014) argues is difficult for public organizations to manage. Thirdly, healthcare transparency is an

important policy area for public administration research (e.g., Bevan and Hood, 2006; Blomgren, 2007). Finally, the program covers two areas of open government. Unlike the police transparency program, it does not explicitly include program efforts in the area of collaboration. However, it involves an open data platform for transparency and the creation of the NHS Citizen online forum for public participation.

Thirty-five individuals were interviewed (22 in the United States case and 13 in the United Kingdom case) with about half from government and half from civil society. There were two interviewees from each leading government agency (the Office for Science and Technology Policy from The White House in the United States and the Prime Minister's Cabinet Office in the United Kingdom), one interview with individuals from each of the leading civil society organizations (The Open Gov Hub in the United States and the Civil Society Network in the United Kingdom). Further interviews were gathered by snowball sampling technique following suggestions offered by the core group of interviewees. The interviews were done by telephone, which was necessary to gain access over a wide geographic area. According to Hagan and Collier (1983) telephone interviews can be a disadvantage because the interviewer cannot see the interviewee and therefore is unable to benefit from observing the body language of the interviewee and creating the personal rapport that can be helpful for developing the conversation. However, Hagan also points out that there are several advantages to phone interviews. Firstly, they reduce the need for using extra financial and staff resources to carry out the interviews. Secondly, the

reduced level of behavioral interaction in a phone conversation makes the process of monitoring and standardizing the quality of the interview easier. Thirdly, telephone interviews make it possible to reach individuals across a wide geographic area. The latter reason is especially important in this research as the interviewees are in two countries separated by a large distance.

As well as a wide range of documentary evidence and interviews used to develop knowledge of the cases, George and Bennet (2005) also recommend forming knowledge through participant observation. I undertook research supporting the IRM researcher for the United States, which included six separate visits to the head office of the OGP in Washington DC. Those visits involved several information gathering projects involving focus groups and interviews with members of the United States government and civil society organizations as well as attendance of policy talks given by a similar range of experts. One of the visits also included participation in the training course offered to IRM researchers in order to prepare them for their work as assessors of the national action plans for open government of the member countries. These regular sessions of participant observation involved detailed note-taking that also contributed to the range of qualitative data points used in the research. The documentary evidence collected during the research included news articles, official policy reports, online discussion obtained through membership in the listservs of the main civil society networks that are engaged in the open government initiatives. News articles were used as a secondary source of information on the events and processes that took place during a 12 month period following the adoption of the program. These

news articles were selected using Google News Alerts. A specific 'Boolean operator' of keywords (for example "police AND transparency OR police AND collaboration"), performing the role of a search algorithm, was entered in the Google Alerts search facility to limit the content of the articles that would be included in the sample. While news articles cannot be relied upon to provide scientifically reliable information, they do provide leading information that can be further verified and explored by cross-checking with experts in interviews or in official policy reports (Crabtree and Miller, 1999). Prior public administration scholarship has used news articles in order to gather archival evidence and perform thematic analysis on current affairs topics, public controversies, or historical topics (e.g., Lejano and Leong, 2012; Nohrstedt, 2013; Simo and Bies, 2007; Willems, 2014). In the context of open government initiatives, news articles are an especially good source of information as the initiatives regularly involve open meetings, open data, and other information-rich forms of engaging with journalists. All of the prior IRM progress reports and NAPs of the United States and the United Kingdom were also used as secondary sources for background information on the context of the open government initiatives in those countries.

The two case studies each involved a descriptive vignette, which is a case study method used in narrative inquiry. Vignettes are a type of narrative or framing device. They are selected from relevant case material and used to illustrate a particular concept, variable, relationship, or phenomenon through detailed description. According to Dodge, Ospina, and Foldy (2005), vignettes are an especially useful tool for developing organizational concepts in comparative

research. Narrative vignettes have three main benefits. Firstly, they reflect "situated social reality" where beliefs, values, attitudes, and feelings are demonstrated in a concrete context (Dodge, Ospina, and Foldy, 2005, 290). Secondly, they contain practical knowing about experienced professionals working in their natural context. Thirdly, they are 'constitutive', which means that they represent events, processes, or phenomena that simultaneously influence and are the outcome of the knowledge and actions of individuals (Dodge, Ospina, and Foldy, 2005). In this dissertation, the vignettes are used to provide narrative examples of episodes of crisis or conflict that create organizational ambiguity.

1.5. Content analysis

Content analysis is "a careful, detailed, systematic examination and interpretation of a particular body of material in an effort to identify patterns, themes, biases, and meanings" (Berg, 2002, 338). The content analysis in the dissertation addresses a sub-part of research question 1.2, which concerns the organizational process factors that should be involved in open government performance. In the absence of prior empirical research on open government organizational processes, an inductive approach to content analysis can help to develop evidence and build theory (Berg, 2002). The content analysis was carried out on two groups of textual material used in the research: (1) 49 progress reports of individual countries produced by the IRM; and (2) interviews of senior decision-makers from each of the country case studies. In the content analysis of the IRM progress reports inductive, open coding was used and, in the second, deductive coding was

used. Open coding is used first for the content analysis of the IRM progress reports in order to create a thematic framework that can subsequently be used deductively to analyze the interviews from the two country case studies.

Open coding involves approaching the analysis of text through inductive methods. The researchers start by asking the data a specific set of questions based on the goals of the research. The data must then be analyzed minutely through repeated readings, each time with theoretical notes taken throughout. In the open approach two or more researchers read the texts (in this case the IRM progress reports) to inductively create an index sheet. Categorizing tactics are required throughout the content analysis process starting when the first texts have been read so that the themes and categories can develop iteratively with the subsequent addition of new texts. Strauss (1987) recommended a grounded approach to open coding that should come with no preconceived theoretical ideas or externally imposed organizing strategies. The text should 'speak for itself' and themes, sub-themes, and categories should be based only on a reading of the selected material. However, the method used in this dissertation for open coding instead follows Berg's (2002) method where the themes and categories are developed together with knowledge of the research theory and prior literature so that they bear a "relation to the properties of the phenomena under investigation" (Berg, 2002, 351). In the deductive method of content analysis for the case study interviews, the themes, sub-themes, and categories generated inductively in the IRM progress report analysis was used as a coding framework to analyze the interview texts.

This method was employed in order to provide a robust thematic framework that could be used to analyze the material from the interviews.

The full set of content analysis steps used in the open coding is shown in Table 1.2. This schema is based on the stages of content analysis by Berg (2002). Each of the steps of the content analyses conducted in this research is matched with the corresponding stage as described by Berg.

Table 1.2. Berg's (2002) stages of content analysis (in bold text) with detail of specific application in the dissertation research.

Stages of open coding content analysis

1. Identify the research question(s)

The research question being addressed by the content analysis is research question 1.2: 'How does organizational process contribute to open government performance?' The first step is the sub-part of this question: 'What process factors should be involved in assessment of open government performance?'

2. Determine analytical categories and constructs from theory.

Before the content analysis is undertaken, a detailed literature review was undertaken and a theoretical framework was developed with the main analytical categories of organizational processes identified. This theoretical knowledge was used to shape the researchers' selection of themes, sub-themes, and categories during the open coding.

3. Read through data and establish grounded categories using open coding

All of the IRM progress reports were read (*all* reports, including low, medium, and high OGP performers) and a coding sheet was developed by taking notes on first impressions, ideas, and possible connecting information between concepts.

4. Determine objective criteria of selection for sorting the data chunks into analytic and grounded categories, themes, and sub-themes.

The coding sheet was cross-referenced with theory and analytical categories developed in the literature review in order to create a final code book.

5. Assign the data into categories, themes, and sub-themes.

The IRM progress reports were read and segments of text (clauses, full sentences, or collections of contiguous sentences) were assigned to categories, themes, and sub-themes.

6. Count the number of entries in each category to create descriptive statistics and to allow for the demonstration of magnitude or prevalence.

A final word count showing frequency and percentage coverage was entered into tables.

7. Analyze and present the results in order to facilitate interpretation and decisions regarding hypothesis testing and theory.

The results were presented in tables and analyzed using textual discussion. Inferences, conclusions, and other theoretical observations were made.

1.6. Performance as compliance

As this dissertation will address the topic of organizational design and its association with performance in open government programs, it is necessary to address in this section how performance will be defined and operationalized throughout the dissertation. Organizational reform performance has become a

central part of public administration theory today as it is associated with the

managerial models of organizational performance that have become dominant

since the 1990s (Tsokhas, 1996). There are many different ways that performance

can be measured, but transparency, like open government, has been a difficult

subject to measure because definitions of transparency are wide-ranging (Ingrams,

2016). However, one of the most objective ways of measuring open government

success is simply through a binary assessment of whether a program complies

with what it sets out to achieve; that an open government program fulfils what

designers say it will fulfill. This is called compliance-based performance

measurement.

According to May and Burby (1996), compliance can be achieved through

either meeting concrete policy outputs or by non-material qualities like shared

values, processes, and intentions. Compliance is thus a good measure of open

government success where goals normally involve the adoption and integration of

specific kinds of processes involving value-based, normative, actions such as

transparency, public participation, and collaboration. Compliance has two

dimensions that are critical to understanding how organizations achieve it:

compliance is 1) deontological, and 2) instrumental. Deontologically speaking,

open government involves normative commitment to transparency, which

according to Hood and Heald (2006), is an intrinsic good in itself as well as an

instrumental value. Public managers experience a moral responsibility to comply

with policy but they also recognize that there are instromental, strategic, self-

interested reasons for compliance or non-compliance (Foo, Asenova, Bailey, and Hood, 2011; Spriggs, 1997).

Compliance is a measure of reform outcomes that aims at enhancing the value of *accountability* (Jos and Tompkins, 2004; Weber, Lovrich, and Gaffney, 2007), and it is vital to the success of a project (Kassel, 2008). Compliance measurement in open government design is therefore especially pertinent because open government also aims at improving accountability. According to Jos and Tompkins (2004, 26), "[c]ompliance-based processes rely on established rules and procedures and focus on whether administrators have complied with these expectations". However, compliance need not be delivering specific amounts of output. In fact, compliance is increasingly about putting in place better processes such as information and technology exchange mechanisms that aid future policy design and implementation (Rogers and Weber, 2010). The same goes for the policy areas of transparency and open government where organizational processes reform is the main goal. The unique thing about aspects of transparency such as accountability and participation is that they not only are the goals of transparency reforms, but are the very means and processes by which they are achieved (Hood and Heald, 2006; Roberts, 2006).

In sum, performance is a broad, multi-level component of organizational design. The openness of government is a difficult thing to measure, but compliance in meeting process goals committed to in open government reforms can be more easily measured. Furthermore, compliance raises questions about deontological motivations as well as instrumental strategies of managers and other

agents within organizational structures, and is therefore important for understanding the normative and strategic motivations underlying organizational structures and process of open government. This definition of open government performance does not claim to be without limitations. One of its main limitations is that it does not capture the actual impacts of open government on the government outcomes and the well-being of citizens. However, these kinds of lasting outcomes are very difficult to measure as they involve a dense causal interplay with long-term consequences that are very difficult to identify, dissect, and measure objectively. In contrast, compliance can be objectively measured and is therefore used as a robust way to operationalize open government performance across the different methods used in the dissertation.

1.7. Discussion and conclusions

A broad range of quantitative and qualitative sources are used to investigate the research questions proposed in this dissertation. The research questions of the dissertation are divided into three sub-questions. The first two sub-questions (questions 1.1 and 1.2) are the central research questions and address the association of the structural and process factors of organizational design with performance. These two questions are addressed through regression analysis and best practice country case studies. However, the process factors are also addressed through a thematic content analysis in order to develop knowledge of such processes in the absence of detailed findings in existing empirical research. Question 2 is a secondary-level question about the role of macro-level factors in

organizational design capacity, and is addressed solely through regression analysis.

The mixed method approach is an approach described by Cresswell (2003) as *concurrent triangulation* and *sequential explanatory* that is designed to improve the empirical rigor of the research through a diverse set of data points that can be triangulated and contrasted. The OGP is an ideal case for exploring the dissertation's research questions. It has developed a specific set of open government eligibility criteria as well as its own evaluation system of organizational processes and performance called the IRM. The full range of methods in the research includes a literature review, content analysis of IRM progress reports, a case study approach using document analysis, narrative inquiry (vignettes), participant observation, and interviews of practitioners involved in two open government programs. Content analysis, following inductive and deductive methods used by Berg (2002), is adopted in the research for analysis of IRM progress reports and the case study interviews. The inductive type of analysis aimed to develop a thematic framework that could be used to establish detail about organizational design in open government, while the latter type of content analysis involved a deductive analysis where the thematic framework was applied in the two case studies. One case study is a police transparency program in the United States, while the other is a citizen-centered healthcare program in the United Kingdom. In addition to the qualitative analysis, two stages of regression analysis are used. The first stage of regression analysis involves regressing open government performance with organizational design variables at

a program level. The results of this regression analysis are used in the triangulation of results addressing the association between open government organizational processes and performance. The second stage of regression analysis involves regressing organizational design variables on macro-level indicators at a country level. The results of the second stage of regression analysis addresses the secondary research question concerning the relationship between macro-level factors and effective open government processes.

The next chapter of the dissertation introduces the core theoretical perspectives of the dissertation, organizational design and structuration theory. The chapter will carry out a review of the theoretical literature on the structural factors involved in open government performance. At the end of this chapter a structural model of open government will be constructed that forms the first step of the analytical framework of organizational design.

~ Chapter 2 ~

The Structural Factors of Organizational Design

2.1. The theory of organizational design – 2.2. A structuration approach to organizational design – 2.3. Literature review of the structural factors of open government performance – 2.4. A conceptual model of structural factors involved in open government performance – 2.5. Discussion and conclusions

2.1. The theory of organizational design

Organizational design theory is a core topic in public administration scholarship that concerns how organizational structures and processes are designed. According to Burton and Obel (2004), organizational design is, "a normative science with the goal of prescribing how an organization should be structured in order to function effectively and efficiently." The theory focuses on how the internal processes and external structural parts of an organization fit together to improve the organization's decision-making efficiency. A process is defined following Davenport (2013, 5) as "a structured, measured set of activities designed to produce a specific output." Meanwhile, structure comprises the more fixed social and institutional variables such as official knowledge, techniques, and values, the jurisdiction of the policy, and the hierarchical control of the organization.

The current chapter will first introduce organizational design theory and structuration theory including the concepts of organizational structure and process. Secondly it will focus on structuration theory to understand organizational structure in organizational design and performance, while the next chapter will delve into more depth on specific organizational processes and how those processes relate to performance. The current chapter will thus address research question 1.1 of the dissertation ('how does organizational structure contribute to open government performance?') by carrying out a literature review of the structural factors involved in shaping and structuring organizational design in open government.

The launch of new open government reforms raises the question of how public organizations design organizational structures and processes for open government. But, the design of public organizations has moved a long way from the early models of organizational design influenced by the work of Max Weber. Early models conceived organizational design through the lens of a rational-bureaucratic perspective of organizations where senior officials at the top of the hierarchy decide what policies will be carried out and how. Such models are considerably outdated today. Today, organizational design is viewed from within institutional perspectives that look at organizations in their environmental context and hold that political, cultural, and inter-organizational variables affect organizational design (Frederickson, 1999; March and Olsen, 1983). The institutional perspective holds that both internal processes and external structural organizational variables interact to create forms and arrangements of

organizational designs. Importantly, such designs are not rationally determined by any particular actor, but rather are a mixture of intentions, processes, and resistance from actors and structures. Organizational design is a socially constructed process that takes place through combinations of actors, agents, and arenas. It involves the construction of identities, hierarchies, and rationalities (Brunsson and Sahlin-Andersson, 2000). Ahrne and Brunsson (2005, 84) say that, "[t]he environment of formal organizations can be organized, and formal organizations may be active in organizing their own members as well as their environment: other organizations and other individuals."

Public organizations are uniquely characterized by structures of inter-organizational policy-making with shared goals and processes, and therefore Ahrne and Brunsson (2005) have called such organizations "meta-organizations". Meta-organizations are characterized by significant collaboration challenges and points of conflict, and this is no less true of the organizational structures involved in open government. Prior work has already begun to look at the organizational structures and processes of open government at a more granular level. In one conceptual framework, Meijer (2013) argued that there are three aspects to transparency regimes: information exchange, institutional relations, and working and performance. Each of Meijer's three core interpretative lenses for understanding of transparency (cognitive, strategic, and institutional) are based on types of interactions that take place between the government and its stakeholders, and one of the main strengths of these three different dimensions is that they provide public administrators with a way to understand how transparency fits in

with broader structure of the social and public sector context. Therefore, in approaching open government initiatives such as the OGP it is necessary to understand the organizational, legal, political, and relational structures that underlie the reforms. As Meijer says, "[g]overnment transparency is constructed in interactions between actors with different perspectives within a certain (institutional) playing field, and, at the same time, these interactions change the nature of the playing field" (Meijer, 2013, 429). Meijer's theory is an important foundation for organizational theory in transparency research. However, his theory has not been extended to cover the area of open government, and, furthermore, the organizational theory of open government still requires detail of the specific organizational components and structure of the components that fit together in the design of open government reforms as opposed to transparency programs alone.

2.2. A structuration approach to organizational design

Organizational design perspectives in public administration theory sometimes take on a reductionist view because they do not give full consideration to the way individual human agency defines and shapes organizational structure (Shangraw and Crow, 1999). Especially in areas of administration such as open government where technology decisions are central to the design process, public administration scholars have developed frameworks to analyze decisions using constructivist perspectives in order to provide a more complete picture of how organizations bridge the divide between organizational structure and agency (e.g.,

Thatcher, Brower, and Mason, 2006; Tsai, Choi, Perry, 2009). In keeping with this dual perspective of organizational design, this dissertation addresses design at the intersection of structural and agency aspects by approaching design in two parts: organizational *structure* that involves the more fixed part of the organization and organizational *processes* that involve the fluid part of the organization associated with individual decision-making and agency.

One of the main theoretical well-springs for this dualist perspective is Anthony Giddens' theory of *structuration*. According to Giddens (1984), organizational structures are continually constructed by the actions of members of organizations and the characteristics of their institutions. Structures are enacted by users rather than inherent in organizations or technologies. The structuration perspective is especially helpful for understanding government reforms because, while people, ideas, and interactions change, there is an underlying structural process that creates organizational cohesiveness (Sinclair, 2002). Structuration theory can thus be used as a micro-foundation for organizational approaches that otherwise focus on macro-level institutional processes (Cooney, 2007). Scholarly works that attempt to use institutional processes to understand the unification of structure and process in organizational behavior have often drawn on the theory of structuration. For example, looking specifically at the role of technology in organizations, Orlikowski (1992, 405) says that "[d]rawing on the ideas of social shaping and inscription, structuration models have posited that technology is developed through a social political process which results in structures (rules and resources) being embedded within the technology." Orlikowski describes a

"technology choice model," whereby decision-makers develop technology through a dynamic process, while acting within a particular organizational structure. Following Orlikowski's logic, I have adapted her original model on the dynamic creation of technology to the subject of open government shown in Figure 2.1.
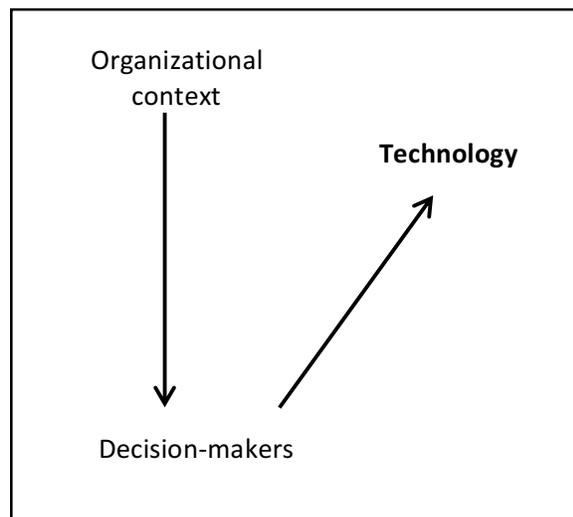
Figure 2.1. Original strategic choice model. Orlikowski (1992)

The adapted model, Figure 2.2, shows the dynamic process with open government performance as the outcome of the strategic choice model where organizational processes such as decision-making lead from the organizational context and produce performance outcomes instead of the outcome of 'technology' choice in the original model by Orlikowski.
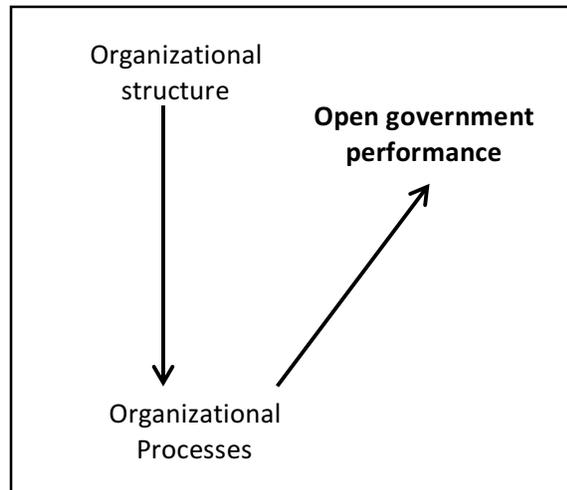
Figure 2.2. Strategic choice model. Adapted from Orlikowski (1992)

Technology choices are an important part of open government design. However, open government design involves a wider range of structural elements that should be considered to build a full picture. As Luna-Reyes and Gil-Garcia (2014) argue, as technologies, institutional arrangements, and network dynamics co-evolve, it is necessary to understand how structure fits into the enactment of technology practices and organizational processes.

2.3. Literature review of the structural factors of open government performance

This chapter has so far described the dual nature – structure and process – of the structuration approach to organizational design used in this dissertation. In the remaining parts of the chapter I focus specifically on the structural factors involved in open government design and performance using both organizational

design theory from the field of ICT studies and findings from prior research on performance in related areas to open government such as transparency, open data, citizen participation, and e-government. The findings from these literatures are used to generate empirical propositions and build a conceptual model of the structural factors involved in open government performance. Four structural factors are identified in the literature review, and used in the model: managerial, institutional, technological, and environmental.

The role of managers

Managerial capacity and skill

Empirical findings from public administration literature find that effective public organizational structures are strongly associated with the role of the manager in the structure (Hage and Dewar, 1973; Kellough and Selden, 2003). Previous literature has addressed the role of managerial skills in organizational design factors and leadership planning of government programs. For example, the design of program objectives involves creating a structure with a coherent plan with clear goals and specific and measurable outcomes (de Lancer Julnes and Holzer, 2001; Kravchuk and Schack, 1996). These organizational design practices can be used to orchestrate and direct the various units of the organization (May and Winter, 2007), and to provide for effective and accountable leadership (Brudney, Herbert, and Wright, 1999; Schick, 1999). Other managerial roles include guiding the self-evaluating ability of organizations (Wildalvsky, 1972), creating trust with citizens

to facilitate citizen willingness to develop participation initiatives (Yang, 2005) and taking a long-term perspective to improve good governance (Lapuente and Nistotskaya, 2009).

Proposition 1: Effective management of the organizational structure including planning, evaluation, and leadership is associated with higher open government performance

Integrating public values in open information systems

Open government programs are often about satisfying technical achievements and the release of data rather than building a structure with citizen input that creates a program the citizens consider to be useful and valuable (Robinson et al,, 2009; Zhang, Puron-Cid, and Gil-Garcia, 2015). However, transparency also includes proactive forms of transparency that set an information sharing and policymaking agenda and base decision-making on structures involving citizen input (Robbins, Simonsen, and Feldman, 2008). This ability of managers to build public value using organizational structures that go beyond the everyday work of the organization to factor in long-term public goals is called 'meta-governance' skill (Irvin and Stansbury, 2004; Sorensen and Torfing, 2009).

Public participation and transparency are important public values that contribute to open government processes. Managers in open government initiatives shape these values using meta-governance skills. For example, in the area of open data programs, managers can create a culture of publicizing open

data, and focusing on the lasting impacts of policies (Bertot, McDermott, and Smith, 2012; Zuiderwijk and Janssen, 2014). Hellberg and Hedström (2015) describe this managerial role in the process as a storytelling approach that helps to build understanding and shared goals in the relationship structure between government and citizens in open data initiatives. They found that although the idea of open data appeals to people, the actual potential for re-use is limited if relevance is not clear. Managers of open government therefore have an important role to play in organizational structures of appointing officials and creating processes that can convey the context as well as the content of information to citizens so that they can make objective and intelligent decisions about policy (Evans and Campos, 2013).

Proposition 2: The integration of public value goals into organizational structures is associated with higher open government performance

Managing citizen-government relationships

Citizen participation is associated with citizen trust of government and better policy decision-making (Dahl, 1994; Neshkova and Guo, 2012; Roberts, 2004). With citizen participation, managers also have an influential role in structuring and guiding the processes involved in citizen participation programs. This can be done, for example, by carrying out cost-benefit analyses of the use of citizen participation over non-participative forms of decision-making (Moynihan, 2003). Zhang and Yang (2009) found that the level of professionalism of managers, their

perception of the political environment, and their attitude towards citizen input were significant in shaping the decision to include citizens in policymaking processes.

Managers may also decide to limit how open organizational structures will be. In a study measuring the relationship between managerial decision-making and citizen engagement, Rathgeb Smith (2010) observed a critical role played by leadership. Walker et al. (1982), in a study of public participation in social assistance policymaking found that managers had considerable leeway in deciding which citizen groups participated and which were included in the final reviews of input. Indeed, public officials have discretionary powers to prevent citizen participation from influencing the outcomes of decisions (Sheely, 2015).

Proposition 3: The integration of citizen perspectives and citizen-government relationships into organizational structures is associated with higher open government performance

The role of institutions

Political institutions

Open government involves opening up the decision-making of political institutions to the public, and as a result the decisions to open up government depend in large part on the decisions made by political institutions. The political role in open government is important because, as Von Furstenberg (2001, 115)

says, "without a change in power and political will, externally imposed transparency codes and standards will forever be chasing an elusive target." Political institutions with competitive election systems seem to be more likely to use open government than non-competitive political institutions. Grimmelikhuijsen and Welch (2012) found evidence that political competition, and pressure from citizens and media is instrumental in designing decisional and informational forms of transparency, and Zhang and Liao (2011) found that political competition increased the likelihood of governments adopting online tools that provide participation with citizens. Berliner (2014) and Berliner and Erlich (2015) carried out a multivariate analysis of antecedents of access to information laws and found that institutions with high levels of political competition were highly correlated with the adoption of access to information laws.

Proposition 4: Competitive political structures that rely on fair and democratic forms of public appointment are associated with higher open government performance

Innovative institutional characteristics

Institutional factors play a central role in organizational design. In the area of e-government, a host of institutional variables have been associated with more effective adoption of e-government programs. According to Lee, Chang, and Berry (2011, 444), these variables comprise forms of innovation associate with

"learning, political norms, competition, and citizen pressures." The role of institutional factors may be especially important for processes involving innovative information technology design and organizational restructuring because these elements exert a powerful effect on organizational change (Heintze and Bretschneider, 2000). For example, the existence of robust institutional policies encouraging promotion of web 2.0 technologies encourages public organizations to use of social media (Campbell, Lambright, and Wells, 2014), or to adopt micro-blogging (Ma, 2014).

Proposition 5: Innovative institutions are associated with higher open government performance

Technology

Socio-technical structures

Open government initiatives rely heavily on ICT, but the basis of technology design processes in psychology, social behavior, and social organization is key for understanding their use. Numerous examples from empirical research show that socio-technical trust, self-efficacy, and level of digital literacy are key determinants of digital government performance (e.g., Bailard, 2014; West, 2005). Bailard (2014) in a multi-country study of Internet use, civic engagement, and trust found that online mediated government communication and technology

will not be as effective if it is not matched with underlying democratic structures that address issues such as trust, self-efficacy, and the digital divide.

Proposition 6: Organizational structures that integrate social with technical aspects are associated with higher open government performance

Collaborative structures

According to Dunleavy et al. (2006, 468), the emergence of Digital Era Government (DEG), which has fostered greater need for collaboration, is the result of, "a wide range of cognitive, behavioral, organizational, political, and cultural changes that are linked to information systems." These changes have led to a needs-based holism that links agencies together around citizen needs using information technology Digitization of public information in open government programs such as open data creates a need for sophisticated online security measures. Collaborative structures – between government organizations – are needed to develop and maintain secure online systems. Collaboration is also needed to develop open data algorithms that are responsive to specific public demands for information and fair and unbiased in the ways that they select and present information.

Proposition 7: Collaborative organizational structures in technology development and use are associated with higher open government performance

Environmental factors

Administrative reform pressures

Environmental structures in terms of social, political, geopolitical, and economic

forces are generally interdependent with the factors discussed above: managerial,

institutional, and technological. But government reform depends on

environmental structures that derive from administrative challenges (Groeneveld

and Van de Walle, 2010). Among the most important historical administrative

reforms discussed in public administration literature are early 20th century civil

service reform and the reinvention movement reform (also called NPM reform) of

the 1990s and early 2000s. In the context of open government specifically,

administrative reform under the leadership of Barack Obama was a primary

motivation behind open government initiatives in the United States. The

administrative reform pressures of the US have always emphasized that

democracy rests on citizens being informed and actively involved in government

(Bertot, 2010).

Proposition 8: Organizational structures that have high level reform

leadership are associated with higher open government performance

Public demand

Information transparency and freedom of information has repeatedly been found

to be driven by improved information flow resulting from gradual social, political,

and economic changes (Xiao, 2013), and pressure from citizens and media (Grimmelikhuijsen and Welch, 2012). Features of the public demand environment include having a larger population, larger population density, higher growth, and lower unemployment (Nelson and Svara, 2015). Research on open government and related areas such as ICT use and e-government has firmly established that having an environment of public demand is important for adoption and development (Ahn, 2011; Li and Feeney, 2014). Citizen demand for the tools of open government and e-government such as open data and social media is a central factor in understanding how programs should be designed (Colesca and Dobrica, 2008; Gupta, Dasgupta, and Gupta, 2008). Without a structure of public demand, new programs are likely to go unused and ultimately be a waste of public funds.

Proposition 9: An organizational structure that incorporates public demand for web 2.0 technologies is associated with higher open government performance

2.4. A conceptual model of structural factors involved in open government performance

Having addressed the literature on performance of open government and related fields, four main factors can be deducted for inclusion in a model of the structural factors associated with open government performance (Figure 2.3). These

structural factors and their associated propositions will later in chapters 4 and 5 be explored through the best practice country case studies. Scholars have started to propose conceptual models for the role of public administrators in designing certain elements of open-government initiatives, such as transparency initiative or open data initiatives. For example, studying the subject of e-governance, Gil-Garcia and Pardo (2006) said the organizational factors involved in successful e-government programs can be categorized as environmental or institutional, legal and regulatory, organizational and managerial, information technology, and information and data. This dissertation parallels Gil-Garcia and Pardo's (2006) e-government model. However, the model here applies to the field of open government rather than e-government. The conceptual model uses the main structural factors of open government performance identified in the literature review and theoretical framework above: managerial, institutional, technological, and environmental.
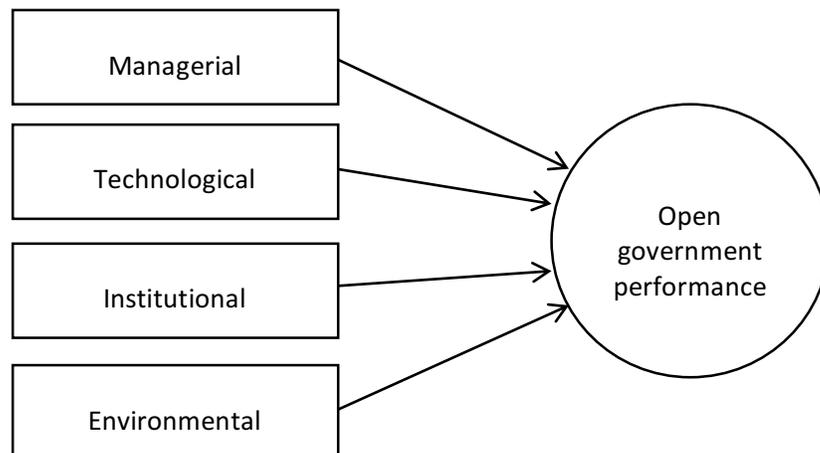
Figure 2.3. Structural model of open government performance.

2.5. Discussion and conclusions

This chapter presented organizational design theory and structuration theory and described how they can be used to supplement each other by using a dualistic approach to organizational design involving organizational structure and organizational process. It was argued that organizational design required a dual structure/agency conceptualization to understand the way that the structure and process of organizational design both relate to organizational performance. To form the structural part of organizational design, a literature review of structural factors associated with performance across a range of areas related to open government, such as transparency, open data, citizen participation, and e-government, was carried out. Nine propositions concerning the association between structural factors and open government performance were put forward. The chapter then developed a conceptual model of the structural factors of open government performance from the empirical findings of this prior literature. The conceptual model included the four structural factors: (1) institutional factors, which comprise the norms, values, rules, and political properties of the organization; (2) managerial factors, which comprise the decision-making, knowledge and skills, and leadership structure; (3) technological factors, which comprise the specific kinds of technologies used by organizations as well as the

technologies attendant socio-technical structures; and (4) environmental factors, which comprise the structure of open government organization. The conceptual model of organizational structures is the first step towards a comprehensive analytical framework of open government organizational design and performance. The next step in developing the analytical framework is to introduce the organizational processes. It is to that step, in Chapter 3, that the discussion will turn now.

~ Chapter 3 ~

The Process Factors of Organizational Design

3.1. IRM thematic analysis – 3.2. The inventory of organizational processes – 3.3. Preliminary tests of organizational design and performance – 3.4. Discussion and conclusions.

This chapter begins with a multi-country content analysis following Berg's (2002) open coding method of inductive analysis by identifying the three core processes, or 'themes', of open government. The purpose of this method is to describe the kinds of organizational processes that should be involved in the assessment of open government performance. The core process themes – consultation, governance, and strategy – are divided into sub-themes and smaller categories. This stage of the research results in the establishment of an inventory of open government organizational processes. The chapter next takes preliminary steps towards addressing research question 1.2, 'How does organizational process contribute to open government performance?' by (1) conducting a frequency analysis of the themes, sub-themes, and categories in the top and bottom five performers according to the OGP starred performance ranking, and (2) estimating a regression model of open government processes and performance.

3.1. IRM thematic analysis

Open coding analysis

To conduct the thematic analysis of the IRM progress reports, an open coding content analysis method was used. The first of each member country's reports from all of the years of available reports (2013-2016) was read and coded. The IRM progress reports are independent evaluations that include detailed assessment of organizational processes of the open government initiatives. The reports include information on the organizational processes and structures that were designed by the country government to help the implementation of the country's NAP. These organizational processes and structures thus support the phases of the implementation of specific commitments, and shape the ultimate form and impacts that the commitments will have. In keeping with the biannual reporting system of the IRM, the first reports were published in 2013 two years after the launch of the initiative. In the content analysis, only the first progress report of each country was included in order not to give disproportionate weight to countries that have more progress reports from more years of OGP membership. Not all of the 75 current members of the OGP have yet produced even their first IRM progress report, so there were 57 reports in total. A further eight reports were mostly written in Spanish so these were also excluded from the analysis. The final sample size of IRM progress reports was 49. Each progress report is required to have a section called "Action plan development", which describes the organizational, institutional, and policy arrangements that will be used to set out the individual action plan programs and implement and assess those programs. Another required section is titled the "National context of the national action plan". This section also describes the broader organizational

processes of the country's national action plan. Finally, a third required section, called "Implementation of action plan", involves the design of decision-making processes that are used throughout the implantation of the action plan. The three narrative sections, which are typically about 10-15 pages in length, are relevant to the organizational design component of the national action plan and so were selected as textual material for the content analysis. These sections leave a considerable degree of flexibility in what the IRM researcher can write on these topics. However, quality control and training on how to address these sections is provided to the IRM researchers, and these narrative sections are accompanied by coding of specific design items (discussed below in the regression analysis). The remainders of the progress reports address the specific content of the initiative's programs; how each individual commitment was implemented in practice and what happened as a result. This section is not relevant to the organizational design in terms of organizational processes and structures, and so it was excluded from the content analysis.

In the open coding content analysis, multiple readings and re-readings of the IRM progress reports were first undertaken to identify important concepts contained in the texts, which were noted down. This method followed the recommendations for inductive content analysis in Berg (2002)[8]. The concepts were refined using an iterative process of reading that organized the concepts into a series of themes, which are subdivided into smaller sub-themes. The sub-themes themselves were subdivided into categories that represented a certain value,

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[8] Berg's (2002) step-by-step guidelines for open content analysis are listed in Chapter 1.

characteristic, or quality of the sub-theme (see Appendix 1 for full definitions of each of the themes and categories). The content analysis resulted in the creation of three major organizational process themes: (1) Consultation; (2) Governance; and (3) Strategy. These major themes are depicted in Figure 3.1.

Consultation

Open government
design

Governance   **Strategy**
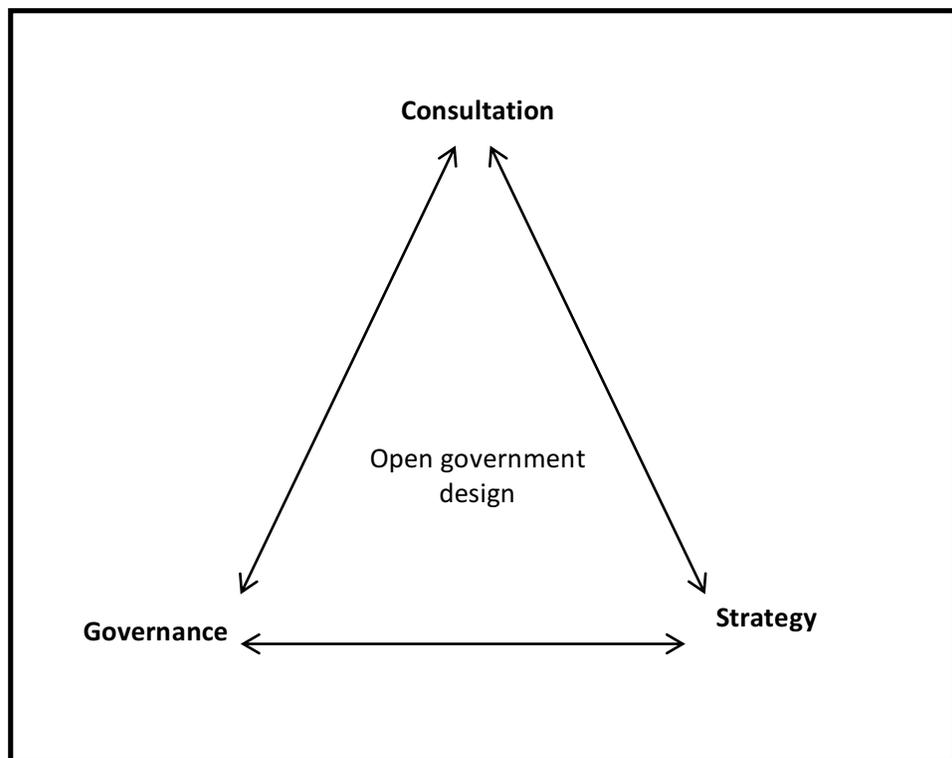
Figure 3.1. The three core themes of the open government processes

Within the three core themes, there are further sub-themes and categories that provide two more levels of details of what is involved in open government organizational processes (sub-themes and categories for each major theme are

shown in Appendix 3). Each sub-theme had several categories, which was the

smallest unit of analysis and the one used to count frequencies of textual

references to the themes. The categories refer to different characteristics or values

of the sub-themes. For example, if the text of the IRM progress report said that,

'the open government initiative used a series of online consultation meetings for

stakeholders from business and civil society, and all of the participants from key

organizations were invited', this text was coded at three levels. Firstly, it was a

form of consultation so it was coded under the *consultation* major theme. It was

also about stakeholders so it was coded under the *stakeholders* sub-theme, and it

was about the quality of the consultation so it was coded under the *quality* sub-

theme. Lastly, there are certain important categories within the sub-themes: the

specific categories of stakeholder are *business* and *civil society*, and the specific

category of quality is *inclusiveness*. Note that, while the stakeholder categories

are value neutral, the quality category is valued positively. Other categories might

be valued negatively, such as *unengaged*. These neutral, positive, and negative

differences suggest that there are variations in organizational processes that

contribute to better performance. However, for the purposes of this chapter, all of

the process categories will be considered to be value neutral and are integral to the

full repertoire of open government processes. This initial coding enables a full

description of open government processes to be achieved before continuing with

the performance-based evaluation of the dissertation.

Table 3.1 shows the full list of thematic codes in the IRM progress reports

between 2013 and 2015. It also shows the frequency of textual references in each

of the codes listed by number of sources (IRM progress reports) and total

references for each code. According to Berg (2002), while the analysis of the

results of a thematic content analysis consist of semantic and conceptual

meanings in the text, the number of cited codes can also be used to convey the

magnitude or prevalence of certain codes.

Table 3.1. Number of textual references by source and total references in IRM progress reports from 2013 to 2016

	No. Sources	No. References
Consultation	**47**	**785**
Stakeholders	*44*	*211*
CSOs	43	110
Government	25	43
Business	21	30
Academia	13	18
International	8	10
Location	*34*	*119*
Online	26	47
Offline	23	34
Centralized	14	21
Decentralized	12	17
Modes of communication	*27*	*69*
Meetings	26	42
Email	6	9
Blogs	3	7
Social media	3	6
Surveys	2	3
Telephone	2	2
Consultation governance	*7*	*8*
Shared	3	4
Unilateral	4	4
Quality	*43*	*224*
Narrowness	20	45
Inclusiveness	23	35
Unengaged	19	27

Dedication	16	22
Openness	14	19
Two-way	15	18
One-way	14	15
Closeness	9	15
Regularity	5	10
Partnership	7	10
Co-production	6	8
Prior networks	*16*	*26*
Continuous	13	22
Not continuous	4	4
Public comment process	*31*	*123*
Transparency of comments	27	53
Awareness-raising	26	44
Accessibility	15	26
Governance	**44**	**128**
Level of oversight and control	*18*	*29*
Centralized	14	21
Decentralized	9	11
Hierarchy	2	2
Breadth	2	2
Head organization	*42*	*67*
Other Ministry	26	29
Prime minister or President office	19	20
Directing	4	6
Foreign ministry	5	5
Supporting	7	7
Specificity of responsibility	*16*	*21*
Shared responsibility per policy area	11	15
One entity per policy area	5	5
Central entity responsible for all programs	1	1
Funding arrangement	*9*	*11*
Central source	7	7
Agency source	3	4
Strategy	**33**	**93**
Goal-setting	*28*	*49*
Level of ambition and impact	21	25

Specificity and measurability	13	19
Relevance to OGP values	5	5
Milestones	*5*	*6*
Specificity and measurability	5	6
Policy area	*18*	*25*
Focus	8	13
Clustering	9	9
Diversity	3	3
Skill and specialization	*1*	*1*
Specialist teams	1	1
Policy tools	*6*	*12*
Legislative change	5	7
New technologies	1	2
Breadth	2	2
Advocacy	1	1

Having identified these themes, sub-themes, and categories, it is important to describe what they mean in practice by referencing them in the IRM progress reports. As can be seen in Table 3.1, the theme of *consultation* was the most prevalent of the three core themes. There were 785 total references in the consultation theme as opposed to 128 and 93 in the governance and strategy themes respectively. The consultation theme included seven sub-themes: *stakeholders, location, modes of communication, consultation governance, quality, prior networks*, and *public comment process*. The two most frequent sub-themes in the consultation theme are the quality and stakeholder sub-themes, which have 224 and 211 references, respectively. The quality sub-theme included several categories connoting different kinds of quality mentioned by the reviewer regarding the consultation process in the design of the open government programs. In practice, this means that consultation processes can be design and

implemented with varying degrees of interaction of commitment from the participants. For example, one reference to the *narrow* category was as follows: "Consultations were concentrated mostly in the capital city of Baku, and they only covered a few segments of the wide range of civil society organisations in the country" (Azerbaijan, 2014, 12). This sentence references CSO involvement and so was entered in the stakeholder, *civil society* category. Another category of quality, *closeness*, was referenced in another progress report that said: "The Working Group's quarterly open meetings have provided numerous opportunities for the Administration to discuss the consultation process" (United States, 2015, 21). Both of these sub-themes of consultation stakeholders and quality appear at a far higher frequency than the total references in the governance and strategy themes, which reflects the focus of the progress reports on evaluations of the involvement and participation of non-governmental actors in the decision-making and vision of the open government initiatives. In contrast, governance and strategy, which are about the distribution of responsibility, leadership, and decision-making in the initiatives, are less frequently coded. The frequency results might lead to interpreting this difference as showing greater importance of consultation in open government processes. While this may be true, the analysis here is more concerned with understanding what the organizational processes are regardless of frequencies.

The governance theme has four sub-themes and 17 categories. The sub-themes are *level of oversight and control*, *head organization*, *specificity of responsibility*, and *funding arrangement*. The categories of these sub-themes

involve governance arrangements such as the amount of hierarchy and centralization as well as specific government agencies or departments that take responsibility for the initiatives. For example, to quote a typical result relating to the sub-theme of *head organization*, one coded segment of text read that, "The Department of Public Expenditure and Reform leads the development and implementation of the Action plan, supported by other Ministries" (Ireland, 2015, 9). The specific categories that define the coding of this text further are (1) *president or prime minister's office*, (2) *other ministry*, and (3) *supporting*. Other possible categories used to define the head organization sub-theme are *foreign ministry* or *directing*. Foreign ministries as head organizations were common in the organizational design of open government and therefore were given a unique category.

The level of oversight and control sub-theme refers to how hierarchical, centralized, or decentralized the open government initiative is in practice. As an example, one IRM progress report said that, "MoPIC was very powerful in leading the committee. MoPIC led coordination among the members; it most likely prepared the plan with some consultation from the committee members... [But] clear domination was obvious by the absence of role distribution among the members" (Jordan, 2014, 26). This description conveys a hierarchical process of oversight and control. On the contrary, an assessment that suggested a decentralized exercise of oversight and control is evidenced in the following text: "At the current time, its mandate is largely around coordinating the implementation of the national action plan, but it does not have the ability to

compel other agencies to enter in commitments, especially given that the Head of Government, the Prime Minister, is not directly involved in the action plan development and implementation processes" (Georgia, 2013, 14).

As mentioned above, governance also addresses the topic of how the initiative is funded, and whether there is a strongly collaborative, shared, or individualistic approach to implementing the initiative. For example, one IRM progress report read that, "[t]he Administration of the Council of Ministers is responsible for day-to-day OGP implementation. OGP financing is the responsibility of lead institutions in charge of the various commitments" (Bulgaria, 2014, 6). This segment of text was coded as *hierarchy* for the role of the Administration of the Council of Ministers, but also as having an *agency source* of funding.

The strategy theme has 5 sub-themes and 12 categories. The sub-themes are policy area, goal-setting, milestones, policy tools, and skill and specialization. These sub-themes relate to the specific decision-making skills and planning techniques that are employed in the design of open government initiatives. For the policy area sub-theme, for example, an IRM progress report said that the "action plan included diverse commitments focusing on access to public information, civic engagement, e-governance, and prevention of corruption" (Ukraine, 2013, 3). Two binary categories – focus and diversity – are possible categorizations of the policy area sub-theme, and this segment of text was categorized as diversity.

The strategy theme also addressed specialist skills, measurability markers, and personnel used to design the initiative. For example, one IRM assessment

read that, "while a number of commitments were potentially transformative, the lack of specificity of the action plan made progress and impact difficult to assess" (Netherlands, 2014, 3), which highlights the need for goals to be specific and measurable. Another area of the strategy theme addressed whether countries adopt highly ambitious goals that aim for good impacts and adopt forms of performance measurement to track progress. For example, one IRM progress report recommended that, "the next action plan should prioritize fewer but more ambitious commitments with measurable, realistic milestones and the necessary resources" (Macedonia, 2013, 4). One assessment of a legislative change used as a strategy said that the country had made "its action plan as a legally binding document at the governmental level ("Decree of Government"), requiring specific procedures, including an opportunity for the public and other departments to comment on the draft" (Slovakia, 2014, 2).

3.2. The inventory of organizational processes

The results of the content analysis show that there are specific themes of organizational processes that are involved in the organizational design of open government initiatives. Three main themes of organizational processes are identified: (1) Consultation; (2) Strategy; (3) Governance. There are more detailed parts of the organizational processes, which are identified in the sub-themes and categories of organizational design in the content analysis. In order to turn these themes, sub-themes, and categories into more explicit organizational processes, it

is necessary to translate them into empirical statements of organizational processes. This can be done very easily. Each category in the thematic analysis is represented by a process. For example, the category of *shared* in the governance sub-theme of the consultation theme can be translated into the empirical statement of a process of *Consultation using a shared form of governance*. Table 3.2 provides the full inventory of open government organizational processes established by the thematic analysis. Note that the statements include ostensibly ineffective organizational processes such as *consultation with a narrow quality*, and pairs of statements that are contradictory such as *consultation with an unengaged quality* with *consultation with a dedicated quality*. This is intentionally done to retain the full range (i.e., full inventory) of organizational processes from the content analysis. Consultation *quality* refers to the character of the consultation, such as the form, structure, and level of interaction between the government and the stakeholders. In the next chapters, the case studies of best practice will be used to trim the inventory into key performance indicators (KPIs) that are more specific about the kinds of processes that are associated with higher open government performance.

Table 3.2. The inventory of open government organizational processes

Consultation

1. Stakeholders
1.1. Consultation with CSO stakeholders
1.2. Consultation with Government stakeholders
1.3. Consultation with Business stakeholders
1.4. Consultation with Academic stakeholders
1.5. Consultation with International stakeholders

1.6. Consultation with the public as stakeholders

2. Quality
2.1. Consultation with a narrow quality
2.2. Consultation with an inclusive quality
2.3. Consultation with an unengaged quality
2.4. Consultation with a dedicated quality
2.5. Consultation with an open quality
2.6. Consultation with a two-way quality
2.7. Consultation with a one-way quality
2.8. Consultation with a close quality
2.9. Consultation with a regular quality
2.10. Consultation with a partnership quality
2.11. Consultation with a co-production quality

3. Location
3.1. Consultation taking place in an online location
3.2. Consultation taking place in an offline location
3.3. Consultation taking place in a centralized location
3.4. Consultation taking place in a decentralized location

4. Modes of communication
4.1. Consultation mode of communication using meetings
4.2. Consultation mode of communication using email
4.3. Consultation mode of communication using blogs
4.4. Consultation mode of communication using social media
4.5. Consultation mode of communication using surveys
4.6. Consultation mode of communication using telephone

5. Consultation governance
5.1. Consultation using a shared form of governance
5.2. Consultation using a unilateral form of governance

6. Prior networks
6.1. Consultation that is continuous with stakeholders from prior networks
6.2. Consultation that is not continuous with stakeholders from prior networks

7. Public comments process
7.1. Consultation uses transparency of comments in the public comments process
7.2. Consultation uses awareness-raising in the public comments process
7.3. Consultation uses accessibility in the public comments process
7.4. Consultation uses transparency of comments in the public comments process

Governance

8. Level of oversight and control
8.1. Governance with a centralized level of oversight and control
8.2. Governance with a decentralized level of oversight and control

8.3. Governance with a hierarchical level of oversight and control
8.4. Governance with a broad (non-hierarchical) level of oversight and control

9. Head organization
9.1. Governance with the prime minister or president's office as the head organization.
9.2. Governance where the head organization has a directing role.
9.3. Governance with the foreign ministry as the head organization.
9.4. Governance where the head organization has a supporting role.

10. Specificity of responsibility
10.1. Governance where specificity of responsibility involves shared responsibility by policy area
10.2. Governance where specificity of responsibility involves one entity by policy area
10.3. Governance where specificity of responsibility involves a central entity responsible for all programs

11. Funding arrangement
11.1. Governance involving funding from a central source
11.2. Governance involving funding from an agency's own source

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Strategy

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12. Goal-setting
12.1. Strategy involving goal-setting with ambition and impact
12.2. Strategy involving goal-setting specificity and measurability
12.3. Strategy involving goal-setting relevance to OGP values

13. Milestones
13.1. Strategy involving milestones with specificity and measurability

14. Policy area
14.1. Strategy involving policy area with focused policy areas
14.2. Strategy involving policy area with clustered policy areas
14.3. Strategy involving policy area with diverse policy areas

15. Skill and specialization
15.1. Strategy involving specialist teams

16. Policy tools
16.1. Strategy involving the policy tool of legislative change
16.2. Strategy involving the policy tool of new technologies
16.3. Strategy involving a breadth of policy tools
16.4. Strategy involving the policy tool of advocacy

3.3. Preliminary tests of organizational design and performance

Having detailed the kinds of organizational processes that are involved in open

government organizational design, the research now makes some preliminary

steps towards addressing whether organizational processes in open government

are associated with any performance differences. This is done in two ways in this

chapter. Firstly, the thematic analysis detailed above is analyzed further to see if

there are any obvious differences in the coding results for the high and low

performers in open government. Secondly, a regression analysis is performed.

Comparison of themes in high and low performers

This analysis of the results of the thematic analysis looks at the polar ends (the top

five and bottom five) of the OGP's starred ranking table (see Appendix 2) in order

to check at face value whether there are different organizational processes in high

and low performance countries (full tables of the results are shown in Appendices

4, 5, and 6).[9] It uses Berg's (2002) method of analyzing the frequency of coded

themes to draw some broad conclusions about where differences in frequencies

show significant disparities in magnitude or prevalence. This high-low

comparison is not intended to be a robust test of the relationship between

organizational processes and performance. It relies on a small sample of high and

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[9] The OGP performance ranking is based on the starred ranking measuring program completion and potential impact. The ranking of the five high performers includes, in order of performance, Brazil, Mexico, United States, Croatia, and the United Kingdom. The ranking of the five low performance countries includes Costa Rica, Czech Republic, Hungary, Panama, and Sweden. The full ranking is available in Chapter 1.

low countries. For this reason, as Berg (2002) advises, the comparison will focus

on only the very large differences between high and low countries where

correlations between organizational processes and performance appear strong.

The results of the test for the theme of consultation revealed that there

were 62 and 35 total references among the high and low performers respectively.

This indicates that high performers received more discussion about the

organizational processes. However, this difference, while large, in itself does not

mean the differences are associated with performance because the difference may

not be based on differences in positive and negative assessments of organizational

processes such as *dedication* vs. *unengaged*. However, a closer look does show

some substantial differences in the coding of positive and negative categories of

organizational processes, and the difference does appear to show that differences

between high and low performers in terms of organizational processes are wide.

Moderate to high divergence between the high and low performers can be seen on

all of the sub-themes except for two: *continuity with prior networks* and *quality*.

For these latter two, the results are the same or similar. It seems that the quality of

consultation and continuity of networks is not what distinguishes the high

performers. In fact, low performers even received slightly higher frequencies of

references in the positive categories of *openness* and *inclusiveness*, which are both

positive valuations of the quality of the consultation process. However, beyond

the quality of the consultation process, higher performing countries relied more

frequently on stakeholder meetings. Their IRM reports included many more

details about how and where consultation meetings were taking place. It was thus

in the concrete and technical aspects of consultation such as the modes of communication, the location of meetings, and the public comments process where higher performing governments seem to have a difference in organizational processes. Higher performing governments were also much better at collaborating with a diversity of stakeholders as the reference to involvement of other partner agencies in government, business, and academia were much more frequent.

On the theme of governance, the results of the comparative analysis showed that the high and low performers are almost the same with ten references for the high performers and eight references for the low performers. However, notable divergences between the two are in the funding arrangement sub-theme where IRM researchers in low performing countries reference dependence of funding on own agency sources while IRM researchers in high performing countries did not mention funding. The lack of a reference may not mean that higher performing countries are more supported by central sources, but the absence of any reference is an interesting result in itself, which indicates that the high performing countries may not have been clear about what the budgeting arrangements were that underpinned their open government efforts. The other difference is in the *specificity of responsibility* sub-theme where IRM researchers of high performing countries mention the design of shared responsibility several times while IRM researchers of low performing countries do not mention the use of any shared responsibility arrangements. Finally, on the *Strategy* theme, there was again the difference between the high and low performers centering on information regarding concrete and technical organizational design

characteristics. The sub-theme of *policy tools* is where the difference is most significant. High performing countries IRM progress reports reported the use of tools such as *advocacy* (1), *legislative change* (2), *new technologies* (2), and referenced the use of *breadth* in policy tools for organizational design. In contrast, in the progress reports of the low performing countries, these policy tools were not used.

While this analysis shows interesting initial results about performance differences associated with organizational processes, caution should be used in interpreting the comparisons. A limitation with this approach is that there is a theoretical possibility that how an IRM researcher evaluates of organizational processes may be endogenous to some facts about the performance of the IRM researcher's country. For example, it might be possible that IRM researchers in higher performing countries are just more skilled in obtaining information and identifying positive things to evaluate than their colleagues in low performing countries. But, the possibility of these two assessments influencing each other is diminished by the fact that the thematic analysis and the OGP ranking are based on two separate data sources. The thematic analysis is based on the textual evaluations of organizational processes in the IRM progress reports, while the OGP starred ranking is a quantitative assessment of the performance of the open government initiatives in terms of their potential impact and their progress being made towards completion. Moreover, given the comprehensive evaluation training and quality control management provided to all the IRM researchers, which was described in Chapter 1, and the fact that the content analysis themes

were derived from analyses across all of the countries not just high or low performers, there are good reasons to believe that the test at least provides a basis for making some general comparisons.

Regression analysis

In order to use quantitative analysis to provide a second source of empirical testing, the next section of the chapter uses regression analysis of variables that operationalize organizational design using quantitative data from the IRM. The quantitative IRM variables are secondary data and cannot be operationalized to match the themes or categories from the content analysis. Therefore, the regression results and content analysis results are not directly comparable. The analysis cannot show that the value of the process themes of the content analysis are statistically supported because the sources, operationalizations, and variables are markedly different from the regression analysis. However, the quantitative variables used in the regression such as the use of milestones, accountable leaders, and performance measurement are types of organizational design processes that are derived from prior literature and can reasonably be expected to lead to better open government performance. The regression analysis serves as a further test of whether there is any empirical evidence for differences in open government performance based on organizational design practices. If the quantitative data is robust, the regression analysis should show evidence of the relationship between

organizational design variables and open government performance that we would expect.

Transparency in performance measurement efforts has been identified as a key part of performance because transparency provides critical information for assessing goals and determining success in determining goals (e.g., Bianchi and Rivenbark, 2012; Landow and Ebdon, 2012; Moynihan and Ingraham, 2003). According to Moynihan and Ingraham (2003), there are four specific performance measurement practices that tend to be associated with better performing public programs: (1) Performance milestones; (2) Measurability; (3) Strategic coordination; and (4) Goal clarity. These management for results (MFR) practices also have corresponding organizational design components involving different approaches to organizational processes and structures. For example, performance milestones involve designing organizational processes to be planned around meeting the milestones, and, similarly, goal clarity involves organizational processes that have clear communication systems and definitions of organizational targets. Similarly, strategic coordination might start with processes shared with other organizations or government agencies.

Processes with a clear program leader. Similarly to any type of program area, open government programs require processes to be driven by a coherent strategy (de Lancer Julnes and Holzer, 2013; Kravchuk and Schack, 1996), but a coherent strategy also depends on clear leadership decision-making. Therefore, a further important characteristic in the achievement of program objectives is effective and

accountable department leadership (Brudney, Herbert, and Wright, 1999; Schick, 1999). Without this kind of transparency, the milestones and shared-criteria needed to assess success and encourage public organizations to be accountable would be more difficult to achieve (Ingraham and Moynihan 2001).

Processes with specific and measurable performance indicators. Moynihan and Ingraham's (2003) performance milestones and measurability are similar in that they both concern the way that organizational processes are geared towards specific targets. Developing and adhering to processes with specific and measurable indicators involves organizational inputs such as resources and time as well as the activities used to turn the inputs into outputs and outcomes (Behn and Kant, 1999; Wholey, 1999). Sorenson and Torfing (2009, 249) say that milestones focus the organization on the "production of outputs in terms of reports, conferences, plans, policy proposals and direct interventions." Measurability involves giving levers of control to program organizers by connecting micro-level practices to organizational outcomes (Heinrich, 2002; Hellberg and Hedström, 2015; Lapuente and Nistotskaya, 2009; Zuiderwijk and Janssen, 2014) and unifying organizational action around those outcomes (May and Winter, 2007).

Processes involving joint program implementation. According to Moynihan and Ingraham (2003) strategic coordination involves agreed plans of action coordinated between centrally leading organizations and the other participants. A

process of joint implementation may not necessarily be strategically coordinated in this way, but the joint action offers opportunities to share and build resources to enhance program effectiveness. In order for open government collaboration to happen, open government agencies must operate jointly with other organizations or agencies. Only through joint implementation can public organizations begin to focus "attention across functional divisions and throughout various organizational levels on common goals, themes, and issues" (Poister and Streib, 1999, 30).

Processes with clear goals. Clearly defined goals provide direction to organizational processes. According to Beisheim et al. (2014, 664), "[t]asks, rules, and commitments need to be defined clearly and precisely, that is, unambiguously, to reduce the room for interpretation". Clear goals enable organizational processes to follow the steps from program start to finish ((Beierle and Konisky, 2000). Unclear goals can even lead to participants becoming disillusioned and losing motivation (Jung, 2014; Wright, 2004). In open government programs goals should invovlve the core components of open government such as public participation (Piotrowski and Liao, 2012; Meijer, Curtin, and Hillebrandt, 2012) and accountability (Lourenço, Piotrowski, and Ingrams, 2016; Yu and Robinson, 2012).

Specific empirical hypotheses can be set forward based on the foregoing literature review of the organizational process variables and program performance.

H1: Open government programs that appoint a named leader who is responsible for the initiative will perform more strongly.

H2: Open government programs that use specific and measurable performance indicators will perform more strongly.

H3: Open government programs that are designed to be implemented jointly by multiple agencies will perform more strongly

H4: Open government programs with clear goals will perform more strongly

The data from the IRM reports covers all of the 47countries in the IRM data that started their commitments in the year 2012 and which were subsequently assessed by the IRM researcher in the year 2013. In total for that round of NAPs, there were 1,077 open government programs that were launched. It is these 1,077 programs that are the unit of analysis used in the regression. Table 3.3 and Table 3.4 show the organizational design variables operationalized using IRM data, first for the ordinal and continuous variables and second in a frequency distribution for the dichotomous variables. The IRM data is generated through precise scalar coding carried out by the IRM researcher as part of the progress report creation. The dependent variable is measured using three items coded by the IRM researcher in the IRM progress reports: (1) Progress, which is assessed on a scale of 1 to 4 by the "level of completion at the time of analysis, according to the action plan's own schedule"; (2) Potential impact, which is assessed on a scale of 1 to 3 by how potentially transformative a program might be in the policy area;

and (3) Effectiveness, which is assessed on a scale of 1 to 12, and is a composite

measure created by multiplying progress by potential impact.

Table 3.3. Descriptive statistics (ordinal variables)

Variable	Measurement	Mean	Std. Dev.	Min	Max	Obs
DV1: Progress	The level of completion at the time of analysis, according to the action plan's own schedule." Ordinal: 1 – 4 (high)	2.572	1.109	1	4	1087
DV2: Potential impact	How potentially transformative a program might be in the policy area. Ordinal: 1 – 3 (high)	1.768	0.887	1	3	931
DV3: Effectiveness	Progress*Potential impact Continuous: 1 – 12 (high)	4.341	3.027	1	12	924
IV1: Measurability	The level specificity and measurability of the program Ordinal: 1 - 3 (high)	2.073	0.877	1	3	1106

Table 3.4. Frequency distribution table (dichotomous variables)

Variable	Measurement	Yes (1)	No (0)	Obs
IV2: Joint implementation	The number of government agencies involved in and engaging with the program is more than one.	727 (36%)	1260 (64%)	1987

	Binary (1 = more than one agency)			
IV3: Accountability	Does the program designate a specific individual or office as the point of contact for the program? Binary (1=yes)	149 (14%)	947 (86%)	1096
IV4: Goal clarity	The program is relevant to one of the definitions of the goals of open government, as described in IV5-IV8. Binary (1=relevant)	929 (85%)	177 (15%)	1106
IV5: Goal: information	According to the IRM, programs that "pertain to government-held information; are not restricted to data but pertains to all information; may cover proactive or reactive releases of information; may pertain to strengthen the right to information; and must provide open access to information Binary (1=yes)	681 (62%)	417 (38%)	1098
IV6: Goal: participation	According to the IRM, programs that "seek to mobilize citizens to engage in public debate, provide input, and make contributions that lead to more responsive, innovative and effective governance." Binary (1=yes)	340 (31%)	758 (69%)	1098
IV7: Goal: accountability	According to the IRM, programs that "have an "open" element, meaning that they are not purely internal systems of accountability without a public face.	417 (38%)	681 (62%)	1098

		384 (35%)	714 (65%)	1098
	Binary (1=yes)			
IV8: Goal: technology	According to the IRM, programs that involve "technology and innovation promote new technologies offer opportunities for information sharing, public participation, and collaboration." Binary (1=yes)			

There are four main organizational design variables: (1) *Joint implementation*, which measures whether the program involves an implementation processes involving at least two government agencies; (2) *Accountability*, which measures whether the program has been designed with a specific, named, public official responsible for the implementation; (3) *Goal clarity*, which measures whether the program is designed with clear relevance to open government goals and purposes. Dummy variables operationalize the area of open government goal design into four different types of open government policy: (i) information; (ii) participation; (iii) accountability; and (iv) technology; and (4) *Measurability*, which measures whether the program is designed with specific and measurable outputs that can be used to assess performance and hold officers accountable.

Ordered logistic regression analysis was used for the first two models because the dependent variables (completion and impact) are ordinal. The third model used ordinary least squares (OLS) regression because the dependent variable (effectiveness) is continuous. Furthermore, standard errors were clustered at the country level to control for country fixed effects. A Brant's test of parallel

lines in the associations between the levels of the dependent variables and the predictors across Models 1 and 2 resulted in a non-significant p-value meaning that the associations are parallel and an ordered logistic model is appropriate. The mean VIF scores for the variables was 1.3 suggesting that multicollinearity should not be a problem. The results for the estimated models are shown in Table 3.5. Several of the variables of organizational design are found to be significantly related to the performance measures. The strongest result is for the variable of measurability of open government programs, which is significant in each of the three models representing the dependent variables of progress, impact, and effectiveness. The coefficient for measurability is large showing that a one-unit increase in the measurability of a program is associated with an expected log increase in the performance of a program of 0.53 (Model 1), 0.43 (Model 2), and 0.85 (Model 3). Shared implementation is not significant in any of the models. Goal clarity is also significant, but mainly in Model 2 where the dependent variable is the potential impact of the program and in Model 3 for effectiveness. However, the open government goals are not significant for the outcome of program progress.

Table 3.5. Ordered logistic and OLS regression results (beta coefficients and standard errors)

Variables	Model 1 Progress		Model 2 Impact		Model 3 Effectiveness	
Joint implementation	-0.039	(0.124)	0.229	(0.241)	0.284	(0.255)
Accountability	-0.181	(0.304)	-0.235	(0.230)	-0.333	(0.407)
Measurability	***0.528	(0.114)	**0.426	(0.135)	***0.851	(0.161)
Goal clarity	0.141	(0.172)	**0.499	(0.415)	*0.548	(0.235)

Goal: information						
Goal: participation	-0.041	(0.144)	**1.076	(0.456)	0.215	(0.229)
Goal: accountability	-0.112	(0.136)	***0.384	(0.358)	***0.944	(0.276)
Goal: technology	0.244	(0.161)	**0.964	(0.377)	*0.605	(0.282)
N	1077		921		914	
Wald chi2	***24.36		***67.37			
F-score					***8.91	
Pseudo R2	0.026		0.061			
R2					0.125	

Note: (* p<.01, ** p<.05, *** p<.001)

Table 3.6 summarizes the results of the regression analysis by showing the decisions of significance made for each of the hypotheses. The hypothesis that accountability through the appointment of a specific, named, leader who is responsible for the program leads to higher performance is not supported in each of the three models so it is not statistically related to program progress, impact, or effectiveness. The second hypothesis regarding the use of measurable performance indicators is accepted for each of the models. The third hypothesis that shared implementation improves performance is not supported by any of the models. Hypotheses 4 and 5 are both accepted: firstly, open government programs with clear technology or information goals are more likely to make progress towards completion, and, secondly, open government programs with clear public participation or accountability goals are more likely to have greater impact.

Table 3.6. Decisions on empirical hypotheses based on p-value estimates

Hypothesis	**Model 1**	**Model 2**	**Model 3**
	Not supported	Not supported	Not supported

H1: Open government programs that appoint a named leader who is responsible for the initiative will perform more strongly.			
H2: Open government programs that use specific and measurable performance indicators will perform more strongly.	**Accepted**	**Accepted**	**Accepted**
H3: Open government programs that are designed to be implemented simultaneously by multiple agencies will perform more strongly	Not supported	Not supported	Not supported
H4: Open government programs with clear goals will perform more strongly	Not supported	**Accepted**	**Accepted**

The results of the regression analysis show support for several of the hypotheses of the relationships between organizational design and performance. Processes involving the design of open government programs to be specific and measurable and to have a clear connection to open government goals do have an impact on how well a program will perform. However, others, such as having an accountable named leader who is responsible for the program and programs that

involve joint implementation do not seem to have an influence on performance.

The general conclusion to draw from this is that some organizational design

practices do play a role in improving the performance of open government, but

not all of the practices have this effect. In Chapters 4 and 5, a case study method

will be used to further address the question of the relationship between

organizational design and performance in the context of high performing open

government countries. The case study approach builds upon the regression

analysis by exploring the wider range of organizational processes from the

thematic typology developed earlier in this chapter.

3.4. Discussion and Conclusions

This chapter started with a content analysis of the IRM country progress reports,

which resulted in the creation of 3 themes, 16 sub-themes, and 63 categories for

organizational processes involved in organizational design. The three themes

consultation, governance, and strategy form the core organizational processes.

The thematic analysis was used to generate empirical statements of organizational

processes that constitute an inventory of processes within each of the sub-themes

of open government processes. The next step in chapters 4 and 5 involves

applying the thematic typology in specific best practice cases in order to see how

it works in a concrete example of open government programs. These chapters will

delve further into the central research questions of the dissertation concerning the

association between open government design, both structural and process factors, and performance.

This chapter also made some preliminary explorations of the research questions. A comparison of the coding scheme in the top five and bottom five performers according to the OGP performance ranking, revealed notable differences in the organizational processes of the high and low performers. On the governance theme, there was no observable difference. However, in the themes of consultation and strategy there appeared to be distinct differences between high and low performers. High performers appear to be more transparent in the *how* and *who* of consultation; they consult with a wider range of stakeholders and are more specific in detailing how interaction and decision-making with the stakeholders will take place. On the strategy theme, there was also a difference between the high and low performers with the high performers relying much more strongly than the low performers on performance measurement. It should be noted as an important limitation in this preliminary method, that the differences are based on frequencies of thematic codes rather than in-depth analysis of the process differences, and that there may be multicollinearity problems.

Regression analysis was also used to make some probability predictions about the significance of specific OGP organizational design practices. An ordered logit model and an OLS model estimated parameters for variables of performance measurement, accountability, goal clarity, and shared implementation. The results of the regression showed mixed results supporting the association between organizational processes and open government

performance. The results strongly showed that designing initiatives to be specific

and measurable in their outcomes is important for open government performance.

Goal clarity was also important in that open government programs with clear

public participation or accountability goals are more likely to have greater impact.

The hypotheses regarding the association between joint implementation and

performance and naming a specific accountable official were not supported. The

positive results for the micro-level organizational design factors of specificity and

measurability and designing programs with clear goals to improve impacts are

corroborated by the content analysis results, which also found that these practices

were salient parts of open government organizational process. The results provide

some initial support for the main argument of this dissertation that organizational

design is important for creating the right kinds of organizational processes for

good open government performance.

~ Chapter 4 ~

Case 1: Police transparency

4.1. The context of law enforcement in the United States – 4.2. Background of the

OGP initiative on police transparency – 4.3. Data and methods – 4.4. Mapping the

inter-organizational structure and stakeholders of the program – 4.5. Content

analysis of the interviews – 4.6. Narrative illustrations of structure and process –

4.7. Discussion and conclusions

This chapter presents the first of two case studies where multiple sources of

evidence are used to inform understanding of organizational design in a high

performing open government country context. These findings will be used to

further develop the analytical framework of organizational design and open

government performance. The case study is of an open government program to

improve transparency in law enforcement in the United States. The chapter

addresses both the parts of the central research question of the dissertation: (1.1)

how does organizational structure contribute to open government performance?

And, (1.2) how does organizational process contribute to open government

performance? The chapter will address the research questions by discussing the

structural factors and process factors through analysis of the case study of open

government programs in a high performance country context. Firstly, part 1.1 is

addressed through analysis of the inter-organizational structure and stakeholder

processes involved in the best practice case study, the United States police
transparency program. Secondly, part 1.2 is addressed by using the thematic
framework and inventory of open government processes from Chapter 3 to
analyze interview texts from senior level decision-makers involved in the police
transparency program. Finally, both parts 1.1 and 1.2 are jointly addressed using a
narrative vignette from the police transparency program.

4.1. The context of law enforcement in the United States

Public records keeping in law enforcement in the United States is underpinned by
several federal statutes as well as state legislation. Police departments are
governed by the freedom of information (FOI) requirements of their own states,
which can vary significantly on several technical and legal points. At one end of
the spectrum of police openness, some states require that all information
regarding police actions (including sensitive information such as the names of
police officers) be available at the request of a member of the public. At the other
end of the spectrum, some states have tighter control on information and do not
allow release of information relating to individual cases such as the locations or
identities of police officers or victims where crimes took place. Additionally,
some states give a strong level of discretion to public agencies in deciding
whether information should be exempted from public release. States also vary in
the fee amounts and the categories used for payment schedules for accessing
government data, which has a significant practical influence on the accessibility
of police records. A further area of state level differentiation is in the

constitutional basis of FOI law. Some states enshrine FOI in the state constitution and consider the ability of citizens to access information to be a powerful and fundamental right. All these legal differences lead to wide divergence in the practices of freedom of information in law enforcement. The existence of the state differences themselves also acts as a barrier to transparency across the sector of policing: because each jurisdiction faces a unique legal environment, cross-jurisdiction transparency standards are difficult to meet.

Because laws are generally hard to change, the legal context of law enforcement is relatively firmly fixed. However, recent political and social trends have revealed informal norms and values that also clearly shape the openness of police departments in managing and sharing information about internal operations. There is increasing public pressure on police departments to share more information publicly, notably through proactive information sharing tools such as open data. In the past two years, the emergence of several high media profile episodes of civilian deaths from police shootings in the United States have elevated public focus on police accountability. Activists, national media outlets, and congressional committees have raised questions about the way that police officers use lethal force during police operations or employ physical means of restraint during arrest and custody. Special attention has been given to institutional racism in police departments. In the wake of an unusual increase in the number of such reports of police violence, the media, transparency advocacy groups, and civil rights organizations have criticized the lack of data published by police departments. Many of these groups have bemoaned the fact that their data

on police accountability is not derived from direct communication with police departments, but from third party police-accountability tracking initiatives such as that of The Guardian newspaper.

4.2. Background of the OGP initiative on police transparency

Against the backdrop of increased scrutiny of law enforcement practices, The White House launched the President's Task Force on 21st Century Policing by executive order in December 2014. The Task Force was given a mission to, "identify best practices and otherwise make recommendations to the President on how policing practices can promote effective crime reduction while building public trust" (U.S. Department of Justice, 2015, 7). Another one of the main aims of the Task Force is to implement digital technologies to improve "transparency, accountability, and privacy," and to promote the adoption of open data by police departments.

Following the publication of the findings of the Task Force in May 2015, which recommended a sweeping range of reforms to mend the relationships and trust between police departments and their communities, the White House decided to advance the police transparency efforts to the level of the OGP. Adoption of the Task Force recommendations became a program in its third National Action Plan published in December 2015. The exact wording of the program in the national action plan, entitled "*Build Safer and Stronger Communities with Police Open Data*," is worded as follows:

"In response to recommendations of the President's Task Force on 21st Century Policing, the United States is fostering a nationwide community of practices to highlight and connect local open data innovations in law enforcement agencies to enhance community trust and build a new culture of proactive transparency in policing. The Office of Science and Technology Policy and the Domestic Policy Council have been working on the Police Data Initiative in collaboration with Federal, state, and local governments and civil society to proactively release policing data, including incident level data disaggregated by protected group. This work aims to improve trust, bring better insight and analysis to policing efforts, and ultimately co-create solutions to enhance public safety and reduce bias and unnecessary use of force in policing. Currently, 26 participating jurisdictions including New Orleans, Knoxville, and Newport News, are working side-by-side with top technologists, researchers, data scientists, and design experts to identify and overcome existing barriers to police efficacy and community safety. The Office of Science and Technology Policy and the Domestic Policy Council will continue to expand the Police Data Initiative to include additional jurisdictions. They will explore opportunities to work more closely with state partners and work to build out more resources such as playbooks and technology tools to help jurisdictions easily extract and publish data."[10]

The program language demonstrates that the police transparency program is an effort across all levels of government to accelerate and expand the work of an existing government initiative, the President's Task Force on 21st Century Policing. The initiative is led by two policy offices in the White House, the Domestic Policy Council and the Office of Science and Technology Policy. The two main components of open government are transparency and collaboration, but the program also uses some elements of public participation. The program also aims to address the problem of public trust by co-creating solutions and including citizens in the decisions regarding the kinds of information and accountability processes needed at police departments. Finally, this program also manifests the

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[10] The Third National Action Plan of the United States, 2015-2017. Washington DC: The Open Government Partnership. Page 16. Last accessed on 11/25/16 from http://www.opengovpartnership.org/sites/default/files/final_us_open_government_national_actio n_plan_3_0_0.pdf.

open government characteristic of relying on technology innovation, which in this case involves use of open data tools, such as data formats and application programming interfaces (APIs) to share information and cloud computing technology to store data.

Since the release of the U.S. National Action Plan, the Police Leadership Forum, one of the stakeholders that agreed to contribute to the program, has attracted over thirty more police departments to join the Police Data Initiative. While the Task Force provides no funding for police departments to participate, the White House has hosted several high-level meetings offering training on open data, which several of the open data software vendors have attended. Participating police departments thus have access to knowledge sharing and a community of practitioners. The program also includes a component of public participation. The White House has held civic innovation hackathons where participants develop a software code for new platforms that can be used in police open data. Individual police departments have also held similar events. Another area of public participation has been in the open meetings of the White House Interagency Open Government Working Group, where civil society organizations such as the Sunlight Foundation have been invited to give talks about police transparency. One such open meeting, which was attended by over thirty people mostly representing advocacy organizations from the Washington DC area, is described in detail for the case study vignette at the end of this chapter.

4.3. Data and methods

This section discusses the methodology used for the interviews, vignette, and the selection of other data sources. In order to explore the case of the police transparency program, a qualitative data analysis approach was adopted using the case study method, which is discussed in more detail in Chapter 1. Several specific research questions are addressed in the current chapter and the next chapter on the second case study. These chapter-specific research questions build logically on the central research questions. Three different methodologies are used in the chapter: (1) mapping of the inter-organizational structure and stakeholder relationships, (2) interview content analysis, and (3) a narrative vignette. As discussed in the introduction to this chapter, each methodology is used to address the research questions: (1.1) how does organizational structure contribute to open government performance? (inter-organizational mapping and narrative vignette) And, (1.2) how does organizational process contribute to open government performance? (interview content analysis and narrative vignette).

Multiple sources of data were used to develop case knowledge of the program and to create the inter-organizational map. These sources are listed in Table 4.1. The dissertation drew information about the program from 147 news articles. In the context of open government programs, news articles are an especially good source of information as the programs regularly involve open meetings, open data, and other information-rich forms of engaging with journalists. Over the 12-month period, the Google Alerts operator returned 147 news articles that provided useful information about the case. In addition, several official reports were read. This included a government report, 'Recommendations

of the President's Task Force on 21st Century Policing', which was produced by

The White House and used by the lead agencies of the police transparency

program as a key policy report for designing the program.

Table 4.1. Sources used in the police transparency case study

Name	N	Description
Media articles	147	Collected using Google Alerts between October 1, 2015 and October 2, 2016. Google operator: "open government" AND "police" AND "transparency" OR "open government" AND "law enforcement" AND "transparency" OR "open government" AND "police" AND "open data" OR "open government" AND "law enforcement" AND "open data"
Interviews	25	Expert practitioners involved in designing the police transparency program. Individuals selected by snowball sample: 13 police chiefs 7 civil society representatives 5 government officials
OGP national action plans	3	Official national action plans of the United States government: 1. National Action Plan of the United States 2011-2013 2. National Action Plan of the United States 2013-2015 3. National Action Plan of the United States 2015-2017

OGP progress reports	4	1. First Mid-term Progress Report of the United States 2. First Progress Report of the United States 3. Second Mid-term Progress Report of the United States 4. Second Progress Report of the United States
Civil society alerts	38	1 blog piece 35 letters 2 official comments
National policy reports	1	One national policy report from the government addressing the topics of police transparency were released during the period of the police transparency program: 1. Recommendations of the President's Task Force on 21st Century Policing

Four previous IRM progress reports on the United States and the three NAPs of the United States were also read for background information about the United States open government initiative. Finally, the researcher was also a member of the email listserv of the official network of civil society partners with the government, Openthegovernment.org, and received 38 communiqués comprising blog pieces, official letters/statements, and comments.

The research additionally collected information on the policing transparency program through interviews. The interview methodology followed the research steps described earlier in the methodology chapter. Participant selection followed a snowball sampling technique that began with a written

invitation to all of the chiefs of the police departments that participated in the President's Task Force as well as the four civil society organizations that were members of the Task Force (N=31). Twelve of the organizations responded and were interviewed. These twelve then recommended a further ten interviewees, who were also interviewed. Individuals qualified for interviews if they met two criteria: (1) they must have been directly involved in the work of either public agencies or civil organizations on the program; and (2) they must be of senior management level. The ethical considerations and consent procedures were carefully planned and followed. In particular, interviewees were informed that their responses would be anonymous and confidential. This was done to protect their privacy and to ensure that they would be willing to be honest and forthcoming with information. Each interview lasted between 30 and 60 minutes by telephone. There were two set questions asked of all the interviewers: 1) 'What organizational factors help the police open government program to succeed?' and 2) 'What barriers prevent the police open government program from succeeding?' During the interview, the interviewer could follow different lines of enquiry or ask follow-up questions to address important points raised by the interviewee. These follow-up questions were designed to encourage the interviewee to elaborate rather than to introduce new topics by the researcher. Examples of follow up questions are:

- Could you give some specific examples of …….?
- Could you explain why that was a helpful practice?
- Could you explain why that was an unhelpful practice?

Interview notes were taken by hand and typed into Word documents for later analysis. The content analysis followed the steps of Berg (2002) described in the methodology chapter. The initial phase using open coding of IRM progress reports was used to create an index of themes, sub-themes, and categories. Using this index, the interview texts could be coded deductively. The researcher and an assistant researcher assigned sentences or groups of sentences to categories and an inter-coder reliability coefficient was calculated. The Cohen Kappa score was 0.88 which shows strong level of inter-coder reliability.

4.4. Mapping the inter-organizational structure and stakeholders of the program

Figure 4.1 maps the inter-organizational structure and stakeholders of the police transparency program using an organizational mapping diagram with the government organizations on the left and the non-governmental stakeholders on the right. The structural context of the program is shown in the managerial, technological, institutional, and environmental factors involved in the map, which are located on the map. These placements show the general location of the factors. However, while the structural factors are focused in these areas, they may also involve other parts of the map, as described in the textual analysis.

Managerial factors

The *managerial factors*, which involve the organizations where high-level decision-making occurs, are the multi-sectoral leadership of the program

comprising an executive lead, supporting agencies, a lead coalition delegated with

the policy leadership of the program, and the civil society partner,

Openthegovernment.org. The executive department of the police transparency

program is The White House, which also plays the role as the de facto lead

agency on the program and is the driver of the reform plays a crucial leadership

role in helping the program to succeed. However, also important to the

effectiveness of the program is the subsidiary vehicle created by The White House

to be the official lead of the program, which is a coalition, or 'network', of police

chiefs, academics, technology organizations, and government officials called the

President's Task Force on 21st Century Policing. The Task Force was formally

created in October 2014, and its work culminated in the publication of a report

recommending the creation of a nationwide network of police departments that

could share technologies, training, and best practices. This network is largely

orchestrated by the Office of Science and Technology Policy in The White House

where the managerial oversight and planning for the organizational structure is

located.

These leadership components of the map evidence the way that managerial

structure operates in the program. In the case of the police transparency program

most of the managerial factors concern the role played by The White House in

deciding what goals to include in the program and what tools to use as well as

who to consult and the venues that will be used. However, they are also reflected

in the managerial role of police chiefs in individual police departments. On the

government side, the work of The White House and the Task Force is strongly

supported by a collaborative structure with a core group of federal agencies, such as cabinet level ministries like the Justice Department or central executive departments like the Office of Management and Budget. These supporting agencies enable the quality of the consultation process and intergovernmental collaboration elements of the program. The Justice Department hosts an open source coding program intended to encourage members of the public to contribute coding improvements to the open data architecture of police open data programs. Additionally, the Justice Department's Community Oriented Policing Services agency has a mandate to involve citizens in police work in order to foster greater trust, while the General Services Administration contains a web design team called 18F that has been building websites and open data platforms across different agencies in order to create a standard, high-tech website presence. The Crime Statistics Management Unit is a branch of the Federal Bureau of Investigation that manages the Unified Crime Reporting policy to standardize collection of police data from police agencies nationwide.
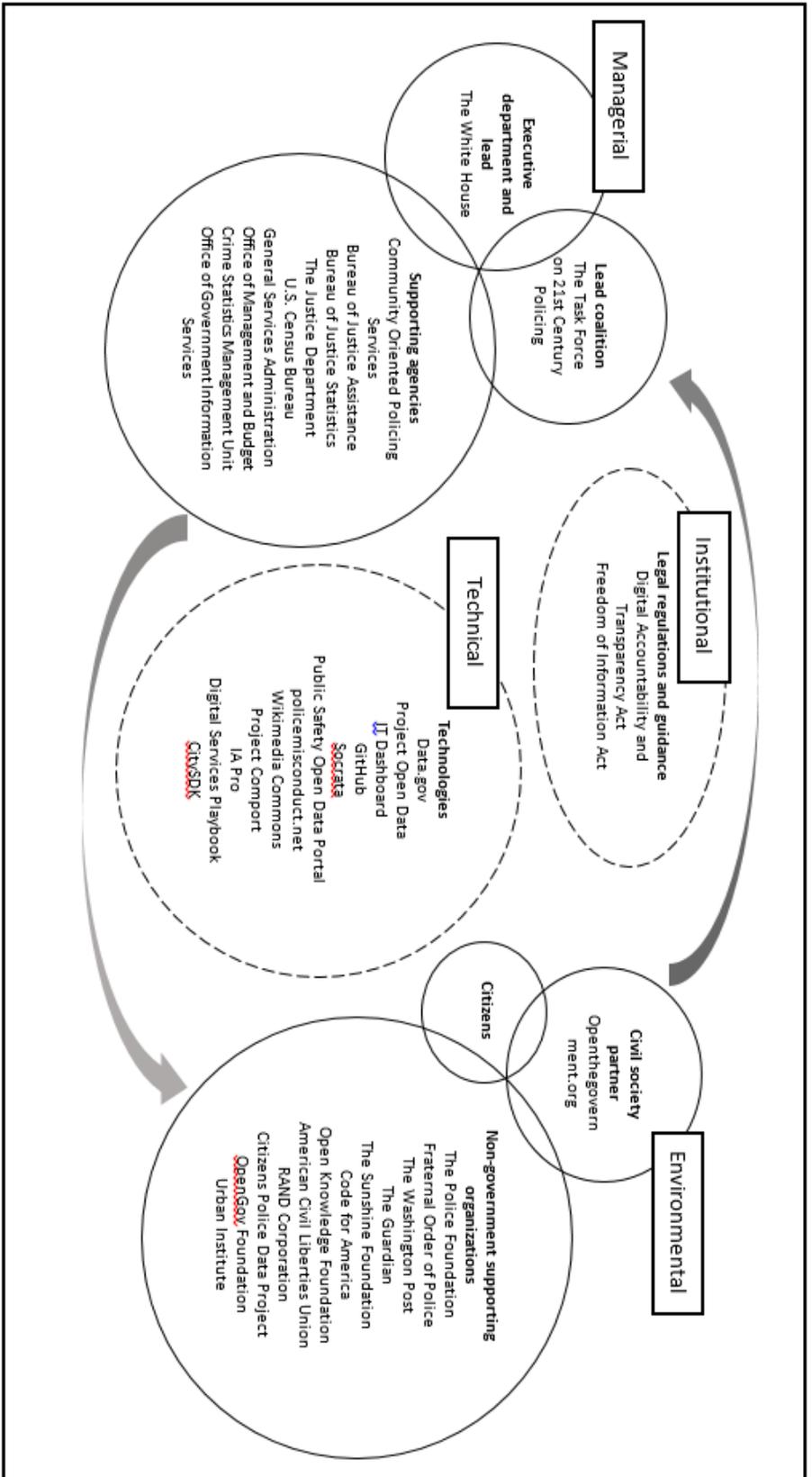
Figure 4.1. Map of the inter-organizational structure and stakeholders of the police transparency program

Managerial

Executive department and lead
The White House

Lead coalition
The Task Force on 21st Century Policing

Supporting agencies
Community Oriented Policing Services
Bureau of Justice Assistance
Bureau of Justice Statistics
The Justice Department
U.S. Census Bureau
General Services Administration
Office of Management and Budget
Crime Statistics Management Unit
Office of Government Information Services

Institutional

Legal regulations and guidance
Digital Accountability and Transparency Act
Freedom of Information Act

Technical

Technologies
Data.gov
Project Open Data
JT Dashboard
GitHub
Socrata
Public Safety Open Data Portal
policemisconduct.net
Wikimedia Commons
Project Comport
IA Pro
Digital Services Playbook
CitySDK

Citizens

Civil society partner
Openthegovernment.org

Environmental

Non-government supporting organizations
The Police Foundation
Fraternal Order of Police
The Washington Post
The Guardian
The Sunshine Foundation
Code for America
Open Knowledge Foundation
American Civil Liberties Union
RAND Corporation
Citizens Police Data Project
OpenGov Foundation
Urban Institute

Technological factors

The *technological factors* are represented by several specific technologies

provided by specialist governmental and non-governmental organizations.

Specific technology platforms were used from both within and outside of

government evidencing the important role for performance of technology sharing

through third parties. For example, GitHub and 18F are government hosted

platforms, while Wikimedia Commons and Project Comport are hosted by

nonprofit organizations. The government's work in the program is achieved

through a range of technologies that structure the relationships of the program

through the way, for example, that the Public Safety Open Data Portal creates a

network of open data adopting police agencies. This intersection of technology

use and White House decision-making addresses the structural and organizational

processes regarding decisions on the kinds of technologies that are used by the

head organization.

Technology factors also intersect with managerial factors across the range

of competing groups seeking shared interests in the program from The White

House, individual agencies such as the Justice Department, and other civil society

organizations such as the Openthegovernment.org coalition. There are several

important and constantly evolving technology innovations that the police

transparency program relies upon. These technologies are from both

governmental and non-governmental organizations. Data.gov is the central open

data portal for the United States government. It includes all the data submitted by

government agencies including crime statistics held by the Justice Department. Project Open Data is an open source coding initiative focusing specifically for open data platforms. GitHub is another crowdsourced coding innovation by the White House that has provided open source code for use by other government departments. Several kinds of software that have been developed by nonprofit organization such as Code for America and Wikipedia or private tech companies such as IA Pro are already becoming widely used by police departments in their use of open data technology. For example, IA Pro produces a data management and analysis tool used by many police departments in the United States as well as other countries. Other police departments have made use of the citizen sourcing potential for crime data on Wikimedia Commons where data can be freely uploaded and shared, as well as Project Comport, which is an open software created by Code for America that is designed to turn police internal records systems into open data.

Institutional factors

The *institutional factors* are comprised, firstly, by the range of governmental and non-governmental institutions that play roles in the structure, and secondly by the set of laws such as the Freedom of Information Act that form the context of the institutional norms and values supporting the structure. At the center of the organizational structure are two additional structural components that both support and constrain the open government process: legal regulations and

guidance and technologies. The former, part of the institutional structure of the program, contains the two acts of Congress that regulate government transparency. The Digital Accountability and Transparency Act of 2014 primarily focuses on budgetary transparency but it also builds an open data infrastructure that applies to the development of data sharing in other areas such as crime statistics. The Freedom of Information Act was reauthorized in 2010, and has been updated to make electronic sharing of public information more efficient. These laws are part of the institutional structure that encourages fair and democratic practices and a structure for healthy democratic competition in the political systems underpinning the open government program and the open government reforms in the United States generally.

Environmental factors

The *environmental factors* are shown in many of the areas of the map where external economic, political, and social factors influence the structure and processes, but the main locus of the environmental influence is the citizens who form the environment of public demand. The non-governmental side has three main groups: citizens, the official civil society partner (Openthegovernment.org), and specialist non-governmental supporting organizations. The range of actors on the non-governmental side depicts an inter-organizational structure strongly focused on technical and policy expertise as well as broad range of civil society and private sector stakeholders. The former includes some CSOs that are already

members of openthegovernment.org such as The Sunshine Foundation. However, they are added separately here to the group of specialist non-governmental supporting organizations because they play a prominent specialist role among the CSOs. The group of non-governmental supporting organizations includes two newspapers, The Washington Post and The Guardian, which have been relied upon to provide the most comprehensive data reporting on fatalities and injuries sustained as a result of police actions. The Open Knowledge Foundation plays a monitoring and policy learning function in the open government process by hosting a database of the open data activities of cities in the United States. Several of the other CSOs in this group also provide new (and sometimes overlapping) data points on policy actions. The Data-Driven Justice Initiative is a coalition of around 70 city, county, and state governments aiming to use data tools to address justice issues.

4.5. Content analysis of the interviews

Table 4.2 shows the results of the deductive content analysis using the themes, sub-themes, and categories from the IRM progress report analysis as axial codes to classify material from the interviews of senior level decision-makers in the police transparency program. The interview respondents were asked to talk about organizational factors in the police transparency program that were either beneficial or harmful to success. Here their responses are coded according to the thematic typology from Chapter 3. This was done firstly to enrich the analysis

supporting the results of the first research question and to address the second question by finding out how decision-makers in the high performing open government countries viewed the role of organizational design as ingredients of successful open government programs.

Supporting the findings of the thematic analysis of the IRM progress reports, the consultation theme was again the most frequently coded theme by a large margin. Consultation was coded by 155 references; Governance was coded by 36 references; and Strategy was coded by 63 references. The single most frequently coded category was *quality* of consultation which had 67 references followed by the *members* category which had 64 references. The discussion around quality was primarily about the importance to success of processes involving collaboration for program success, and prominently involved the categories *two-way*, *openness*, *co-production*, and *partnership*. This discussion involved comments such as this from one interviewee who said that, "collaborative approaches are essential. I have worked with civil liberties organizations and human rights to make sure their voices are heard."

Regarding the *stakeholders* discussion, the full range of possible stakeholders categories were populated at least once, and interview respondents reported that they believed a diversity of stakeholders were vital for the success of the police transparency program. However, among stakeholders there was a prevailing focus on the importance of engaging with citizens and the public and nonprofit sectors; the single most highly referenced member was the general "public", other government agencies, and CSOs. For example, referring to the

public, one interviewee said that, "[i]f I was a police chief I would engage community about what needs to be provided. Actually engage the community to address community problems such as drink driving." It was natural that interview respondents referenced the importance of engaging with other government stakeholders because the program was centered on a group of police departments advocating for the adoption of open data. For example, referring to the inter-agency work, one interviewee said that, "[t]hey hoped to get 3-5 agencies to get together to work on this, but they ended up having many more. There was tremendous local leadership."

Discussion of the structure of consultation processes was limited, which evidences the absence of beliefs among interview respondents about value distinctions concerning formal or informal arrangements for how consultation should be carried out. *Modes of communication* was also a sub-theme that was infrequently discussed though among them *in-person meetings* and *telephone* communication where the most common mode of communication. Similarly, the importance of online forms of communication with stakeholders such as *social media* and *email* was seen as being a limited ingredient for success as it was only mentioned a couple of times.

Table 4.2. Results of content analysis showing themes and categories (frequencies)

Consultation (155)		Governance (36)	
Stakeholders (64)	Public (21)	**Level of oversight and control (13)**	Centralized (7)
	Government (20)		Hierarchy (4)

	CSOs (15)		Decentralized (1)
	Academia (4)		Breadth (1)
	Business (2)		
	International (1)	**Head organization (18)**	Directing (7)
			Supporting (7)
			National agency (4)
Modes of communication (11)	Meetings (6)		State agency (0)
	Telephone (3)		
	Social media (2)	**Funding arrangement (4)**	Agency source (4)
	Surveys (1)		Central source (0)
Governance (1)	Shared (1)	**Milestones (1)**	Measurability (1)
	Unilateral (0)		
Quality (67)	Two-way (16)		
	Openness (15)	**Strategy (63)**	
	Co-production (9)		
	Partnership (6)	**Goal-setting (19)**	Ambition and impact (13)
	Unengaged (6)		Measurability (5)
	Dedication (5)		Values (1)
	Closeness (4)		
	Regularity (3)	**Policy design (8)**	Focus (8)
	One-way (2)		Diversity (0)
	Narrowness (1)		
		Skill and specialization (16)	Specialist teams (16)
Continuity with prior networks (12)	Continuous (9)		
		Policy tools (20)	New technologies (14)
	Not continuous (3)		Advocacy (3)
			Breadth (2)
			Legislative change (1)

The governance theme, which was the least frequently discussed theme in the interviews, was concentrated on discussion of who the *responsible leader* of the implementation should be and the *level of oversight and control*. The *head organization* was the most important sub-theme. That area of dialogue focused on the national level leadership in The White House and its role as both a supporting and a directing influence. This focus on The White House in the governance of the program was also reflected in the categories included in the level of oversight

and control sub-theme which referenced *centralization* and *hierarchy* many times while the binary correlates of *decentralization* and *breadth* where hardly referenced at all either as helpful or as barriers that are detrimental elements of program success. Positive evaluations of the role of central control as a driver of program implementation and delivery of results in a politically difficult area of policymaking seemed to be more common. For example, one interviewee, referencing centralization of processes said: "In his CIO [Chief Information Officer] role he controls all of the data aspects. He is the central point of control. Tied in directly to chiefs so he gets arguments through and there is broad oversight." However, despite the strongly centralized focus of the policy transparency program, the funding dialogue was exclusively in reference to the funding coming from the police departments themselves while the absence of any reference to funding from the federal government reflects the fact that there was no such funding. In the absence of funding, the non-monetary benefits available to stakeholders appear to be the motivation behind participation, and this is backed up by the other strong sub-themes and categories of the interviews. The program was being supported by a clear pre-existing network of organizations that had been created through the President's Task Force for 21st Century Policing; continuity with this network as a positive success factor was referenced nine times. This collaborative network of police departments, the private sector, and civil society was motivated around the sharing of technology best practices and technical knowledge rather than funding. Funding appeared not to concern the interview respondents while a more realistic barrier for the respondents was

having a lack of knowledge and technical resources to make data analysis

feasible. Respondents said that technical resources available through the network

of the President's Task Force were frequently praised as a valuable asset for the

program.

The strategy theme was mainly concerned with value of skills and areas of

professional expertise. The sub-theme of goal-setting and the importance of

planning programs that would have substantive impacts on society and

government was mentioned 13 times. Measurability and the open government

values present in the goal-setting were of lower concern and were coded five

times and once respectively. Likewise, the professional area of using specialist

teams was also prevalent and was the single most frequently referenced category

in the strategy theme. Further reflecting the specialist and knowledge

management sharing aspects of the program, the policy design sub-theme was

exclusively about the barrier of having a lack of technical skill and knowledge as

well as the helpful contribution of a narrow focus rather than a broad, diverse

approach for program success. The policy design focus of the interviews was

overwhelming around the concept of focusing on specific policy areas rather than

taking a diverse approach to cover multiple areas of policy, such as when one

interviewee said that, "[i]t is about identifying the most pertinent kinds of

information on what the public wants. Going out and getting input from the

community, churches, places of gathering."

Finally, in general, the sub-theme of policy tools was dominated by

discussion of new kinds of ICT tool that were needed to make the management of

open data initiatives possible. Only once was the category of legislative means to affect policy change discussed as an ingredient for success. The police transparency program was therefore a strongly focused program employing new technologies and overcoming organizational barriers by supplying specialist personnel and skills. Its strategy was driven by highly ambitious goals, and these ambitions were framed by a hierarchical structure with leadership, but also significant support, coming from the top. Its consultation process was heavily concentrated on three sectors: government, citizens, and civil society, but these relationships were viewed as having a strong quality of collaboration with two-way decision-making processes.

4.6. Narrative illustrations of structure and process

Narrative illustrations, called vignettes, are used to highlight specific episodes occurring in the case study that bring the subject matter of the research into sharper relief (Dodge, Ospina, and Foldy, 2005). Here the vignettes are used to describe the role of performance-related factors of organizational structure and processes. The vignette (Box 4.1) was written by the researcher using notes taken at an open working group meeting of the police transparency program. Two other sources of data are used to refine some details in the vignette: (1) the interviews with senior decision-makers, and (2) news articles from around the time when the event described in the vignettes took place. The analysis of the vignette further explores the roles of organizational design in the performance of open government initiatives.

The vignette shows an account of a meeting of the open government working group on the police transparency program at The White House Conference Center. The researcher attended the meeting as a meeting participant and took detailed notes of the meeting involving writing down initial impressions about the event, the setting and organization, and the routine aspects of the roles of participants in the meeting to form a rich narrative description of the event (Emerson et al., 2011). The members of the open government working group met on 11 November, 2015 to discuss the concerns about availability of data on deaths and casualties caused by police investigations. As media stories of such events were increasing in frequency, the lack of a central process for collecting and sharing reliable information was perceived to be a critical problem for the police transparency program. Members of the program were unhappy that only media outlets such as The Guardian and The Washington Post were currently collecting systematic information.

Box 4.1. Vignette: A working group meeting to address body cameras and other issues

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Content of the meeting

The main points of discussion in the meeting were the selection, quality, and availability of police data, the growing use of police body cameras, and the need to share best practices on data tools and technologies. Leaders at the meeting stated that there have been unreported data that is not spread evenly across the country. They said that there is a lack of implementation guidance and standards on what information is required. They wanted a standardized process so that they can get accurate data.

One participant explained:

"It is difficult when we currently have to rely on external forces to provide the data. Until we have statistics it is very difficult to advance reform. Of 26 studies in the study carried out by the government, only seven of them are actually reporting data. We would like a unified crime report system that provided statistics in real time. We want data that really reflects the population such as people with disabilities or undocumented persons or officer violence against women."

Participants also discussed implications of open data for data and privacy, particularly the concern that soon all officers will have body cameras:

"Body cameras are a complex issue. There is a big concern of privacy and surveillance. It will result in accountability is a small number of cases. It will be used on both sides. We often find that whether it is a body camera from a police officer or other footage there are not standards on how the information should be shared. The police are really resistant to publishing the data. Let's think about this from a civil rights perspective. What are the things that we need to protect and promote regarding cameras?"

Style and organization

The style of the event was open and interactive. It was well facilitated, and had questions frequently allowed. A fun atmosphere was helped by the facilitator, who also wielded a significant amount of discretion to bring in people who she believed may have an important contribution.

The event had a strong community focus and collaboration. Frequent references were made to the community-based values of the initiative. One participant said:

"We need a community element so that people can contribute what they need to and get the outcomes they want. I'm hoping that people will take the initiative, create the platforms they need, and encourage the government to do a better job."

The leadership for the initiative was viewed as a grassroots, emergent form of leadership. One participant said:

"There are a lot of volunteers who are up against big challenges for the work. We need to streamline communication and use tools that are easy for people to use and which give them a clear pathway. There is an emergent leadership that can have much bolder visions, but these need to be bridged with folks that have more modest aims. There is some communication and trust stuff that needs to be sorted out."

Despite the discussion of letting grassroots leadership emerge, there was a clear pecking order at the event, and more authoritative speakers pre-emptively took more speaking time. There was a definite sense of power politics at the meeting and that some people and topics are worth hearing over others. Long introductions for the speakers and clear hierarchical leadership credentials conveyed for each of the core organizations in the group. Questions at the end of

the meeting became a chance for different organizations to stand on a soap box and say what they think.

Areas of tension or conflict

The meeting was addressing a hot button political topic but it was mainly being described in purely policy and legal terms. However, at the same time there was an unspoken undercurrent of racial bias issues that were not really being addressed.

There was a definite sense among the participants of frustration and resistance to the current policy status quo with regard to police reporting. There is a cynical attitude towards politicians who want to move around the important issues and build broad tent coalitions rather than tackling the issue head on. Some participants at the meeting seemed to have a strong sense of "us vs them". For example, one participant said:

"We need to take on the Fraternal Order of Police. There needs to be some editorial writing and some questions about whistleblowers and good cops who are bringing information to light. If the police are not concerned anything bad has happened, why do they want to protect this information?"

Other participants were concerned about opponents of the open data movement. For instance, one participant said that, "the International Association of Chiefs of Police was under pressure from Black Lives Matter. People aren't saying that data collection is going to ruin the country but there is a significant contingent of critics of the data collection movement.

Despite the clear sense of sides voiced by this participant, other participants appeared to be unsure of how he fitted into the event. One man said that he works across issues rather than specifically on this one. He confessed that he is more of a "tech guy" and he whizzes through talking about his website, and sounds like it would be too complicated or take too long to describe in detail. He said that he is "less an advocate and more a support resource for advocates," and that he, "likes having a conversation with everyone on the topic."

Symbols, norms, and values

The topic of shared goals and collaboration was a theme that participants continually returned to. They are a coalition of organizations committed to transparency and open government. They are advocates bought together to discuss transparency and the use of data for criminal justice reform.

Participants equated information with power. One participant said:

"The importance of data is to balance the power. It shifts the power so that different people are having the same conversation at the same time. Information is power. Hopefully the data will expand after we see how the importance of data is in shifting the conversation and creating results."

The meeting involved a significant amount of nomenclature including acronyms and technical language about law enforcement operations or open data technology. It would have been difficult for an outsider to properly understand everything that was being discussed.

The vignette provides a perspective on the organizational design of the police transparency program using the simple lens of participant observation during a meeting of program stakeholders. Several points can be made about organizational design of the police transparency program from the vignette. Firstly, one of the main subjects of the meeting, the use of body cameras worn by police reveals the salience of a changing technology and information environment and the need for the program to be responsive to new concerns raised by stakeholders. The issue of body cameras is described as 'complex'; it seems unclear whether the body cameras are meant to protect citizens, police officers or both. However, the novelty of the technology, and the question of an appropriate response to the innovation, challenges the participants of the working group to address the innovation using adequate technological expertise. Members of the group identify as technology experts (the 'tech guy'), but it is clear that body cameras are an emerging technology with legal and technological problems that cannot be immediately solved. The diverse range of stakeholders at the meeting provides an excellent forum of experts from different sectors with the ability to tackle the problem effectively. While the novelty of the technology means that its use does not quite fit into existing structure of techniques and practices, the potential for collaborative solutions is made possible because the group sees that

the police transparency program has a collaborative structure and they are open to sharing and learning ideas form the community of stakeholders. The discussion of the working group shows that they recognize the need for managers to identify the right organizational personnel and practices should be employed to share data from police cameras in a way that is effective, practical, and legally compliant. For example, one person commented that "[t]here is an emergent leadership that can have much bolder visions, but these need to be bridged with folks that have more modest aims." Such concerns come with a range of technical legal and technological questions that must be managed with the right group of trained personnel.

The vignette also raises an important organizational process characteristic of performance in balancing diverse stakeholder viewpoints while also keeping a strong hierarchy of authority connecting up to the main decision-making bodies in The White House and the member of the President's Task Force. Participants in the meeting showed a keen awareness of the veto holders and the agenda setters and their language and behavior revealed a careful management and strategic approach as well as awareness that the process of reform involved a hierarchical governance structure. While, the goals of the open government program may be clear in formal terms because they set out that the police departments will adopt open data, the interpretation of how to do this will always be contestable and power politics determines the role that stakeholders should play in delivering the goals. Finally, while the event revealed a strong sense of hierarchy, the culture of collaboration and diversity of stakeholders was again strong. Multiple groups,

with competing views, were present at the meeting. The discussion was civil, but cautious, and it was clear that participants knew that their positions were held in the balance with competing views, and must be taken on an equal footing with those competing views. One person was described as being unclear about the role he was supposed to have. He saw himself as just a 'tech guy' but in fact the powerful role of socio-technical expertise in changing dialogue about policing was noted by other participants in the meeting. The final quote of the vignette is illustrative of combining technology and social dialogue in for effective problem-solving on the issue of police transparency: "Information is power. Hopefully the data will expand after we see how the importance of data is in shifting the conversation and creating results."

4.7. Discussion and conclusions

In this chapter the association between organizational design, in terms of structure and processes, and open government performance in the police transparency program was explored. First, an inter-organizational map of structure and stakeholders was used to shed light on the way that the specific organizational structures of the police transparency program help it to perform strongly. The managerial factor was shown in the balance of a strong top-down structure of expertise emanating from The White House with an equally effective presence of civil society and private sector expertise that resembled more of a bottom-up structure. Technological factors were shown in the multiple types of organizations and stakeholders with technological tools and knowledge, and which had helped

to create awareness of the need for better police transparency in the first place.

Institutional factors were similarly shown in the multi-stakeholder structure that

supported policy innovation and provided a structure of binding laws and

regulations concerning access to information. Finally, the environmental factors

were primarily evident in the public demand that drove the need for technology

solutions to an area of transparency policy that mattered greatly to citizen's lives.

The next part of the chapter, the thematic typology, generated by the

content analysis of IRM progress reports was used deductively to content analyze

the organizational processes of the program. The case study showed that the

police transparency program emerged from a prior high level police open

government initiative called the President's Task Force for 21st Century Policing,

and it was driven by public and media pressure to address fundamental

organizational problems in the performance of police departments at a national

level. The interviews of 22 senior level decision-makers from the police

transparency program were analyzed, and a picture emerged of strongly

collaborative program driven by knowledge-sharing relationships and led by a

powerful central actor in The White House.

The chapter finished with a narrative vignette created from a participant

observation study of a working group meeting on police transparency. The

vignette brought aspects of the program's design of structure and processes into

sharper relief by examining ways that structure and process underpinned the

actions and language of the participants. On a difficult and challenging new topic

to the program of police data from body cameras, the group brought a range of

expert voices to the table. This process was both structured by the policy authority

of leading organizations such as The White House and enthusiastic about the

solutions being offered by citizens and technology organizations at the grassroots.

The vignette also revealed many aspects of the technological and institutional

structure of the program such as the laws and regulations that guided transparency

and privacy policy and the importance of socio-technical solutions to achieving

the goals of the program.

In sum, the police transparency program is a broad open government

program that demonstrates all of the key characteristics of open government

policy: transparency, collaboration, and public participation. The organizational

design of the police transparency program as a case of high performing open

government initiative is based on several notable process and structural

characteristics:

- The governance of the program is based on using existing networks in new

  ways rather than changing or transforming existing structures and

  personnel. Not only did the process category of continuity with existing

  networks come through repeatedly in the interviews, but the interviews

  also evidenced very little discussion of governance processes such as the

  ways that decisions were made or the norms and processes for parceling

  out authority.

- Central funding was not important for the success of the program in the

  views of the interviewees, which further supports the conclusion that the

program was created around an informal, loose-knit effort rather than a top-down effort with strings attached.

- The stakeholder approach of the program was based around sophisticated technical skills and a diverse collection of organizations with a supportive structure. Valuable strategy processes of the police transparency program were focused on technology skills and knowledge sharing. The interview respondents advocated a big tent approach to policymaking and implementation, which included as many stakeholders as possible especially among citizens and police departments, which were the two categories of stakeholders that were due to benefit the most from a public service that relies on trust and communication at the local level. While The White House exerted a strong hierarchical presence, it was also described using categories of *supporting* as well as *directing* that were key to its role as a contributing factor to the success of the program

- The consultation of the processes too an interactive approach that aspired to keep to clear goals of open government. The program was described using positive network terms such as *two-way*, *openness*, *co-production*, and *partnership* and the consultation of the program depended largely on third parties including citizens, nonprofits, academia, faith organizations, and the private sector who were viewed as being vital to sharing ideas and shaping decision-making. The program was driven by a core shared goal of addressing the widespread failures of police departments to protect the safety of communities. The goal was a clear one that interviewees said

was commonly held among stakeholders and viewed as having the

potential to make a big impact on society.

The case study of the United States police transparency program thus

evidences several areas of organizational design that are associated with higher

open government performance. These areas build on the structural and process

factors identified in Chapters 2 and 3, and are explored using multiple data points

of the case studies, the inter-organizational map, interviews, and a narrative

vignette. These areas of organizational design are explored further in the next

chapter through a second case study of a healthcare open government program in

the United Kingdom.

~ Chapter 5 ~

Case 2: Citizen-centered health services

5.1. The context of public health agencies in the United Kingdom – 5.2. Background of the OGP program on citizen-centered health services – 5.3. Data and methods – 5.4. Mapping the inter-organizational structure and stakeholders of the program – 5.5. Content analysis of the interviews – 5.6. Narrative illustrations of structure and process – 5.7. Discussion and conclusions

This chapter presents the second of the two case studies. As in Chapter 4, the current chapter addresses parts 1.1 and 1.2 of the central research question of the dissertation: (1.1) how does organizational structure contribute to open government performance? And, (1.2) how does organizational process contribute to open government performance? However, in this chapter the case study is of an open government program aiming to create more citizen-centered decision-making around health service delivery. In an identical way to Chapter 4, the chapter will address part 1.1 by through exploration of the inter-organizational structure and stakeholders of the open government program. It addresses part 1.2 by using the thematic typology of open government processes from Chapter 3 to analyze interview texts from senior level decision-makers regarding the organizational processes that are associated with successful outcomes in open government programs. Finally, both parts 1.1 and 1.2 will be addressed in the

analysis of a narrative vignette taken from the citizen-centered health services program in the United Kingdom.

5.1. The context of public health agencies in the United Kingdom

The National Health Service (NHS) in the United Kingdom has been widely admired around the world as an example of an effective national healthcare system. However, a move started during the administration of Prime Minister Tony Blair to make healthcare providers more financially independent has largely failed due to a widespread inability by many hospitals and regional health authorities to be financially self-sufficient (Greener, 2002). The UK parliament introduced market style systems designed to encourage health authorities to compete for funding. Some health authorities have proven incapable of achieving financial stability under this system, and the effect of austerity budgeting adopted by the government in the aftermath of the economic recession in 2008 has led to further financial pressures on health services. In 2015, junior doctors led several strikes in protest at the level of pay they were receiving, and this issue has continued into 2016. The above policies, exacerbated by the existence of an aging population requiring more care, have placed the NHS under an unprecedented level of financial pressure.

The system of nationalized healthcare and the historic role that the NHS in particular has played in the social welfare institutions remain popular in the United Kingdom. However, there is disagreement between left and right political parties on the level of privatization that should be applied to the NHS. This

controversy also extends to the realm of open government, especially with regard to government transparency and accountability. Medical and pharmaceutical companies lobby the government for increased openness of patient medical records, ostensibly for research and development operations, but also for marketing opportunities. The public meanwhile decries the lack of information that would help them make more informed decisions about their healthcare options. They would like hospitals to be more accountable on their performance and they would like notable areas of underperformance, such as for patient waiting times and treatment outcomes on major health areas such as cancer, to be addressed through strengthened accountability repercussions. However, certain sectors of the public also strongly oppose the release of patient records for commercial purposes.

5.2. Background of the OGP program on citizen-centered health services

Given the divergence in views on what health data should be released, recent attempts to create system-wide open government reforms have been unsuccessful. The United Kingdom's NAPs have featured several programs designed to tackle health policy through open government such as by setting up online citizen forums to guide decision-making of the Department of Health, open meetings for consultation, and integration of health statistics in the national open data portal. The NHS is restricted by law from publishing health performance statistics as a means to compare performance on specific indicators between service providers.

However, the second OGP National Action Plan of the United Kingdom set out to give patients and civil society organizations opportunities to participate in the NHS decision-making regarding what kinds of data should be made available, and how this data could be used by citizens to make more informed healthcare choices. The NAP wording of the citizen-centered health services program was as follows: "NHS England will be improving the quality and breadth of information available to citizens to support them to participate more fully in both their own health care and in the quality and design of health services which will result in greater accountability of NHS England." According to the confident claim in the UK NAP, the program will involve the, "biggest moves ever taken by any health service anywhere in the world to put transparency and patient participation at the very core of the health system." The program planned to take a number of steps to meet this ambition by introducing new kinds of data about clinical performance, develop new performance indicators, implementation of a services patient recommendation tool, and adopting a Patient Centred Outcome Measurement (PCOM) tool on services available for rare and complex medical condition.

5.3. Data and methods

As in the prior case chapter, the case research in this chapter employs a qualitative data analysis approach with a case study method (for more on the methodology see Chapter 1). The research questions are addressed here in a way that mirrors the intent and form adopted for the research questions of the policy transparency case research in Chapter 4. The objective of the case study analysis is to develop

understanding of the association of structural and process components of organizational design with open government performance. In subsequent chapters, these results from the case study interviews can be used to develop the analytical framework into a framework for understanding the relationship between organizational design and open government performance.

Identical methods to the first case study are employed in this chapter: (1) mapping the structure of inter-organizational relationships and stakeholders, (2) interview content analysis, and (3) a narrative vignette. Also identically to the first case study, each methodology is used to address the two parts of the central research question in a different way: (1.1) how does organizational structure contribute to open government performance? (addressed through the inter-organizational structure and stakeholders map and the narrative vignette) And, (1.2) how does organizational process contribute to open government performance? (addressed through the interview content analysis and the narrative vignette).

Table 5.1 details the qualitative data sources used in the case study. Using Google Alerts, 231 new articles were collected to provide information on the processes and events that took place in the design and implementation of the program. There was one major government report, The Caldicott Report, which addressed issues of public concern around privacy of patient information. Additionally, I received 58 communiqués from one the listserv of the civil society partner, The Open Government Network, and read the UK's four IRM progress reports and three NAPs. The interviews of participants in the health services

program of the UK's open government National Action Plan were conducted

using the methodology described in the methodology chapter of the dissertation.

The target population for the interviews was identified by two criteria: 1) they

must be senior managers in their organizations; and 2) they must have participated

in the work of the open government programs for reforming open government in

the healthcare sphere. Individuals were identified from public reports on the

policy development process of the programs and were emailed directly to invite

them for interview. An initial list of twenty-five leaders from government, civil

society, and the private sector was identified. Only three of these individuals

initially agreed to be interviewed, but a further ten individuals who were

recommended through a snowball sampling process eventually agreed to be

interviewed. The interviews took place between April 2016 and August 2016 and

were carried out by telephone. Exactly as in the police transparency cases study,

there were two set questions asked of all the interviewers: 1) 'What organizational

factors can help the healthcare services open government program to succeed?'

and 2) 'What barriers can prevent the healthcare services open government

program from succeeding?' During the interview, the interviewer could follow

different lines of enquiry or ask follow-up questions to address important points

raised by the interviewee. These follow-up questions were designed to encourage

the interviewee to elaborate rather than to introduce new topics by the researcher.

Examples of follow up questions are:

- Could you give some specific examples of …….?

- Could you explain why that was a helpful practice?

- Could you explain why that was an unhelpful practice?

Table 5.1. Sources used in the citizen-centered health case study

Name	N	Description
Media articles	231	Collected using Google Alerts between January 1, 2015 and January 1, 2016. Google operator: "open government" AND "national health service" AND "data" OR "open government" AND "nhs" AND "data" OR "open government" AND "health" AND "data"
Interviews	13	Expert practitioners involved in designing the citizen-centered health services program. Individuals selected by snowball sample: 7 government officials. 6 civil society representatives.
OGP national action plans	3	Official action plans of the United Kingdom government: 1. National Action Plan of the United Kingdom 2011-2013 2. National Action Plan of the United Kingdom 2013-2015 3. National Action Plan of the United Kingdom 2016-2018
IRM progress reports	4	1. First Mid-term Progress Report of the United Kingdom 2. First Progress Report of the United Kingdom

		3. Second Mid-term Progress Report of the United Kingdom
		4. Second Progress Report of the United Kingdom
Civil society listserv posts	58	Listserv posts were obtained through membership of the UK Open Government Network listserv.
National policy reports	1	One national policy report by the government addressing the topics of health data were released during the period of the health services program:
		1. The Caldicott Report

5.4. Mapping the inter-organizational structures and stakeholders of the program

The inter-organizational map of the structure and stakeholders of the open government program in Figure 5.1 shows the three main groups on both the government side (the left side) and the non-governmental stakeholder side (the right side). As indicated, the figure shows the integration of the structural factors of organizational design in the program: managerial, technological, institutional, and environmental.

Managerial factors

The management structure is headed by the executive department of the UK NAP, the Cabinet Office. However, the overall responsibility for the program is in the

hands of a non-departmental executive body that is part of the Department of

Health called NHS England. This lead organization is quite a young organization

having only been created in 2012. However, it is effective as a leader in the

managerial structure because it has broad oversight over multiple health bodies. It

holds the contracts for doctors in the NHS and manages overall strategy including

the digital strategy for the United Kingdom government. NHS England is thus the

central component of the managerial structure as well as the lead agency in the

governance of the program. The other group on the government side is the group

of collaborating agencies, some of which are directly involved in implementation

of the open health initiative such as NHS Digital, an executive non-departmental

body of the department of health that stores and analyzes data on hospitals in the

UK, and NHS Improvement, which oversees the funding and strategy for the NHS

trusts and authorities. Other collaborating agencies play a less direct role but are

nevertheless important for enabling the delivering institutions to achieve their

missions. In this category is the Crown Commercial Service, which oversees and

guides all government procurement, and the Ministry of Justice, which is also part

of the institutional part of the structure as it is involved in the legal matters

pertaining to privacy and commercialization of patient health records.

Technological factors

The governmental and non-governmental sectors together are the locus of the

managerial and institutional factors of the inter-organizational structure. However,

on both sides are organizations that specialize in open data technology, such as

Dr. Forster and NHS Digital (named the Health and Social Care Information

Centre before August 2016), and therefore form a central part of the technological

factors. Specific types of technological factors include data.gov, which is the

central government portal for data from all the departments. NHS Choices is the

main statistical database of the NHS. It is designed to provide patients with

information about the range of services that are available. Axure is a software

package developed by the private sector that specializes in site maps and widgets

in website design, and which is used by government agencies. JavaScript Object

Notation (JSON) is an open and linked data format that is commonly used in open

data portals replacing the early XML format that was widely viewed as being

clunky and difficult to use by members of the public. CareCERT is an internal

support service designed to help government agencies deal with cyber-attacks.

Cyber Essentials is another software package employed as part of the UK's digital

government strategy to prevent cyber-attacks. MastadonC is a provider of an open

source data program for open and big data, and the company is one of the main

consulting firms for the NHS. Patient Centred Outcome Measurement is a

software tool for uploading and organizing a patient survey taken after receiving

any kind of health treatment.

Institutional factors

In the center of the structure are the legal components of the structure that

underpin the open government process and are necessary for providing the

institutional framework of rules, norms, and values that both governmental and

non-governmental organizations share in. Institutional factors are not confined to the legal areas, but this is one of their central focuses. Firstly, the legal regulations and guidance component includes the United Kingdom agency-wide Digital Government Strategy, which was published in November 2012 and provides guidelines for how departments should implement the digital by default policy originally set forward in the March 2012 budget. This document is a strongly worded injunction for departments to conform to open government reforms. However, it is not mandatory for departments. Other items of legal regulation and guidance, on the other hand, are established by law. These include the Freedom of Information Act of 2000, the Health and Social Care Act of 2012, which led to a major reorganization of the NHS as well as establishing NHS England, and the Public Records Act of 1958, which had been a default information access policy for the United Kingdom until the passage of the Freedom of Information Act, and which contains standards for records storage and management. These legal aspects of the institutional structure provide for the fair and democratic processes associated institutions with political competition that is conducive to strongly performing open government reforms.
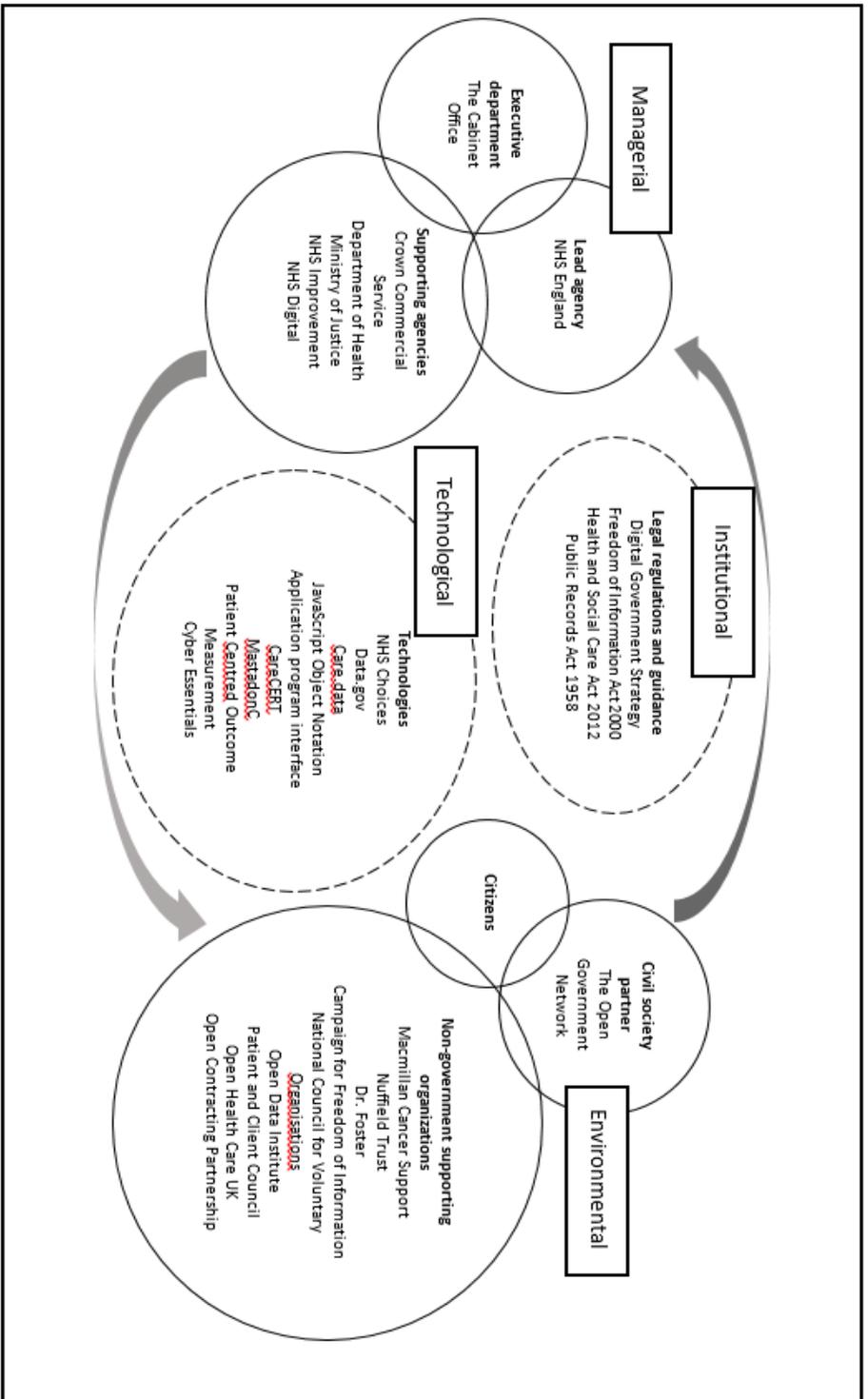
Figure 5.1. Map of the inter-organizational structure and stakeholders of the citizen-centered healthcare program

Environmental factors

Forming the locus of the environmental factors, on the right side of the diagram,

the three non-governmental stakeholder groups are citizens, the official civil

society partner, the Open Government Network (comprising over 700 civil

society organizations), and specialist non-governmental organizations that include

private companies, technology organizations, and other nonprofit organizations

that are specialists on the health open government arena. This latter group

contains some members such as The Open Data Institute that are also members of

the Open Government Network. The medical specialist organizations the

Macmillan Cancer Support and the Nuffield Trust are the official supporting

organizations outside of government for the program. Macmillan funds specialist

healthcare, while the Nuffield Trust is a charitable trust with the goal of using

analysis and evidence-based assessment to improve the operation of the

healthcare system. However, there are other groups that form part of this

environment of pressure on the government to adopt technologies for improved

openness in the health sphere: the National Council for Voluntary Organisations

is an umbrella association representing the interests of the voluntary sector; the

Open Data Institute is a nonprofit group aiming to promote the generation of

knowledge and innovation through open data; the Patient and Client Council is a

membership association of healthcare patients in the NHS system; Open Health

Care UK is a private company aiming at harnessing digital technology to improve

the services of hospitals and other healthcare providers; and the Open Contracting

Partnership is a nonprofit with the goal of opening up the contracting process by building relationships between the government, private sector, and civil society.

5.5. Content analysis of the interviews

The content analysis followed the technique of Berg (2002) as described earlier in the methodology chapter of the dissertation. Notes taken of the interviews were content analyzed using a deductive coding approach. The thematic typology of open government organizational processes in the IRM progress reports content analysis was used to categorize the text of the interviews.

The results of the content analysis were similar to the results of the content analysis for the police transparency program in Chapter 4. The discussion about organizational processes conducive to program success for the citizen-centered health services program was chiefly concerned with the theme of consultation. As shown in Table 5.2, there were 94 references to consultation categories in the expert interviews. This compares to 38 for the governance theme and 33 for the strategy theme. The single most important sub-theme was the *stakeholders* sub-theme with 56 references. The stakeholders sub-theme itself was primarily made up of references to the categories of *CSOs* (25) and the *public* (14). For example, in discussion of CSOs, one interviewee said: "The challenge is that you want good civil society engagement including privacy lobbyists. There are so many organizations and the collaboration is normally positive." In contrast to these categories of stakeholders, the coding of categories such as the *government* (7),

business (6), *academia* (3), and *international* (1) had a smaller number of

references. It is notable that the references to private sector stakeholders

(business) are almost as extensive as the references to government stakeholders.

This equal result for business and government reflects the history of market-based

reforms in the NHS and the continued role of private interests in contracting for

healthcare services.

Table 5.2. Results of content analysis showing themes and categories (frequencies)

Consultation (94)		Governance (38)	
Stakeholders (56)	Public (14)	**Level of oversight and control (15)**	Centralized (7)
	Government (7)		Hierarchy (1)
	CSOs (25)		Decentralized (7)
	Academia (3)		Breadth (1)
	Business (6)		
	International (1)	**Head organization (19)**	Directing (10)
			Supporting (7)
			National agency (2)
			Local agency (0)
Modes of communication (2)	Meetings (1)		
	Telephone (0)	**Funding arrangement (2)**	Agency source (1)
	Social media (1)		Central source (1)
	Surveys (0)		
		Milestones (2)	Measurability (2)
Governance (2)	Shared (0)		
	Unilateral (2)		
Quality (26)	Two-way (5)	**Strategy (33)**	
	Co-production (4)		
	Partnership (4)	**Goal-setting (19)**	Ambition and impact (29)
	One-way (4)		Measurability (4)
	Closeness (4)		Values (0)
	Openness (2)		
	Unengaged (1)	**Policy design (9)**	Focus (8)
	Narrowness (1)		Diversity (1)
	Dedication (1)		
	Regularity (0)	**Skill and specialization (4)**	Specialist teams (4)

Continuity with prior networks (8)	Continuous (5)	Policy tools (4)	New technologies (3)
	Not continuous (3)		Advocacy (1)
			Breadth (0)
			Legislative change (0)

Both the *modes of communication* and *governance* sub-themes were not discussed as frequently by the interview respondents. There was one reference each to meetings and social media as a mode of communication used for consultation. In the governance sub-theme, the category of unilateral governance was referenced twice as a barrier to effective program results because it curtailed expert input from stakeholders. Discussion of the level of continuity with previous networks was extensive but more about the value of *continuity* as opposed to *discontinuity*. A typical reference to the importance of previous networks is shown in this quote from one interviewee was that, "we have a duty to engage [with stakeholders]. It was enshrined in law in 2003, and so now we have quite strong networks in place." Another interviewee said that, "transparency has been a big part of that and being both chair of G8 and the OGP really helped to drive things."

Similarly to the deductive analysis in the police transparency program, the *quality* of the consultation was the second largest sub-theme in the analysis with 26 references. The categories for deliberative kinds of consultation quality were the most important for processes that are conducive to success. There were five references in the *two-way* category and four in each of the categories of *coproduction*, *partnership*, and *closeness*. For example, one interviewee talking

about partnership with civil society said that the interaction could sometimes be a barrier to the program: *"it is legitimate in a democracy for civil society to say no but OGP is about consensus. They wanted to be able to do stuff through collaborative decision-making."* The other quality categories, *openness* (2) and *dedication* (1), were also discussed as being helpful for producing successful programs, but they were referenced to a smaller degree compared to the more collaborative categories of co-production, partnership, and closeness, while *unengaged* (1) consultation is a barrier to success.

The governance theme reveals an interest of interview respondents in strongly balanced forms of centralization and decentralization, which also closely mirrors the findings in the analysis of the police transparency program. While, overall, the governance theme is the smallest theme, its references are almost entirely concerned with discussion of centralization and decentralization themes. For example, referencing centralized structure, one interviewee said that, "carrying out the work is not possible without the high-level commitment of the prime minister. All of that allows the internal motivation of the officials." Referencing decentralization, another interviewee said that, "department ministries rather than the office of the prime minister have made [the program] inefficient. It requires good decentralized leadership."

Both the *level of oversight and control* and the *head organization* sub-themes were important sub-themes were coded texts referenced the role of helpful organizational processes. However, in each of those sub-themes there is a balance with no clear preference for centralized or decentralized levels of oversight and

control; neither was necessarily a barrier or an enabling factor. In the level of oversight and control sub-theme, centralized and decentralized categories were both referenced seven times. In the head organization sub-theme, the *directing* and *supporting* categories also evidenced this balance between two binary categories of governance, which suggests that the governance of the healthcare performance program involved efforts to address both the hierarchical, top-down aspects of governance as well as the decentralized, bottom-up aspects of governance. There were two references to the roles of national agencies in the program. Discussion of funding arrangements, though minimal, was also balanced with one reference to agency and central sources of funding each though neither of the references revealed preferences of the respondents regarding the association of funding arrangements with program success. However, there were no references to subsidiary, regional or local agencies.

The strategy theme was the least most-referenced theme in the content analysis with 33 references. However, the most significant observation about the results for the strategy theme is that it included the single largest referenced category where interview respondents talked about the importance of *ambition and impact*, for successful open government programs. Experts in the healthcare performance program discussed the value of ambition and impact in the sub-theme of goal-setting more than any other category. Experts also discussed the importance of designing the health services program to be measurable in its goal-setting, but the most prominent area of focus surrounded how policymakers should ensure that the initiative has an ambitious, real, and meaningful impact on

the ultimate goal of improving the health of people in the country. There was no

coded discussion pertaining to the values of open government category in goal-

setting. The other sub-themes of the strategy theme, *policy design*, *skill and

specialization*, *policy tools* were all discussed quite extensively. Notably, the

interview discussion revolved around the value of *focus* rather than *diversity* in

the approach to policy design of the program. There were four references made to

specialist teams by the interviewees, and, in the *policy tools* sub-theme the

discussion mainly revolved around the importance of applying *new technologies*

for program success. However, there was also one reference to the use of

advocacy as an important policy tool in the program. There were no references to

either the value of using a breadth of policy tools or to the use of legislative

change as a tool.

5.6. Narrative illustrations of structure and process

Narrative illustrations using a descriptive vignette of an important episode

encountered during the research reveal more about the role of organizational

design in the high performing case study example of the United Kingdom citizen-

centered health services program. The vignette (Box 5.1), which is discussed in

terms of how it sheds light on organizational design in the performance of open

government programs, describes how the program responded to the repercussions

of negative media reports resulting from the release of its own data. The vignette

tells the story of negative media reports that used data released by NHS England.

It addresses the tricky situation of how the citizen-centered healthcare services

program responded when the release of health data, which is a deliberate goal of the program, inevitably led to an episode of negative media reporting about the NHS. In October 2016 data was released revealing that the wait times for patients in accident and emergency rooms had been unusually high. The wait times reported for the preceding summer were at the same level as normal wait times during the winter period, which is a much busier time of year. Such levels had not been seen since the year 2004. Medical officials claimed that the problem was due to funding shortfalls. The data was released on My NHS, an open data portal made available as part of NHS England's programs in the UK NAP.

Box 5.1. Vignette: NHS England reports data showing an emergency room crisis

Financial pressures were slowly becoming more painful in 2016. The Guardian newspaper reported a new scoop with information purporting that earlier in that year, in May 2016, the Prime Minister had vetoed the release of ten billion pounds in supplemental funds to the NHS, which was also blamed on funding problems. Including this new ten billion pounds shortfall, estimates by the Local Government Association put the funding gap for the year at 2.6 billion pounds.[11]

To compound these funding problems, several different news outlets reported on new data released on My NHS showing that during the 2016 summer quarter the shortage of hospital beds in accident and emergency rooms was at its highest level since 2004. Furthermore, the shortages were higher than previous winter quarters when accident and emergency rooms are normally supposed to be busier.

As the large scale of the funding shortfall started to become clear, NHS leaders reported that they had started looking into the causes of the crisis. But NHS experts seemed to express very little surprise. Many saw it as a predictable result of years of funding shortages. [12] One NHS trust executive said the data appeared to show a

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[11] The Guardian (2016). NHS areas will implode in winter expert Mark Holland warns. https://www.theguardian.com/society/2016/oct/13/nhs-areas-will-implode-winter-expert-mark-holland-warns. Last accessed 10/22/2016.
[12] The Daily Telegraph (2016). A&E summer waiting times worse than most winters new data shows. http://www.telegraph.co.uk/news/2016/10/13/ae-summer-waiting-times-worse-than-most-winters-new-data-shows/. Last accessed 10/22/2016.

dramatic change for the worse, but in fact a large proportion of the change could have been due to a shift from measuring hospital use of beds at night time to daytime, which makes the numbers look bigger. NHS England has previously made data management decisions to restrict the flow of information in order to present information in ways that it believed would be more informative. For example, in December 2015, NHS England started publishing some types of data on a monthly rather than a weekly basis in an effort to minimize the appearance of misleading fluctuations.

According to NHS England, a solution was in place to address the problem of hospital bed shortages which involved engaging local health and social organizations in a "transformation process" designed to address the new information.[13] The Department of Health had also prepared 3.5 billion in extra funding for social care, which they view as a priority for the next decade.

In another response to the crisis, NHS England said that it was also in the process of monitoring a new evidence-based solution to wait times in one borough in London. Data already suggested that these new projects appeared to be working. A 10% drop in wait times was reported.[14] Another component of the process to incorporate organizational learning through data was the establishment earlier in the year of an independent healthcare safety investigation branch. In a recent speech, the Health Secretary, Jeremy Hunt, said that the investigation branch will help with, "consulting on legislation to give doctors a safe space to speak freely about medical error; and we'll publish hospitals' own estimates of their avoidable deaths, the first country in the world to do so."[15]

One notable part of the vignette is that the lead organization of the open government program is also responsible for the management of the NHS's central open data repository. Despite leading to negative media coverage, this is an example of the program performing as it should. NHS England appears to have been willing to relinquish direct control over the release and management of the data despite the fact that it is the head organization for health data. Decisions regarding the management of data here intersect with several organizational

[13] The Guardian (2016). Ibid.
[14] http://www.bbc.com/news/health-37634687. Last accessed on 10/22/2016.
[15] The IB Times (2016). Health secretary Jeremy Hunt's speech at the Conservative conference in full. http://www.ibtimes.co.uk/read-health-secretary-jeremy-hunts-speech-conservative-conference-full-1584794. Last accessed on 10/22/2016.

design factors. Firstly, both managerial and technological structures are involved

because both the managerial structure of data panning and socio-technical

decisions about how data will influence a given political situation are relevant to

the organization of a program that allows for data to be open, and beyond

manipulation even when the information will reflect badly on the NHS. The

structure of collaboration and the organizational processes of strategy and

consultation are also involved in the vignette account. Civil society stakeholders

demand open data that can be used to assess the performance of government,

which in this case provided insights into bad performance. Strategically, public

managers must also decide if releasing certain kinds of data will be harmful to

public welfare or beneficial. In this case it appears to have been determined that

the information was beneficial to the public. NHS England has undertaken a

collaborative venture to better control the data inputs. This has been done, firstly,

by addressing the source of the funding problems through a "transformation

process". Secondly, NHS is leading a cultural change process to improve the way

that the NHS proactively responds to performance data and becomes accustomed

to talking openly about areas of medical failure. These two remedial approaches

emphasize the importance to program performance of working through

stakeholders in a broad, inter-organizational transformation process and the types

of data expertise needed as part of the strategy processes in the program in order

that the competing visions of goals among stakeholders must be reconciled.

The vignette also points out that health data may be difficult to interpret

accurately because of changes in the way that measurements are taken or because

of seasonal fluctuations. The data seems to say something (which the media has reported on widely) but it actually may mean something different. This fact underlines the importance in organizational design of open government of technological knowledge building both on existing structures of technological knowledge and institutional structures favoring innovation are strongly depended upon. Finally, the vignette also reveals again another important ingredient of open government performance, which is the strongly centralized character of an open government program based on the sharing of information. While the information being shared is public, the information is also a central resource and the lead organization, NHS England, has significant control over what information it decides to release. These competing elements of centralizing vs decentralization and openness vs closure highlight both balancing elements of institutional structure and governance processes in organizational design of open government. In such situations of data management it can be difficult to know what kinds of personnel and organizational responsibilities will be needed to combine both centralized and decentralized organization.

5.7. Discussion and conclusions

This chapter started by providing background to the NHS in the United Kingdom, and describing how this background led to the efforts to use open government to improve the effectiveness and accountability of health services. The NHS has been facing significant financial pressure and privatization reforms since the Tony Blair government sought greater performance scrutiny and competition among

healthcare providers. The open government program in the UK's National Action Plan tried to both remedy and build upon these transitions by creating greater availability of information about the spending and performance of healthcare providers that might be used to set up an accreditation scheme, and including patients in decision-making about healthcare priorities in the NHS so that patients could "participate more fully in both their own health care and in the quality and design of health services."

The map of the organizational structure of the program evidenced the ways in which structural factors contribute to open government performance. Managerial factors were shown in the management of the program across the central organizational actors in the program. Many of these organizations are technology organizations that produce and control the types of technologies that are used to make police decisions. There were a wide range of technology factors supported by tech organizations inside and outside of government, and which helped to facilitate collaboration of the program. These technological and managerial factors are also shaped, firstly, by an environment of citizens, CSOs and other non-governmental health and technology organizations, and, secondly, by institutional factors such as laws and guidelines that also shape the ways that the technology is used such as the Health and Social Care Act.

Thirteen senior decision-makers with experience of working on the citizen-centered health service performance program from the UK NAP were interviewed to find out about the organizational processes that were conducive or harmful to better open government performance. The respondents were from the

senior management level in government and civil society. The interviews were subsequently content analyzed using a deductive method based upon the thematic typology created through the inductive content analysis of the IRM progress reports (see Chapter 3). The results showed that each of the three themes of organizational design (consultation, governance, and strategy) were important areas of the organizational processes for the interview respondents. The positive evaluations given by respondents in the consultation theme focused on two-way processes of deliberation and co-production in the quality of the consultation. The consultation theme evidenced support by the respondents for a broad range of stakeholders including the private sector, civil society organizations, and the general public. This spectrum of stakeholders reflects the existing network of healthcare organizations in the UK healthcare system, especially the role of the private sector. In a fundamental area of public services such as healthcare, which is valued and prized so highly by citizens, the focus on end goals and making a real difference to people's lives is of the utmost importance.

In the final section of the chapter, a narrative vignette was analyzed to examine how a salient episode in the program reveals the way that structure and process work and how they relate to high open government performance. The episode examined a challenging moment for the program when routine data released by NHS England lead to damning reports in the media of NHS underperformance. In its response to this crisis, the program revealed how its collaborative structure and open data technologies made it possible for such a moment to occur when new data could emerge that highlighted an important area

in the health services that needed improvement. While the immediate impact of the event was a negative one as far as the NHS was concerned, the even highlighted a cultural shift taking place in the health services as inter-organizational processes were underway to address the problem collaborative through a 'transformation process'. This ability to share new information about performance and to react remedially with partners is a strong performance feature of the program.

In sum, the case study of the citizen-centered healthcare program reveals multiple levels within the organizational design of the initiative where structures and processes make a difference to the performance of the initiative. The key findings of the association between organizational design and performance are as follows:

- The program evidenced a governance approach that balanced the centralization and decentralization forces of organizational processes. The head organization (in this case the Cabinet Office of the Prime Minister) played both a directing role to provide leadership and vision and a supporting role to encourage autonomy of subsidiary departments and stakeholders. The respondents generally viewed centralized leadership as a key ingredient of success, but this kind of centralized process was important at a central, national level as well as at a local, decentralized level in police departments.

- The program was part of a vision of the Cabinet Office and Prime Minister to radically transform the delivery of health services in a way that made it

more accountable and effect. This aspect of open government program success relates to the finding in the strategy theme of the typology that strong and clear ambition and goals, communicated from central leaders such as the Cabinet Office, were needed to drive the program forward.

- The program was structured in an open way that relied upon citizens, the media, and experts as key stakeholders in the use and interpretation of information. The program had a systematic approach to delivering, analyzing, and acting upon information from its open data programs. As the narrative vignette showed, the program tried to deal with policy failings and negative public interpretation of information by developing the pipeline of performance information from the moment that performance indicators were selected with the help of critical stakeholders such as patients and data analysts.

- The program's process relied strongly on data analysis and legal expertise. In fact, the respondents in the interviews emphasized that this component, which was vital for program success, was not as strong as they would have liked it to be especially within the civil society stakeholders, the Open Government Network. Fortunately, for the program, the technical expertise was balanced across many departments and non-governmental organizations such as NHS England, NHS Digital, and Dr. Foster. As a result the design of the program did not give a strong technical advantage to any group of stakeholders, and consultation involved participation from multiple groups. This diversity of technical helped the program reach

critical decisions that interview respondents said were important for

keeping the program on track as well as avoiding potential mistakes.

The key findings about the organizational design of the citizen-centered

healthcare program show several specific areas that structure and process contributed to

open government performance. In order to turn these findings into a comprehensive

analytical framework, the next chapter deals with key performance indicators derived

from the case studies in the current and previous chapters. The performance indicators are

generated by matching the findings from these chapters with the structural propositions

and the inventory of open government processes.

~ Chapter 6 ~

Assessing open government design and performance

6.1. Key performance indicators: structural factors – 6.2. Key performance

indicators: process factors – 6.3. The analytical framework for open government

design – 6.4. Discussion and conclusions.

The research has thus far addressed the questions of what organizational

structures and processes are involved in the design of open government programs,

and how these organizational designs are associated with higher performing open

government programs. The literature review in Chapter 2 resulted in the creation

of a conceptual model of open government structuration and the establishment of

nine propositions regarding the association between the design of organizational

structure and performance. This analysis addressed research question 1.1 on the

association between organizational structure and open government performance.

The analysis used to answer research question 1.2 of the association between

organizational processes and open government performance in Chapter 3 resulted

in a typology of themes, sub-themes, and categories of open government

organizational processes. This typology was used to generate an inventory of all

the open government processes found in the thematic analysis. However, the

inventory did not distinguish among the positive, negative, or neutral

organizational processes that help or hinder open government performance, and it

is lacking in information that can fully answer the question of the association

between processes and performance. Similarly, the nine propositions from

Chapter 2 are also lacking in detailed indicators of how organizational structure relates to performance. In Chapters 4 and 5, best practice case studies were explored to find out more about these performance details in the high performance open government reform contexts of the United States and the United Kingdom. A further approach for answering research questions 1.1 and 1.2 will be undertaken in this chapter by drawing further detail about organizational design and performance from the case study chapters. The chapter will present results comparing the effective organizational processes identified in the US police transparency program and the UK citizen-centered health services program with the inventory of open government organizational processes. The findings from the best practice case studies will be presented in a table of key performance indicators (KPIs) involving structural performance indicators (SPIs) and process performance indicators (PPIs). Together the KPIs form a performance measurement instrument that can be used by open government policymakers to guide them in the organizational design of their open government initiatives and programs. As organizational design structure and processes can be deliberately managed and controlled by policymakers, they are factors that can be developed with the help of the KPIs. These KPIs will then be discussed together with a new version of the analytical framework to demonstrate how the KPIs can be used in the framework to assess the association between open government organizational design and performance.

6.1. Key performance indicators: structural factors

Performance indicators have become an important tool in the efforts by public

organizations to track and measure organizational inputs, processes, and outputs,

and they are widely required in modern performance management systems (De

Lancer Julnes and Holzer, 2001). According to Hood (1991, 4) performance

indicators aim to provide, "explicit standards and measures of performance."

They can be used to assess performance in a range of areas from financial

performance to accountability and efficiency (Pollitt and Talbot, 2004), to

government contracting (Dunshire, Hartley, and Dimitriou, 1988). In Tables 6.1,

6.2, and 6.3 below, performance indicators and their source from the findings of

the best practice case studies of the United Kingdom and United States OGP

initiatives are listed according to the nine propositions of organizational structures

and the inventory of organizational processes themes and sub-themes.

Table 6.1 lists the structural factor propositions and SPIs. There are 15

performance indicators in total for the nine propositions. Each proposition has 1-3

performance indicators depending on the level of evidence found supporting such

indicators in the case studies. The first three propositions concern managerial

factors relating to effective management of organizational structures (proposition

1), the integration of public values into structures (proposition 2), and the

integration of citizen perspectives and engagement (proposition 3). There are five

SPIs that relate to findings from the case studies that leadership structures are

partially composed of cross-sector partnership of experts such as in the Police

Forum that was made up of multi-sector representatives in the US and the Civil

Society Network in the UK. The Civil Society Network was less well integrated

as a leadership component in the case of the UK, but it still resembled a cross-sectoral kind of leadership structures. Other SPIs relate to the role of a centralized governmental leader as part of the management structure such as The White House and the Cabinet office, as well as policy specific central leaders such as the Justice Department and the Department of Health. Through the work of the open government programs, both country's program management structures aimed to integrate public values concerning public safety and law enforcement (in the US case) and health and well-being (in the UK case). Finally, the management structure of the programs both evidenced a structure involving co-creation with citizens with citizens playing a role in policy formation either through hackathons (in the US case) or through a website (in the UK case).

The institutional factors have two propositions and four SPIs. The two propositions concern institutions that maintain democratic and fair forms of political competition (proposition 4) and institutions that are good at innovating (proposition 5). For proposition 4 the findings in both cases were that fair and democratic institutions were indicated by the existence of strong FOI regulations including regulations that understood the value of digital information rights. Both the US and the UK political systems had institutional structures that promoted such rights. For proposition 5 innovative institutions were indicated by close relationships of government with non-governmental tech start-ups and private sector tech companies that provided for competition with government and encouraged greater innovation (SPI8). Another similar indicator of institutional

innovation was the regular circulation of technology innovation sharing between

the governmental and non-governmental organizations (SPI9).

Table 6.1. Performance indicators for structural factors of organizational design

Structural propositions	Structural key performance indicators
Managerial factors	
Proposition 1: Effective management of the organizational structure including planning, evaluation, and leadership is associated with higher open government performance	**SPI1: The leadership structure is at least partially composed of a cross-sector partnership of experts.** *In the United States the police transparency program was centered on the Police Forum, a leadership body composed of federal officials, police officers, academics, and civil society experts. In the United Kingdom there was no a specific body as such, but the Civil Society Network provided experts to consult with NHS England, which created this inter-sectoral leadership.* **SPI2: The primary agency of government with responsibility for the policy area of the program has a central leadership role**. *In the United States, the Justice Department was part of the leadership structure for the police transparency program, while in the United Kingdom the Department of Health was part of the leadership structure for the citizen-centered health program.* **SPI3: A significant amount of responsibility for the program planning lies with the central executive body of government.** *The head of the structure in the United States was The White House. In the United Kingdom it was the Prime Minister's Cabinet Office.*

Proposition 2: The integration of public value goals into organizational structures is associated with higher open government performance	**SPI4: The program is structured together with an existing initiative with strong public value relevance.** *The United States program was structured on the President's Task Force for 21st Century Policing. The United Kingdom's health program was a more novel creation, but it did have strong public value relevance as it was about improving the performance of health services.*
Proposition 3: The integration of citizen perspectives and citizen-government relationships into organizational structures is associated with higher open government performance	**SPI5: The program structure involves a substantial element of citizen co-creation.** *The police transparency program was designed to use civic hackathons to create programs for sharing police data in innovative ways, while the citizen-centered health program used a website for citizen input.*
Institutional factors
Proposition 4: Competitive political structures that rely on fair and democratic forms of public appointment are associated with higher open government performance.	**SPI6: The program is based around strong legal structures such as freedom of information laws and laws that recognize electronic or digital forms of information rights.** *The United States and the United Kingdom both have strong FOI laws. They also have enshrined bills concerning digital rights of information access and privacy in the Digital Accountability and Transparency Act and the Digital Government Strategy, respectively.* **SPI7: Parliamentary systems are competitive and fair.** *This aspect of political competition did not appear in the case study analysis. However, both the United States and United Kingdom electoral systems are considered to be genuinely competitive and fair.*
Proposition 5: Innovative institutions are associated with higher open government performance.	**SPI8: The program structure is designed to rely on innovations supplied**

	and maintained by the private sector or civic technology nonprofits. *Both case countries evidence strong reliance on third sector technologies. In the United States AI Pro was being widely adopted by police departments and there was a national database run by a consortium of nonprofit civil society organizations.* **SPI9: Innovations regularly evolve and circulate between governmental and non-governmental actors.** *In the US, the data analysis programs of the Sunlight Foundation and Code for America have been adapted by police departments. In the UK, data security software such as Cyber Essentials was adapted from the private sector to be used for government programs such as the Patient Centred Outcome Measurement technology for patient surveys.*
Technological factors	
Proposition 6: Organizational structures that integrate social with technical aspects are associated with higher open government performance.	**SPI10: The structure of the program involves the use of open source technologies**. *In the police transparency program, open source platforms such as Wikimedia Commons and GitHub were relied upon strongly for co-creation of digital solutions.* **SPI11: Technology platforms are openly shared and understood by both governmental and non-governmental actors.** Technology platforms in both country case studies had strong social integration. In the US case, open data technologies were based on sharing of technology between the private, civil society, and public sectors. In the UK, significant efforts needed to be made in a sensitive area of healthcare and patient health records to reassure patients .

	SPI12: Community feedback is sought on whether technologies are meeting community needs. *In the US case, police departments adopting open data portals were trained by The White House and the Community Oriented Policing Services on how to gain community feedback about information provision.*
Proposition 7: Collaborative organizational structures in technology development and use are associated with higher open government performance.	SPI13: Technologies are used to facilitate inter-organizational collaborations. *In both country case examples, there were a wide range of technologies designed to facilitate inter-organizational collaboration. In the US GitHub is open source and the code is available for any organizations to collaborate with. The Police Open Data Portal where data from multiple police departments is collected and analyzed is also a technological tool for collaboration. To a lesser extent, in the UK there were also open data tools used in the program such as those provided by MastadonC.*
Environmental factors	
Proposition 8: Organizational structures that have high level reform leadership are associated with higher open government performance.	SPI14: The program structure is supported by a strong central political power, ideally the executive body of government. *In both the US and the UK the programs were underpinned by enthusiastic open government reforms by Barack Obama and David Cameron respectively.*
Proposition 9: An environment of public demand for web 2.0 technologies is associated with higher open government performance.	SPI15: There is clear demand from the broader public for the kinds of products offered by the program. *The US program for police transparency was driven by a political and media context of citizens demanding to know more about the internal activities of police departments. Civic technology tools such as video and social media were at the center of this. The UK program for*

	citizen-centered health services was similarly driven by an environment of public demand for more efficient and caring health care services.

The technological factors also have two propositions and four SPIs. The propositions concern socio-technical structures (proposition 6) and collaborative structures (proposition 7). One way that socio-technical structures are apparent in the country case studies is through the use of open source technologies such as GitHub or Wikimedia Commons. These platforms bridge the social and the technical aspects of technologies by making the content and the creation of content open for anyone to use. The next indicator (SPI11) is also about the openness of the government to sharing technology, but, rather than open source technologies per se, this indicator relates to the openness of sharing the technologies themselves and making efforts to explain how they are relevant to citizens. In the UK case, the participation of non-governmental organizations in health care information sharing and analysis meant that the government had a vital role to play in helping citizens to understand how technology influenced their lives. A final indicator in the technological factor (SPI13) concerns the use of collaborative types of technologies. These, such as GitHub or MastadonC's software involved not just collaborating on technology solutions, but using technologies that facilitated the collaboration itself.

The environmental factor had two propositions and two SPIs. The propositions concerned the supportive environment of reform leadership (proposition 8) and the influence of public demand for web 2.0 solutions to policy

problems (proposition 9). The reform support in both country cases came from

central governmental executives that were strongly in favor of open government

reforms across the whole range of government policy areas and service types

(SPI14). The last indicator (SPI15) concerns the role of public demand. Both the

US and the UK programs evidenced a strong role played by the public in pushing

for the adoption of such programs that increased the openness of government in

critical areas of service delivery, policing and healthcare.

6.2. Key performance indicators: process factors

Tables 6.2, 6.3, and 6.4 show the performance indicators for the organizational

processes. All of the open government organizational processes from the

inventory are listed in the left side column of the table. The performance

indicators are listed in the right side column of the table. Not every organizational

processes is matched by a performance indicator. Only the organizational

processes that were identified as important in the best practice case studies are

assigned a performance indicator. Most of the sub-themes have been assigned at

least one performance indicator. However, in three cases (the *governance* and

public comments process in the consultation theme, and *milestones* in the strategy

theme) there was not sufficient data found in the case studies to establish a

performance indicator.

Table 6.2 deals with the performance indicators for the theme of

consultation. There are 14 indicators in total. The stakeholders sub-theme has

three performance indicators that indicate the importance of having multiple kinds

of stakeholders in the consultation but also a strong representation from civil

society in particular. International stakeholders can be important too, but only for

adding specific value to the group knowledge and expertise. The sub-theme with

the most indicators is the quality sub-theme, which is explained by the importance

given in the original content analysis of IRM progress reports to the varying

shades of collaboration, coordination, or limited engagement involved in the

consultation. The indicator is supported by the finding from the US and UK case

studies that two-way qualities of consultation were important for program

success. Qualities of closeness and regularity found in the case studies are also the

basis for performance indicators for those two qualities. However, other indicators

address the concern from interview respondents in both case studies that

unengaged, one-way consultations could be an impediment to the program

success. Furthermore, the finding from the case studies regarding the narrowness

of the consultation also called for a more nuanced indicator about the need for

narrowness in cases where specific timeframes and expertise are important.

Table 6.2. Performance indicators for consultation processes of organizational design

Consultation	
1. Stakeholders	
1.1. Consultation with CSO stakeholders 1.2. Consultation with Government stakeholders 1.3. Consultation with Business stakeholders	**PPI1: There is a wide range of stakeholders from diverse sectors.** *All of the stakeholders sectors were present in the UK and US cases and wide stakeholder representation was viewed by respondents to be important.* **PPI2: The representation of civil society is strong.**

1.4. Consultation with Academic stakeholders 1.5. Consultation with International stakeholders 1.6. Consultation with the public as stakeholders	*The representation of civil society in the case studies was the strongest among the stakeholder sectors. CSOs were viewed as having an expert voice that represented the interests of the public.* **PPI3: Participation from international stakeholders may be present to improve expert representation.** *In each of the US and UK cases the role of one international participant provided specialist expertise.*
2. Quality	
2.1. Consultation with a narrow quality 2.2. Consultation with an inclusive quality 2.3. Consultation with an unengaged quality 2.4. Consultation with a dedicated quality 2.5. Consultation with an open quality 2.6. Consultation with a two-way quality 2.7. Consultation with a one-way quality 2.8. Consultation with a close quality 2.9. Consultation with a regular quality 2.10. Consultation with a partnership quality 2.11. Consultation with a co-production quality	**PPI4: The quality of the consultation evidences coordinated and collaborative decision-making. These include qualities such as two-way decision-making, partnership, and co-production.** *In the US and UK cases, positive qualities such as two-way, openness, and co-production were observed frequently while negative qualities such as one-way, and narrowness where not observed frequently.* **PPI5: How narrow or wide the range of stakeholders is rests upon decisions concerning the objectives of the program.** *The US and UK cases showed that narrowness is not always a negative feature of processes. The range of stakeholders was relatively narrowly focused on CSOs and government. However, interview respondents said that there was a strong base of expertise and knowledge among the stakeholders and that concerns about risks and trust were being overcome.* **PPI6: The consultation process exhibits dedication from the members.** *Interview respondents in both countries did report dedication on the part of members including the government*

	participants. The interview respondents praised The White House Office of Science and Technology Policy in the US case, and the Cabinet Office team in the UK case. **PPI7: The quality of closeness is emphasized in consultation communication.** *Interview respondents in both countries did observe closeness in the quality of the consultation communication. The respondents said that lead organizations of the programs were eager to have stakeholders involved in the decision-making.* **PPI8: The quality of regular meeting is emphasized by the consultation communication.** *Interview respondents did observe regularity in meetings in the quality of the consultation communication. In the US and the UK respondents said that regular and timely meetings helped to ensure that stakeholder input was of high quality.* **PPI9: Review is taken of bad practices of consultation such as having an exclusive range of stakeholders and unengaged stakeholders.** *Interview respondents in both country said that unengaged and one-way decision-making processes could be problematic.*
3. Location	
3.1. Consultation taking place in an online location 3.2. Consultation taking place in an offline location 3.3. Consultation taking place in a centralized location 3.4. Consultation taking place in a decentralized location	**PPI10: There is a balance of offline and online meeting locations for consultation.** *There were both offline and online meeting of the consultation participants but most meetings reported took place offline.*

4. Modes of communication	
4.1. Consultation mode of communication using meetings 4.2. Consultation mode of communication using email 4.3. Consultation mode of communication using blogs 4.4. Consultation mode of communication using social media 4.5. Consultation mode of communication using surveys 4.6. Consultation mode of communication using telephone	**PPI11: Meetings are the main way that most of the consultation communication is achieved.** *Interview respondents said that the communication of consultation process relied on in-person meetings. The US respondents said that quarterly meetings of the open government working group helped to bring together diverse groups with competing interests.* **PPI12: Diverse types of web 2.0 communication are used.** *Blogs, social media, webinars, and discussion forums were used in both countries. However, the role of these forms of communication on consultation was unclear. It seems consultation largely relied on in-person meetings.*
5. Governance	
5.1. Consultation using a shared form of governance 5.2. Consultation using a unilateral form of governance	**[No clear data to establish a PI]** *There was not enough information from the interviews to address this PI. Shared governance of the consultation process was referenced by respondents just once and unilateral governance not at all.*
6. Prior networks	
6.1. Consultation that is continuous with stakeholders from prior networks 6.2. Consultation that is not continuous with stakeholders from prior networks	**PPI13: The program draws from a strong existing network of stakeholders** *Both the US and UK cases showed a familiar range of stakeholders in the civil society organizations. The US police transparency program was built around a task force that had been created by Barack Obama. Interview respondents in the US case study viewed this network as a critical part of the program.*

	PPI14: The program brings in new members to the network to meet expertise gaps *While the network of stakeholders is based on a prior network, the US and UK cases showed that new members are brought in to address expertise gaps. In the UK, many of the stakeholders were from the open data advocacy community and there was a shortage of knowledge about health care issues. Medical groups such as Macmillan were introduced.*
7. Public comments process	
7.1. Consultation uses transparency of comments in the public comments process 7.2. Consultation uses awareness-raising in the public comments process 7.3. Consultation uses accessibility in the public comments process 7.4. Consultation uses transparency of comments in the public comments process	**[No clear data to establish a PI]** *There was not enough information from the interviews to address this PI. Interview respondents did not address the public comments process.*

The locations and modes of communication sub-themes both include indicators emphasizing the importance of offline, in-person meetings that were supported by the views of the interview respondents. Finally, the consultation results from the case study interviews also evidenced a trade-off or balance in the elements of the sub-theme of prior networks. It was clear from the case studies of both the US and the UK that prior networks were the basis for the stakeholder network of the open government programs. However, the stakeholders were not

only from these networks. Other stakeholders were introduced in order to address the specific expertise gaps that were required for the program.

Table 6.3 shows the performance indicators for the governance processes. There are five performance indicators in total for this theme. Each of the sub-themes has one performance indicator except for *level of oversight and control*, which has two. The first level of oversight and control indicator is another indicator about trade-offs and balance, in this case regarding centralization and decentralization. As both the case studies showed elements of centralized governance and decentralized governance it was decided to use an indicator that captured both sides of the spectrum. Notably, however, the sub-theme also has an indicator showing that the open government program needs strong leadership from the center of the hierarchy. In the head organization sub-theme, the indicator conveys the finding from the case studies that head organizations both directed and supported the program. The specificity of responsibility sub-theme is supported by the finding from the case studies that both the US and the UK open government programs had responsibility for the program spread widely across organizations. Finally, the funding arrangement sub-theme did not show a clear finding about the relative importance of central or agency sources of funding, but, as it is clear from the cases that both types were used, the indicator retains both categories.

Table 6.3. Performance indicators for governance processes of organizational design

Governance
8. Level of oversight and control

8.1. Governance with a centralized level of oversight and control 8.2. Governance with a decentralized level of oversight and control 8.3. Governance with a hierarchical level of oversight and control 8.4. Governance with a broad (non-hierarchical) level of oversight and control	**PPI15: There is a balance of centralized and decentralized governance.** *In the US, there was a centralized system of oversight and control by The White House. However, much of the responsibility for implementing the program was with the Justice Department and individual police departments across the country. In the UK, there was a centralized policymaking process led by NHS England. However, many other government bodies had oversight for the program such as the Cabinet Office and NHS Digital.* **PPI16: Strong leadership for the program comes from the center of the hierarchy.** *In the US, the White House provided strong hierarchical leadership. In the UK, NHS England provided the leadership. However, the final authority for decisions lay with the Cabinet Office. Therefore, it was difficult for NHS England to make unilateral decisions.*
9. Head organization	
9.1. Governance with the prime minister or president's office as the head organization. 9.2. Governance where the head organization has a directing role. 9.3. Governance with the foreign ministry as the head organization. 9.4. Governance where the head organization has a supporting role.	**PPI17: The head organization of the program has a supporting and directing role.** *The role of The White House evidenced both a supporting and directing character, and the role of NHS England also evidenced both a supporting and directing character.*
10. Specificity of responsibility	
10.1. Governance where specificity of responsibility involves shared responsibility by	**PPI18: Responsibility is shared by different government agencies** *In the US, the Justice Department hosted areas of the program and distributed*

10.2. policy area 10.3. Governance where specificity of responsibility involves one entity by policy area 10.4. Governance where specificity of responsibility involves a central entity responsible for all programs	*responsibility to specific police departments and supporting civil society organizations. In the UK, responsibility was spread widely among government organizations including NHS Digital, NHS Choices, and the Department of Health.*
11. Funding arrangement	
11.1. Governance involving funding from a central source 11.2. Governance involving funding from an agency's own source	**PPI19: Participating agencies may produce their own funds or receive funding from a central source** *In the US, police departments were not funded by the program and relied upon their own funds to implement open data initiatives. On the other hand, in the UK, all the funds for the program came centrally through NHS England.*

Table 6.3 shows the performance indicators for the strategy processes. There are seven performance indicators in total within this theme. The sub-theme with the most indicators is the goal-setting sub-theme, which has three. In the goal-setting sub-theme, each of the processes from the inventory has its own performance indicator as each was supported by findings from the case studies. Overall, interview respondents from the two programs said that programs are helped by having ambition and potential impact, specificity and measurability, and relevance to open government values. There was a nuanced finding for the policy area sub-theme that was supported by the observation in the case studies that programs could either be effectively designed by focusing on a limited number of areas or by addressing a diversity of different areas at once. The skills

and specialization sub-theme has a performance indicator conveying that skills and specialization should be present and carefully chosen to meet the goals of the program as they often were in the cases of the US and UK. Finally, the policy tools sub-theme has two performance indicators for each of the two policy tools that were evidenced in the US and UK case studies. The case studies both showed clear evidence that the programs used forms of legislative change to support the goals of the program, and that they were enthusiastic in their adoption of new kinds of technology.

Table 6.4. Key performance indicators for strategy processes of organizational design

Strategy	
12. Goal-setting	
12.1. Strategy involving goal-setting with ambition and impact 12.2. Strategy involving goal-setting specificity and measurability 12.3. Strategy involving goal-setting relevance to OGP values	**PPI20: The program has high ambition and potential impact.** *The interview respondents in both countries frequently praised the ambition of the program and its potential to positively impact society.* **PPI21: The program has highly specific and measurable goals.** *The interview respondents said that defining and measuring goals was important. In the case of the UK, the health service program was criticized by respondents for a lack of specificity that was seen to have a potentially negative impact on its delivery.* **PPI22: The program is strongly relevant to open government values.** *In the US, the program aimed to improve police accountability using technology and information and therefore is strongly relevant to open government values. In the UK, the program aimed to improve transparency and public participation in health service provision.*

13. Milestones	
13.1. Strategy involving milestones with specificity and measurability	**[No clear data to establish a CI]** *There was not enough information from the interviews to address this CI. Interview respondents did not address the specificity of milestones.*
14. Policy area	
14.1. Strategy involving policy area with focused policy areas 14.2. Strategy involving policy area with clustered policy areas 14.3. Strategy involving policy area with diverse policy areas	**PPI23: Programs are designed to be focused or diverse depending on the goals of the program.** *In the US, the focus of the program was specifically focused on delivering open data and best practices. However, it also had the goal of improving relationships with the community. According to interview respondents, both goals were served by the program. In the UK, the focus of the program was on one key goal of delivering a specific online platform for transparency and public participation in health service provision.*
15. Skill and specialization	
15.1. Strategy involving specialist teams	**PPI24: The program selects the requisite level of skill and specialization.** *The US program had participation from specialists in The White House Office of Science and Technology Policy. It also was helped by several technology organizations such as Code for America. The program in the UK had participation from specialists in from NHS Digital. However, interview respondents also noted that there was low specialism on legal and civil liberties aspects of public information access.*
16. Policy tools	
16.1. Strategy involving the policy tool of legislative change	**PPI25: The program engages in legislative policymaking processes.**

16.2. Strategy involving the policy tool of new technologies	*In the US, while the program did not engage strongly in legislative policymaking processes at a national level, some police chiefs did report engagement at a state level and encouraged this approach.*
16.3. Strategy involving a breadth of policy tools	
16.4. Strategy involving the policy tool of advocacy	**PPI26: The program adopts new technologies.** *In the US, the program was very strong in its adoption and sharing of technologies as well as encouraging participants and citizens to co-produce technology solutions. In the UK, the program aimed to use a new website. However, its adoption of new technologies did not go beyond the website.*

6.3. The analytical framework of open government processes

Earlier in Chapter 2 a conceptual model of the structural factors of open government performance was developed with four structural factors, managerial, technological, institutional, and environmental. In Chapter 3 a thematic typology of the organizational processes involved in open government program using content analysis was then constructed. This typology is centered around the core three themes: consultation, governance, and strategy. Furthermore, in that chapter, the thematic typology was used to set out empirical statements about the processes, which were listed in an inventory of open government organizational processes. In Chapters 4 and 5, case study material of organizational design from two examples of best practice open government countries were described and analyzed. In the current chapter, the results of the case study analysis are compared with the structural propositions and the inventory of open government

organizational processes, and KPIs are generated. These KPIs tell us in detail

what the features are of organizational design are that are associated with higher

performing open government programs. The KPIs can therefore be integrated

with the analytical framework and be used as a tool to evaluate open government

performance.

All the above-mentioned elements can now be put forward in the next step

of the analytical framework for open government design and performance, shown

in Figure 6.1. The framework includes the two levels of organizational structure

and organizational processes. The organizational processes only show the three

main processes because, for the sake of the simplicity and elegance of the

diagram, the sub-themes and categories are not shown. However, the sub-themes

are implied within the strategy, consultation, and governance themes. The four

structural factors of open government performance are in the outer ring of the

diagram: management, technological, institutional, and environmental factors.

The structural design factors support and structure the three processes involved in

open government: governance, consultation, and strategy.
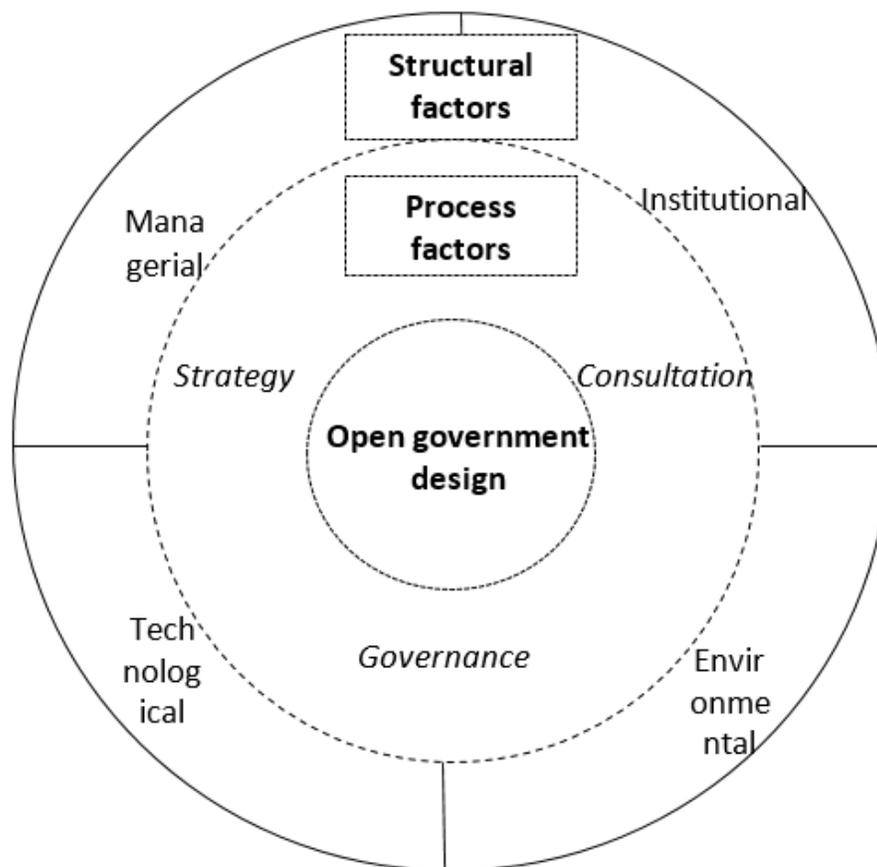
Figure 6.1. The analytical framework for open government design and performance showing structural factors and process factors

On the one hand this analytical framework is a descriptive model of how open government organizational design is constituted by four structural factors and three organizational processes. On the other hand, it is also a framework that can be used to evaluate open government processes using the SPIs and PPIs. In the context of any open government program, any one of the four structural factors or three process themes could be assessed by selecting a factor or sub-theme within the theme and then assessing the processes or structure using the KPIs. For example, the selection of policy tools (a sub-theme) of the open government program strategy theme could be evaluated by addressing the two

KPIs for that sub-theme from Table 6.3: (1) The program engages in legislative policymaking processes (PPI25) and (2) The program adopts new technologies (PPI26). Evaluation of the program would therefore proceed by adopting benchmarking techniques to investigate the extent to which the program engages in legislative policymaking processes and the extent to which it adopts new technologies.

6.4. Discussion and conclusions

This chapter made further steps towards integrating the analysis of the dissertation into an analytical framework of open government design and performance. The main elements brought together in this chapter to construct the latest version of the framework were the four structural factors, the three organizational processes, and the KPIs (SPIs and PPIs) of open government design.

The structural factors were integrated with the processes factors in the analytical framework to show how structural factors provide the context for the processes. Policymakers and program designers of open government can address the role of structural factors and process factors in open government performance by asking assessing their own program designs with the KPIs of open government organizational design in order to understand how the organizational structures and processes themselves can be controlled to improve program performance. Using the findings in the case studies, the KPIs of open government structures were generated from the nine propositions of the association between structure and performance from Chapter 2. The KPIs of open government processes were

generated by assessing the inventory of open government processes from Chapter 3. Fifteen SPIs were generated, and twenty-six PPIs were generated; fourteen in the consultation theme, five in the governance theme, seven in the strategy theme. These KPIs can be used with the analytical framework to evaluate the open government performance.

The final step in the development of the analytical processes is taken in the next chapter, which is the final chapter before the overall results discussion and conclusions of the research. This final step involves the macro-level factors of open government design. It addresses the secondary and final question of this research (question 2) which is, 'Do macro-level country factors shape organizational design capacity in open government?'

~ Chapter 7 ~

Open government and good governance

7.1. The role of open government within good governance systems - 7.2.
Theoretical framework and hypotheses – 7.3. Empirical model and regression
analysis – 7.4. Discussion and conclusions.

7.1. The role of open government within good governance systems

The research will now turn to addressing research question 2 of the dissertation:
Do macro-level country factors shape organizational design capacity in open
government? In addressing this question, the research moves beyond the character
of the specific kinds of organizational design associated with higher performing
open governments to investigate where, in the broader environment of
government, the capacity for effective organizational design comes from.
Governance reforms, effective or ineffective, are made possible by a macro-
environment of economic factors such as how wealthy or debt-ridden a country is
or whether a strong level of corruption exists. Political macro-structures are also
important for governance reform as the institutions for policy deliberation and
decision-making influence what kinds of structures and processes will be adopted,
or the broader legal and normative environment created by laws, the role of the
media, or civil society create an existing mold of political and administrative
structures and processes. These independent variables were selected using an
additional review of the public administration and political science literature on

the macro-level economic and political factors that are associated with administrative reforms, especially in the field of open government studies where examples of transparency reform and access to information and public participation policy reform pertain. These areas of reform have been found to have positive associations with organization processes such as transparency and good governance.

The topic of the macro-level antecedents of transparency success is a well-researched topic. Scholars have viewed the topic through the lens of several different kinds of transparency. Some scholars such as Rios, Bastida, and Bastida (2016) have looked at fiscal transparency of governments, operationalized by the quality of information that governments provide in their annual budget sheets. Rios, Bastida, and Bastida found many macro-level factors are associated with such kinds of transparency including having a strong financial condition, a competitive legislative system, and a legal system with constitutionally-based budgetary requirements. Another study by Araujo and Tejedo-Romero (2016) looked at the macro-level predictors of transparency at the municipal level and found that important political conditions needed to be in place for high transparency to occur. These political conditions were political competition, political ideology involving left-leaning party dominance, and having a large electoral turnout. Janssen, Charalabidis, and Zuiderwijdk (2012) studied open data and used a literature review and focus group with public officials to uncover the barriers to adoption of open data systems in government. They found that several macro-level structures were involved such as legal systems and technical

infrastructure. Similarly, work by Zheng, Schachter, and Holzer (2014) has addressed the levels of public participation of government websites and developed an explanatory model based on the city council and executive arrangements of the city. Cities with more participative websites tend to have elected mayors rather than appointed city managers, and the explanation for this difference seems to be that elected officials are more responsive to public demand for greater participation.

These earlier studies focus on specific elements of open government such as open data, or narrower policy examples of openness such as fiscal transparency. To date, there is no empirical research addressing the macro-level predictors of open government as a unified construct in the way that it is being addressed in this research. Part of the reason for this gap in evidence about open government is that, as previously argued in this dissertation, open government is a difficult concept to define; its meaning is contested by different kinds of political actors, and the platform of policies that go by the name of open government is actually a very broad and diverse set of different kinds of programs, technologies, and policies. To address the problem of open government in a concrete way, this dissertation has focused on building conceptual clarity and definition around the idea of open government design structures and processes specifically.

The rationale for addressing the macro-level factors of effective open government design is threefold. Firstly, as described, there is a gap in previous research on macro-level antecedents in open government because they have not addressed open government as a single construct rather than a specific technology

example or policy area. Secondly, addressing the macro-level factors of effective open government design operationalizes a concept of open government that is both unified and concrete rather than disparate and abstract. Thirdly, by operationalizing open government design effectiveness as the dependent variable, the analysis of this chapter builds logically upon the core parts of the central research question addressing the first two research questions on organizational processes and structures, and their relationship to open government performance.

The aforementioned studies may provide scholars of open government with parallels to develop a theory of the macro-level antecedents of effective open government design. In order to develop a theoretical framework and hypotheses for the relationships between macro-level country factors and effective open government design, the research in this chapter draws upon theory and empirical results from research on the effectiveness of organizational processes. It specifically draws upon an area of work concerning the antecedents of good governance and effective organizational reform. Good governance and organizational reform are two areas of research that have accumulated an extensive body of literature. As open government has been widely linked with the concept of good governance (Bevir, 2006; Harrison et al., 2011; Lee and Kwak, 2012) and is a major area of new governance reform, these are important areas of scholarly knowledge to draw from.

7.2. Theoretical framework and hypotheses

Political competition

The first variable, *political competition* is an important mechanism in policy reform, especially in areas of policy convergence when a clear policy option is part of the political agenda, and when the policy can be used to shape information to be a political weapon (Murillo and Martinez-Gallardo, 2007). This has been widely found in the political science literature for transparency policy (e.g., Alt, Lassen, and Rose, 2006; Berliner, 2014; Berliner and Erlich, 2015). Scholars have hypothesized two different logics to explain the effect of political competition on governance reform. One logic posits that high political competition encourages incumbent political parties to adhere to the existing governance regime, which is the one that has worked to their advantage. The other logic posits that a highly competitive system means that there is more of a cost for the incumbent political party to ignore a popular reform proposal if the reform is likely to affect their competitors at least as badly as it affects themselves and if failure to bow to pressure to reform has significant reputational costs. The latter logic has stronger support in areas of reform having to do with open government such as open government. Reporting on the results of a study of access to information reform, Berliner and Erlich (2015, 126) say that "'horizontal' political contention among competing factions can generate new avenues of 'vertical' accountability by which political principals can hold their agents to account." Therefore, I also hypothesize that:

H1: Countries with higher political competition in their legislative assemblies have more effective open government design.

Some studies also have found that the positive correlation of political competition and good governance processes is contingent on having strong civil society because civil society exerts the positive monitoring, sanctioning, and information mediating role in the political arena that ensures that politicians expect to be held accountable by the electorate (Dowley, 2006). According to Goldfinch and Derouen (2014) the development of good governance processes can take a long time in developing countries but a crucial ingredient of the process is whether the government learns how to become open and receptive to engagement with civil society.

One of the challenges of open government is that informational transparency is not automatically coextensive with accountability. As a professionalized community of information and a political advocacy community, civil society, through demanding accountability and turning information into useful formats, helps to close the gap between transparency and accountability (Van Zyl, 2014). As open government is also a governance reform area that depends on informational transparency and accountability, these findings should also hold in the case of the present research.

H2: Countries with a stronger civil society have more effective open government design.

Democracy and open government are often attributed with overlapping qualities of good governance such as participation, accountability, and transparency. The assumption behind the identification of democracy and open government is that the structures and processes already found in a democracy are conducive to open government reforms. For example, electoral control is a similar kind of citizen accountability to budgetary transparency. Evidence suggests that this assumption may be justified. Democracy, in terms of having a strong citizen and third party influence on political decision-making accountability, is associated with greater online budget transparency (Bolívar, Perez, and López-Hernández, 2015), and participative forms of local administration are found mainly in municipalities that have a certain administrative culture founded in ideas and practices relating to democracy (Royo, Yetano, and Acerete, 2013). Other research also shows that the positive influence of macro-level political factors on government transparency level such as intensive involvement of civil society depends on democratic accountability. Without democracy, civil society becomes part of a process that may bolster autocratic government or business interests (Tan, 2014). Finally, research also connects democratic processes and good governance through the processes of governance reform: Lindquist and Eichbaum (2016, 564) argue that "civility and commitment to democracy," may be a universal ingredient to smooth transitions in reform processes.

H3: Countries with higher level of democracy in terms of accountability and democratic voice have more effective open government design.

Good governance depends on not just the institutional aspects of macro-level political and economic factors, but also on financial status and characteristics of government. Processes involved in governance involving highly technical use of informational resources can be expensive due to the advanced kinds of ICT that are involved (Acar and Robertson, 2004; Weitzman, Silver, and Brazill, 2006). Therefore, there is a positive association between the amount of economic resources of a country and the level of transparency in its institutions (Grigorescu, 2003; Grimmelikhuijsen and Welch, 2012; Renzio and Angemi, 2012; Ríos, Bastida, and Benito, 2016). The relationship between resources and transparency does not hold in all cases, because in some governments with monolithic economies focused on one or two high-yield industries, wealth can become concentrated in a powerful political class that can choose not to adopt transparency reforms (Esteller-Moré and Otero, 2012). However, resources, when they are coupled with an accountable governance system, may at least give political leaders the option to adopt open government reforms such as freedom of information or freedom of the press because such reforms are a kind of political bargain that opens the discussion of how public goods will be distributed (De Mesquita and Smith, 2010).

H4: Countries with higher GDP per capita have more effective open government design.

An extensive body of research on good governance also finds that macro-political and -economic conditions of stability are important antecedents (e.g. Alesina and Perotti, 1993; Lipset, 1959; Maoz and Russett, 1992; Przeworski, 2000). Changes in governance reform take a long time and require complex social and behavioral input relating to political organizations and institutions (Lipset, 1959). Within this complex environment, changes in political leadership can frustrate and divert the goals of policy communities (Howlett, 2014). According to Weaver (2010) governance reforms are not necessarily path-dependent and rely on policy feedback mechanisms, so changes in government administration that replace the leadership of the open government reforms are likely to create negative feedback. This negative feedback may involve complete cessation of the reform process, and even if the process is not officially terminated, it will at least be delayed or interrupted.

H5: Countries that do not undergo a change of administration during implementation have more effective open government design.

Good governance processes are predicated on the idea that access to public information is easy and that confidential information is restricted only to reasonable degrees specified by legal necessity (Mendel, 2008). Several areas of good governance rely on good access to information systems. For one, transparent processes in access to information policies are more effective to the extent that they allow easy and equal access (Berliner, 2016). But further to ease of access,

effective access to information policies depends on institutional mechanisms that allow citizens to use and act upon information (Escaleras, Lin, and Register, 2010), and media freedom that helps journalists act as information intermediaries in the process of transparency (Relly, 2012). Given these important relationships between the quality of the access to information infrastructure, I hypothesize that:

H6: Countries with stronger open information access environments have more effective open government design.

7.3 Empirical model and regression analysis

In order to test the hypotheses of the theoretical framework, a random-effects Poisson regression model was adopted. Poisson regression estimates were used because the estimates provide the best fit for models with a dependent variable that is a count variable and has a distribution that is positively skewed. Random effects controls for time dependent variables that vary country to country so that conclusions can be drawn from the sample to the population of countries at large. A Hausman test confirmed that a random effects model is indeed the best estimator for the data. The dependent variable here is a score out of 5 for the effectiveness of a country's open government design processes where countries can score on any of five different measures. The model uses a set of country-level variables in order to understand organizational design differences at the country level. This data is therefore different from the first regression model in this

dissertation which used IRM data at the program level. These IRM variables are used by the OGP to create a comprehensive index of the effectiveness of a country's open government organizational design. There are five processes. While these five processes do not include many of the effective organizational design practices identified in the case studies in this dissertation, they do show similarity. For example, one of the measures is about whether a country uses in-person meetings for consultation. Another of the measures is about whether the country uses awareness-raising activities around its initiative. Both of these measures were found in the thematic typology of open government organizational processes presented in Chapter 3.

The Poisson regression model is run on data for 50 countries between 2012 and 2015. Not all the countries launched a NAP in each of those years, so some of the years are incomplete, and the number of observations is small, ranging between 84 and 115. While the earlier program level regression in Chapter 2 used the IRM database on the performance evaluation of individual programs, this next regression uses the IRM database for country open government organizational design effectiveness. The five process variables are also shown in Table 7.1 along with details of the operationalization of the independent variables using other sources of secondary data. Table 7.2 shows the frequency distribution and measurement detail for the variable of political continuity. Table 7.2 also shows the frequency distribution for the regional dummy variables, which are included to control for regional differences among the countries, and the year dummy to control for time effects.

Table 7.1. Descriptive statistics (ordinal and continuous variables)

Variable	Measure	N	Mean	Std. Dev.	Min	Max
DV: Organizational design capacity	Composite measure using six indicators of organizational design from the OGP country processes database: Did the country: 1. Provide a public timeline of the process prior to the start? (yes = 1) 2. Produce awareness-raising activities around the consultation process? (yes = 1) 3. Have an invitation-only or open participation consultation? (yes = 1)	115	2.42	1.99	0	6

	4. Publish an annual progress report? (yes = 1)					
	5. Provide in-person consultations with stakeholders? (yes = 1)					
	6. Provide online consultations with stakeholders? (yes = 1)					
IV1: Information openness	Degree of adoption of an access to information law according to the right2know. org survey organized by the Open Society Institute Justice Initiative and Access Info Europe. (1 = no law; 2 = law in draft phase; 3 = law passed in legislature;	115	3.83	0.50	1	4

	4 = access to information is a constitution al right).				
IV2: Democratic level	Continuous measureme nt out of a maximum score of 100 for the strength of political accountabili ty and voice according the World Bank Political Developme nt Indicators. The measure includes the strength of political elections, free speech rights, and media freedom.	115	62.56	20.73	10.51	98.1 3
IV3: Civil society strength	Ordinal scale measuring the strength of civil society according to the	107	6.59	2.05	1	10

	Bertelsman n Transformat ion Index (10=strong)					
IV4: Political competition	Ordinal scale showing level of opposition in the legislature resulting from size of incumbent political party majority (percent of seats won) in last election according to the World Bank Political Indicators Survey (7 = high competition)	115	6.93	0.26	6	7
IV5: GDP per capita (log)	The natural log of GDP per capita measured by the World Bank.	115	9.15	1.19	6.03	11.5 4
	The year that the country	115			2012	2014

Control variable: Year	produced its first NAP.			

Table 7.2. Frequency distribution table (binary variables).

Variable	Measure	N	1	0
IV6: Political continuity	Dummy variable indicating whether there was a change of administration during the design or implementation process. Binary (1 = no change of president or prime minister)	84	40 (48%)	44 (52%)

IV7-14: Regional dummy variables

Africa	11 (10%)
Central Asia	12 (11%)
East Asia	7 (7%)
Europe	47 (41%)
Middle East	5 (4%)
Oceania	1 (1%)
North America	4 (1%)
South and Central America	29 (25%)

IV15-17: Year dummy variables

	44
2012	(88%)
2013	6 (12%)

The results of the regression analysis are shown in Table 7.3. They show only one statistically significant association (democratic level). All of the other variables – a country's level of information openness, the strength of its civil society, political competition, political continuity, and GDP per capita – appear to have no relationship with the effectiveness of open government organizational design.

Table 7.3. Regression estimates for process performance

	Coefficient	Stan. Err.
Information openness	0.107	0.129
Democratic level	*0.012	0.006
Civil society strength	0.005	0.041
Political competition	-0.312	0.232
Political continuity	0.069	0.164
GDP per capita	-0.157	0.097
Regions‡		
Africa	-0.112	0.180
Central Asia	-0.075	0.189
East Asia	-0.606	1.254
Europe	0.588	0.249
North America	0.250	0.239
Oceania	-3.227	1.655
South America	-0.612	0.370
Year[j]	0.487	0.098
Constant	94.301	197.517
N	**79**	

Wald Chi-sq	*****43.61**
Pseudo R-sq	0.05

Note: (* p<.01, ** p<.05, *** p<.001)
‡ *The Middle East region is the referent group.*

ǰ *The year 2012 is the referent group*

Why would these variables that have been associated with other areas of good

governance reform show no significant relationship in the case of open

government design effectiveness? It is possible that the results are influenced by

the low sample size. It is also possible that, as these observations are for a small

number of years, the organizational design processes of the OGP countries are

still going through an innovation phase where processes are tied more to

administrative culture of the implementing departments or from the innovating

behavior of specific public officials as Royo, Yetano, and Acerete (2013) found in

their study of organizational reform at the local level. Organizational reforms

involving ICT innovations involve a substantial degree of discontinuity with

previous, traditional modes of organization (Meijer and Torenvlied, 2016) and

many countries are enthusiastically innovating with uses of ICTs and the Internet

without necessarily considering the ways that the effect of these innovations is

dependent on underlying institutional factors (Baillard, 2014). It may take several

more years before organizational design processes to undergo a process of

institutionalization and begin to respond to these macro-level factors in clearer

ways.

7.4. Discussion and conclusions

Despite one positive result for the association of a country's democratic level with the effectiveness of open government organizational design effectiveness, the results of the regression analysis reveal largely null results concerning the expected kinds of relationships expected between macro-level economic and political factors and the strength of open government design. Only one of the estimates, for the variable of democratic level, had a significant p-value. There are methodological limitations to the model that partially undermine the statistical validity of the inferences. The major limitation, already discussed, is that the sample size is at the low end of the range that is normally considered suitable for multivariate regression analysis. However, taking a typical estimation margin of error of 0.05, sample sizes as low as 70 are acceptable for low population sizes such as this one of around $N = 100$ (Barlett, Kotrlik, and Higgins, 2001). A related limitation of the methodology is that the data covers only four years. Governance reforms involve a long process of development and maturation (Lipset, 1959). Therefore, it may not be surprising that the organizational design processes in the OGP do not evidence the kinds of linkages with macro-level political and economic factors that would be expected from an established area of governance reform.

Despite the null results of the regression estimates, the results do present an interesting insight into the diffusion of the specific organizational design associated with the OGP. The results show that these processes may be being driven by macro-level forces that are different from the traditional forces associated with governance reforms. The results of the regression here only show

that the expected areas of macro-political and –economic structures do not hold in

for many of the macro-level variables. Other research is needed to explore

possible other drivers of effective open government design. Earlier research has

pointed to the role of international networks in fostering policy reform, and,

given, the OGP's dependence on an alliance of countries and a strong network of

support from funding international civil society organizations (Metcalfe, 1994).

Another avenue of research to investigate would be internal organizational factors

such as transformative leadership, which have been shown to be important in

sharpening mission focus and driving organizational motivation (Wright,

Moynihan, and Pandey, 2012), and yet which bear less direct linkages with

macro-level political and economic processes.

Another important internal organizational factor that may accelerate the

effectiveness of open government design is technological innovation. The

research in this dissertation has corroborated earlier research showing that new

forms of ICT such as social media, APIs, and open data play a role in open

government design processes (Lee and Kwak, 2012; Robinson et al., 2012).

Therefore, public organizations that are strong innovators with these forms of

technology can, to the extent that these structures and processes depend on

technologies, accelerate the level of their organizational processes. Such gains –

which often rely on basic technical knowledge, a minimum level of resources, and

a willingness to try a new method or tool – do not rely upon macro-level political

and economic factors that were traditionally associated with governance reforms.

Prior work on innovation in public organizations has found that innovation

involves learning through networks (Hartley, 2005), that it is associated with

certain attitudes and traits in managers (Damanpour and Schneider, 2009), and

that it depends on several different attributes of the structure of organizations

including hierarchies, funding arrangements, and level of politicization (Bekkers

and Homburg, 2005).

~ Conclusions ~

The future of open government

1. Summary of main findings and research outputs – 2. Limitations of the research – 3. Scholarly contribution of the research – 4. Future research directions.

1. Summary of main findings and research outputs

This dissertation set out to address the research question of the association between organizational design and open government performance. Two central parts of the research question concerned the association with performance or organizational structure and organizational processes as the two component parts of organizational design. A secondary research question also addressed the role that macro-level factors play in the organizational design capacity of countries. In order to address these questions, the research carried out an extensive literature review, performed thematic analysis, investigated two case studies of open government programs in high achieving countries, and conducted regression analysis. There are three main research outputs from this dissertation that are summarized below: (1) A model of structural factors of organizational design and performance indicators; (2) A typology of process factors of organizational design and performance indicators; and (3) A unified analytical framework of open government organizational design and performance.

1. A model of structural factors of organizational design and performance indicators

Chapter 2 presented a comprehensive literature review of structural factors associated with open government performance and related areas such as transparency, open data, and e-governance. The review found that there were four main organizational structural factors that could be included in a conceptual model of organizational structure and open government performance: *managerial*, *technological*, *institutional*, and *environmental*. The literature review produced nine propositions concerning the relationship between these structural factors and open government performance. The case study analysis in Chapters 4 and 5 turned these propositions into 15 performance indicators (called structural performance indicators, or SPIs) through the exploration of the performance-related structures in the cases. These SPIs are practical evaluation tools that can be used by policymakers and program designers to improve the performance of the design of organizational structures. The SPIs indicate that the following structural factors are broadly important for open government performance.

- High performing management design involves using a cross-sectoral leadership structure and assigning leadership and planning responsibilities both to a central government department with policy knowledge that is specific to the program and a central government department that is the executive head of the government so that the structure has strong authority. Managers should also choose to base the organization of the program around a policy or public services

area with strong public value relevance and structure the program so as to involve citizens in policy formation and decision-making.

- Strongly performing technological structures in open government programs involve using open source technologies, sharing of technology platforms among participating organizations both inside and outside of government, and seeking community feedback on the performance of the technologies that have a citizen interface. Some of the technologies used in the program should be designed specifically facilitate structures of inter-organizational collaboration with the use of data analytics tools, open source coding platforms, and wikis.

- High performing institutional structures are based on strong information rights laws, norms, values, and are supported by a parliamentary or congressional decision-making system that is fair and democratically competitive. Institutional structures should also be good at facilitating innovation in organizational designs and technologies by, for example, having competitive and open relationships with non-governmental technology organizations where techniques and technologies are freely shared, or at least exchanged with few costs from information asymmetries.

- High performing environmental structures are less easy to control from a design perspective. However, to the extent that organizational environments are supported by a strong and enthusiastic central reforming power they are likely to find more success. Furthermore, strong public demand for the reform goals of open government processes and technologies are also important for performance.

2.   A typology of process factors of organizational design and

performance indicators

The thematic analysis of the dissertation found that there were three main themes

of open government organizational processes. The three process factors were

consultation, governance, and strategy. Consultation processes involve the

selection of stakeholders and the quality of the relationships with the stakeholders.

It had seven sub-themes: stakeholders, location, modes of communication,

governance, quality, prior networks, public comment process, and transparency of

comments. Governance processes involve decisions about leadership,

collaboration arrangements and accountability. It had four sub-themes: level of

oversight and control, head organization, specificity of responsibility, and funding

arrangement. Strategy processes involve decisions about the types of policy tools

and technologies that will be used to implement the open government program. It

had five sub-themes: goal-setting, milestones, policy area, skill and specialization,

and policy tools. The analysis of organizational processes in the case studies was

used to add qualitative information to the inventory relating to the association of

the processes with performance for performance indicators (called process

performance indicators, or PPIs). The PPIs show specific details about the ways

that organizational processes should be designed for higher performance. These

findings are summarized as follows:

- For consultation processes, they should involving a wide range of

stakeholders such as inter-governmental stakeholders, the business sector, and

civil society organizations were more effective characteristics of the organizational processes. The role of civil society organizations was especially important to the consultation processes. A second important factor concerned a cluster of collaboration constructs relating to the quality of the interaction or relationship with the stakeholders. These qualities were characteristics such as *two-way relationship*, *co-production*, and *partnership*. The stakeholders involved in the consultation are dedicated and there is close and regular communication among them.

- In the governance dimension, high performing organizational processes involve governance that takes place simultaneously at centralized and decentralized levels. Successful open government programs also have a clearly designated and strong central leadership structure with a supporting and directing role. Interview respondents said that transformative leadership qualities were core components of the organizational processes required to make open government initiatives successful. In the dimension of strategy, goals developed in the program should be ambitious and aim to have an impact on society. The interviews with senior decision-makers also showed that goal clarity and performance measurement was important. Performance measurement was in fact seen as being one of the main *goals* of open government, not merely a *means* to achieving open government. According to many of the interview respondents, open government meant that more data on government services would be available, and this data could be used to evaluate performance. Performance

measurement through open government was itself seen as a way of demonstrating to the public that governmental processes are reliable, trustworthy, and legitimate.

- The strategy theme of organizational processes also resulted in the finding that high performing processes involved adoption of new technologies and employment of specialists who could adopt and use the technologies in intelligent ways.

3.   An analytical framework of open government organizational design and performance.

In addition to addressing the central question of the research, the cumulative goal of the research methods was to produce a comprehensive analytical framework for open government design and performance. By addressing the questions in three components of organizational design – structures, processes, and macro-level factors – new information was produced that formed integral parts of the analytical framework. The framework, which is the final product of the research, presents a new conceptual and analytical approach for the field of open government studies that has been extensively developed using the diverse methods in the dissertation. The final model of the analytical framework is shown in Figure C.1.
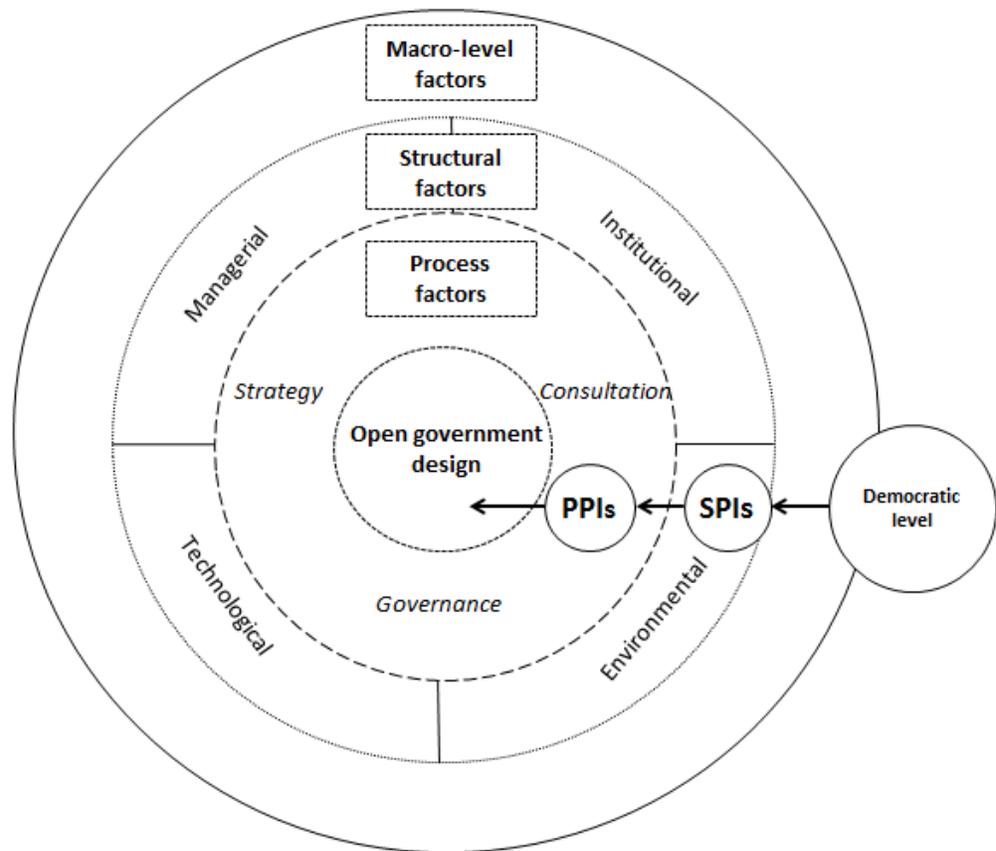
**Figure C.1. The analytical framework of open government design.
Final model with macro-level factors, structural factors, process
factors, and KPIs.**

There were four stages in the development of the analytical framework,

which are as follows: Firstly, the structural component was developed. A

literature review established four factors involved in the structuration of high

performing open government design. These structural factors were *managerial*,

institutional, *technological*, and *environmental*. Secondly, three main themes of

organizational processes were developed in the thematic typology and formed into

three core organizational processes consisting of *consultation*, *governance*, and *strategy*. Thirdly, in order to turn the analytical framework into a truly analytical tool that assesses the performance of open government processes, KPIs were developed that can be applied in program evaluations using the framework. These areas of organizational structure and processes are responsive to the program planning work of open government policymakers, and so KPIs can be used to improve the way that policymakers and public managers influence the performance of open government initiatives. Fourthly, the regression analysis aimed to establish a macro-level to the framework by testing the relationship between macro-level political and economic factors and open government organizational design capacity.

2.   Limitations of the research

Several limitations of the research have already been raised in discussion of the individual methodologies used. The test of the thematic frequency analysis of the high and low performance countries was noted to be limited by concerns about the independence of the thematic analysis of the IRM reports and the OGP starred commitments ranking.[16] The regression analysis of the macro-level factors was also limited by the small sample size.[17] However, there are some other important limitations that should be discussed. These revolve around the generalizability of the study at three different levels, the initiative-level case of the OGP, the

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[16] See pages 97-98.

[17] See page 189.

country-level cases of the US and the UK, and the program-level cases of the

police transparency program and the citizen-centered health services program.

Firstly, regarding the initiative level, this dissertation research has focused

on the case of the OGP. The OGP is arguably the most successful and largest

example of open government reform in history. However, the open government

initiatives represented in the 75 countries of the OGP are by no means the only

well-known cases. Today there are many other open government initiatives that

are taking place independently of the OGP. To examine the scale of such global

interest in open government, and the size of the possible universe of open

government efforts, I performed a simple Google News search using the

keywords of the three pillars of open government as well as for the word "open

government" itself. The search returned about 96,000 results for "open

government", 53,800 results for public participation, 27,200 results for

"government transparency", and 2,160 results for "government collaboration". A

keyword search for "government reform" resulted in 67,000 hits. While these

numbers provide only an imprecise measurement of the extent of open

government initiatives, they do show how widely spread the initiatives are

practiced, at least in the news media of the English-speaking worlds. Given, the

prevalence of different open government initiatives from places of different

political backgrounds and cultures, comparisons with the OGP initiative should

take into account the unique political circumstances of the OGP and the specific

governance system and administration used to implement it. OGP countries and

the review processes associated with them are supported by a unique institutional structure with a certain view or ideology about what open government should be.

Secondly, another similar limitation of the research concerns not so much the case of the OGP as a type of open government initiative, but the generalizability of the case selections, the US and the UK. These were chosen as best practice cases because according to the OGP starred ranking and other independent assessments of openness by organizations such as Transparency International and the Open Budget Institute, and public administration scholars, these countries have strongly transparent and open types of governments. The purpose of best practice case studies is to provide instructive examples or models that can be used to improve other cases (Overman and Boyd, 1994). However, the United States and the United Kingdom both have unique country and unique group and regional characteristics that limit their generalizability. They are both English-speaking, Anglo-Saxon societies with western style democracies that have used specific approaches to bureaucratic organization, political debate, and public participation for the best part of two hundred years. These limitations in generalizability should be considered when applying the findings to other countries with different political and bureaucratic backgrounds. Despite the uniqueness of these cases, the findings relate to the efforts of the countries in a global multilateral initiative in the OGP. In such a global initiative it is valuable to find best practice cases and to apply insights from them to other country experiences. The OGP was designed to foster precisely these kinds of international and cross-cultural lessons.

Thirdly, by the same token as the country level generalizability, there are limitations to the types of lessons that can be drawn from the specific programmatic areas that were selected within the cases of the US and the UK. The programmatic areas were selected as interesting cases that could be used to draw out the findings about the best practice countries in ways that also applied to a an area of transparency policy that is critical to citizens in the way that De Fine Licht (2014) had described, and that combined at least two of the core components of open government (transparency, public participation, and collaboration) so as to generate understanding of processes of open government across the thee components rather than for one component only. However, both of these programmatic areas – law enforcement and health services – have unique aspects that differ from other programmatic areas such as, say, immigration policy or science policy. As this dissertation has argued, open government reforms are focused around fundamental organizational processes. While these processes occur across the consultation, governance, and strategies that affect many programmatic areas in government, the empirical lessons from the research are drawn from sources that are in some ways unique to law enforcement and health services such as the interview respondents who are specialists from those areas.

It is further important to draw attention to the role of differences among policy and program areas as a limited area of the research in this dissertation because prior research on transparency has specifically noted that the effects of transparency differ for different policy areas (e.g. De Fine Licht, 2014; Grimmelikhuijsen and Welch, 2012; Reynaers and Grimmelikhuijsen, 2015).

However, while the research in this dissertation did look at two different examples of open government programs in different policy areas, the goal of the research was to identify the organizational processes of high performing open government programs rather than to analyze the processes as a function of the policy areas. In fact, according to the argument put forward by De Fine Licht (2014), the choices of the policy areas in this research – law enforcement and healthcare – while important and interesting from a public policy perspective, may lead to interpretations of open government reform's effects that are more typical of policy areas involving critical areas of public services. According to De Fine Licht (2014), the effectiveness of transparency depends on the policy area, with citizens far more likely to react positively to transparency in areas of culture or leisure rather than policy areas involving important health or life and death related issues. Furthermore, in the policy areas used in this research, organizational processes may show more consultation and engagement with a range of stakeholders precisely because the policy areas are contentious. Further work should therefore be undertaken to see if a different range of organizational processes would be found in cultural or recreational policy areas such as say, the kinds of shops that a city decides to put in a new mall or the information on flora and fauna that can be found on a national wildlife park website.

Finally, while the dissertation does assess how open government processes and structures are associated with performance, there are finer details in our understanding of the processes and structures that have not been addressed, and will require future work. These limitations in the dissertation include

understanding at the micro-level of how these processes and structures are created, managed, and maintained, and how the processes and structures influence and perhaps support each other. Is it possible for governments to excel in one area or another, or do these attributes tend to come together? How do they interact with one another, and what kinds of strategies, barriers, information systems, and technologies are involved in building these processes and structures?

3. Scholarly contribution of the research

There are a growing number of theoretically important works in the area of transparency and open government studies. The work in this dissertation builds upon and complements these studies in a substantial way.

Open government design

The main stream within the public administration transparency literature addressed in the dissertation is the stream concerned with the organizational structures and processes and especially the perspective that transparency is a transactional process involving relationships between individuals and individuals, organizations and individuals, and between organizations themselves (e.g., Meijer, 2013; Pasquier and Villeneuve, 2006; Weil et al, 2006; Welch, 2012; Welch, Hinnant, and Moon, 2004). In an article in 2011, Pasquier and Villeneuve advocated more in-depth approaches to understanding organizational behavior beyond isolated cases of transparency or non-transparency. Such approaches

improve scholarly understanding of how public organizations gain long-term legitimacy with citizens and how they learn to systematically improve the internal and external relationships that benefit transparency. In the words of the authors, "[if] the transparency of the information is relative, that of the processes must be absolute" (p.159). This dissertation continued this line of enquiry by investigating behavioral, political, and administrative structures and processes in a new area of transparency policy, open government. Similar approaches have been taken in research on other areas of policy such as accountability (e.g., Bovens, 2007; Brandsma and Schillemans, 2012), open data (e.g., Janssen, Charalabidis, and Zuiderwijk, 2012), access to information and freedom of information (e.g., Berliner, 2014; Pasquier and Villeneuve, 2011; Worthy, 2010), participation and transparency (e.g., Welch, 2012), and transparency itself (e.g., Grimmelikhuijsen and Welch, 2012; Meijer, 2013).

This dissertation has shown that there are indeed specific kinds of organizational structures and process that are associated with more successful open governments programs. It thus contributes knowledge of organizational design to a new and important area of government policymaking. In developing scholarly understanding of these informal-formal interactions of structure and processes that underpin transparency reform, this research builds upon other works by Weil et al (2006) and Welch (2012) by extending scholarship to the area of open government. Weil et al. (2006) said that in order to be effective, transparency policies must become, ""embedded" in the everyday decision-making routines of information users and information disclosers. This double-

sided embeddedness is the most important condition for transparency systems'."
(p.155). This dissertation picks up this concept of transparency systems and
extends it to the arena of open government. The structures and processes found in
the research regarding how the new kinds of technologies and the different types
of interactions with stakeholders through forums, regular meetings, policy
learning, and sharing of expertise relate to Weil et al.'s "chains of action and
response", that are involved in the information cycle of transparency and
behavioral change. (p.157).

Performance measurement and open government

Performance measurement theory has been developed in many areas of
government service or policy areas in order to give evaluative tools to
policymakers and citizens as well as to shape the kinds of activities that public
organizations take in pursuit of those goals (Behn, 2003; Julnes and Holzer,
2001). The rise of performance measurement theory during the reforming
government movement known as the New Public Management (NPM) depended
upon sharing and transparency of performance information (Bianchi and
Rivenbark, 2012; Landow and Ebdon, 2012; Moynihan and Ingraham, 2003).
Despite this close affinity between transparency and performance measurement,
the two areas have not before been synthesized in the field of open government
studies. The development of best practice KPIs in this dissertation provides a new
basis for carrying out performance measurement in transparency initiatives. This
connection is vital because scholars such as Hood (2006) have shown how

transparency in government can be abused by politicians by using internal performance information to point fingers at rivals and avoid the consequences of poor performance or delinquency.

By building upon this performance measurement literature, the dissertation both confirms that prior work on performance measurement also applies in the case of open government policy, and extends this literature to show specific ways that open government performance measurement is unique. The unique aspects are shown in the KPIs where 41 indicators show the areas of open government design that are associated with higher performance. The management for results (MFR) framework of Moynihan and Ingraham (2003) found that performance areas of milestones, measurability, goal clarity are important. Regression analysis of organizational design factors in Chapter 3 also found that these factors are associated with higher open government outcomes in terms of progress, potential impact, and effectiveness. According to Poister and Streib (1999), these management design areas can be leveraged to create better performance. They say that policymakers should focus "attention across functional divisions and throughout various organizational levels on common goals, themes, and issues" (p.308). The results of this dissertation show that these organizational levels are relevant to a new and important global area of administrative reform and that the call of scholars for better frameworks of performance measurement still deserve full attention.

The organizational unity of open government

A further way that this dissertation builds on these earlier studies is by looking across a range of policy areas that come under the umbrella of open government to understand what organizational structures and processes they possess that are common. One recent work by Sandoval-Almazan and Gil-Garcia (2016) on open government also had the objective of developing a framework that views open government as an integrated process of organizational unity. According to Sandoval-Almazan and Gil-Garcia (2016), assessing the integrated processes of open government should involve seven components: (1) trust, (2) information value, (3) accountability, (4) constant innovation and change, (5) legal compliance, (6) internal agency transparency, and (7) information systems and search engines. The proposals put forward in the Sandoval-Almazan and Gil-Garcia work mirror some of the themes and sub-themes identified in this dissertation. But the analytical framework in this dissertation looked at open government design at a deeper level by addressing how agency and structure fit together as well as identifying the organizational processes. The structuration approach has the advantage of identifying the long-term structuration basis of change in structures, while organizational processes (consultation, governance, and strategy) are variables that can be changed more directly though policy interventions. The work in this dissertation also used a wide array of empirical methods to test a framework of open government design across a range of countries and in specific open government programs of two high performing countries. This is a large undertaking especially given how extensive open

government reforms have become in many areas of government policymaking and service delivery.

Some recent works have approached open government in a similar way, treating open government as a unified reform program in order to understand the way that it fits within existing administrative structures and practices. For example, Wirtz et al. (2016) addressed open government through a psychological perspective to understand how the organizational shifts associated with open government reforms were perceived by public managers leading them to either embrace or be resistant to such reforms. Wirtz et al. (2016) showed that human cognition can be a useful way of understanding why public managers may be resistant to adopting open government processes. There is something inherently difficult in changing structures from being hierarchical to horizontally participative. There are also risk attitudes associated with legal issues, norms, and bureaucratic obstacles. The results of this dissertation complement Wirtz et al.'s (2016) findings in two main ways. Firstly, the results of both the quantitative and qualitative components of the research reveal the kinds of organizational structures and processes that change in open government reforms. Open government reforms are typically established in a top-down process with leadership from the central executive body of the government. Furthermore, open government initiatives undertaken within the OGP are often legally mandated either by executive fiat or by a law passed by the legislative assembly. Therefore, as Wirtz et al. (2016) find, open government reform may well be daunting to some public managers. In advanced open government countries such as the

United States and the United Kingdom, the speed and degree of these kinds of organizational changes already appear to be quite deep and are altering programs in very important areas of government responsibility such as healthcare and law enforcement.

Open government and organizational complexity

The research in this dissertation also confirms Wirtz et al.'s (2016) findings regarding the complexity of open government organization. The character of this complexity had earlier been expounded by Meijer (2013) using three interrelated perspectives of organizational complexity, cognitive, strategic, and institutional. According to Meijer (2013), transparency is constructed in interactions between the government and its stakeholders. Transparency policies have had a transformative effect on public organizations by making them more interactive in cognitive, strategic, and institutional dimensions of inter-organizational complexity. This way of understanding the impact of transparency policies in public organizations, "help analyze the sociopolitical construction of transparency and identify how this construction is embedded in broader processes of democratic, institutional, and policy change." (Meijer, 2013, 436). The strategic changes in organization leads to resistance against transparency, while conversely, interactions that were previously 'closed' become more opened up to external stakeholders. Cognitively, information becomes increasingly understood as a public good rather than a scarce good and there is a greater appreciation of

citizens as being important political actors. Finally, institutional changes lead to rules that are essentially more inter-organizational in nature.

The cases of the United States and the United Kingdom show similar results to Meijer's theory about the kinds of inter-organizational relationships that take place in open government structures and processes. The three themes, consultation, governance, and strategy broadly parallel Meijer's scheme of cognitive, institutional, and strategic perspectives, respectively, but they are not analogous because the present research addressed organizational design. The interviews with practitioners involved in the design and implementation of open government programs in the United States and the United Kingdom also show the complexity of these structures and processes in open government. In terms of Meijer's institutional component, practitioners discussed the inter-organizational collaboration taking place both vertically within the hierarchy of government, but also horizontally with other departments and stakeholders such as civil society, academic, the media, and the business sector. The institutional component also involved the laws and legal precedents that had been set down in earlier enactments such as freedom of information, which restricted the data that police officers could share with the public or the level of data permitted in the United Kingdom to ensure that health authorities could not be compared and assessed. The two other components of Meijer's theory of transparency complexity, strategic and cognitive, had less salience in the findings of the research. Strategic behavior was indeed evident in the case studies of open government programs, particularly in the organizational process of *strategy*, which included sub-themes

of goal-setting and policy tools. However, these important areas of strategic decision-making were of relatively low importance in comparison to the other processes of *governance* and *consultation*. Finally, while the cognitive perspective of complexity did not emerge as a key theme or sub-theme in this research, it would be a mistake to parallel the findings regarding these themes too closely with Meijer's perspectives of transparency. The research questions of the present work are specifically concerned with outward aspects of organizational design rather than the inward aspects needed to address perspectives or cognitive constructs. Another reason for the discrepancy is that Meijer's theory is specifically applied to transparency, while this work looks more broadly at open government. Transparency is a narrower concept that may have more specific cognitive connotations. Thus, while other works such as Wirtz et al.'s (2016) study, have looked at cognitive and psychological implications of open government for public managers, it would be interesting for future work to investigate whether the cognitive components of transparency and open government behave in different ways.

Public values and citizen perceptions of legitimacy

The policy area of open government is an important area for transparency and open government scholars to consider carefully because of the variation that citizens or other stakeholders show in their demand for openness as a demonstration of government legitimacy (Piotrowski and Van Ryzin, 2007; Reynaers and Grimmelikhuijsen, 2015). Piotrowski and Van Ryzin (2007) found

that citizens demand greater open government, but that there are variations in demand based on levels of confidence of government, ideology, previous interest in contacting government, and the belief of whether or not the amount of openness is already adequate. This dissertation found that there was a strong network of stakeholders involved in the process of designing open government programs including citizens, and that policymakers see open government as a path to greater legitimacy for government.

Prior research has also found that the salience of information for citizens and other important stakeholders in policymaking processes is critical to determining how successful organizational design is involved in areas such as transparency and open government. For example, Reynaers and Grimmelikhuijsen (2015) found that, while input, process, and output transparency are equally important public values, the latter two are more likely to be ignored by public organizations in areas where standards and definitions of processes and outputs are highly contested by stakeholders because their interpretation and relevance to stakeholders becomes less clear as a result of contestation. In another important study, Piotrowski and Rosenbloom (2002) found that public organizations tend to ignore important governmental processes and intrinsic public values that they call non-mission values. Important values of public organizations such as transparency or open government can be overlooked as agencies seek to delivery quantifiable impacts that can have demonstrable value to political principals or members of the public. As a result, public managers may spend less effort and time attempting to

implement procedures and learn from prior practices involving process values

such as transparency, participation, or collaboration.

There are two main ways that the results of this dissertation research

contribute further to our understanding of whether the value of open government

will be neglected by public organizations. Firstly, it is important to note that the

Piotrowski and Rosenbloom study took place before institutional changes

involving socio-technical processes associated with ICT such as Wiki-

government, social media, and open data had begun to gather momentum. The

research in this dissertation takes place at a time when research on socio-technical

processes of change has become more advanced. Further the research shows that

processes of open government do involve forms of performance measurement of

the types discussed by Piotrowski and Rosenbloom involving the production of

action plans and ways to target and assess specific goals. The multi-country

results from the regression analysis as well as the case studies show that these

aspects of open government processes are valued in high performing open

government countries. Furthermore, the results of the research show that, beyond

formal performance planning, open government also involves many

organizational processes such as consultation that create accountability and ensure

that non-mission values such as public participation in law enforcement or

healthcare are visible parts of the program design and implementation process.

These organizational processes for including non-mission values in public

organizations are important to consider alongside the more traditional forms of

accountability such as agency-level annual performance planning established

during the NPM reforms of the 1990s. The relationship between these two approaches is interesting and future research should investigate whether there are types of interdependency, complementation, or crowding-out occurring between the two.

4.   Future directions

The research also poses some additional problems and questions for future work. Firstly, this research specifically addresses national or federal level open government initiatives, but open government reforms are subject to intergovernmental systems that link the national, regional, local, and even international levels. Therefore, organizational design theory of open government should try to develop knowledge of the linkages of structures and processes between these different levels of government. A second area for future study involves distinguishing the organizational design differences of open government programs in different policy areas. The research in this dissertation has looked at two different policy areas (law enforcement and healthcare) but the focus of the research has been on understanding general open government design rather than policy-specific design. Another important frontier of open government research will involve analysis of the *impacts* of open government initiatives, particularly those of the OGP. While the work in this dissertation has focused on the assessment of performance in terms of organizational design, real success requires in-depth understanding of the long-term impacts of policies. Long and short term longitudinal studies are therefore called for in order to improve scholarly

knowledge of the impacts are of open government initiatives on public organizations and society. Finally, this dissertation is among the first to produce a comprehensive performance evaluation instrument for public administration, and thus presents an opportunity for bringing together two important streams in the field: performance measurement and open government. Future work should apply this framework to assess how governments are performing in open government, as well as to identify organizational design areas that can be improved in open government initiatives. By refining the framework in different government and country contexts, the area of open government, which has been a problematic topic in public administration, can become more amenable to empirical evaluation.

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Appendices

Appendix 1. Program areas of open government in scholarly literature (1990 – 2016)

Open government topic	Frequency	Percentage
Open Data	125	41
General open government	45	15
Transparency	39	14
Citizen participation	33	11
Access to information	27	9
Open innovation	9	3
Budget openness	9	3
Geographic information systems	6	2
Open education	3	1
Open science	1	0.5
Intergovernmental collaboration	1	0.5
Total	*297*	*100*

Appendix 2. IRM performance ranking index for OGP member countries

Country		Starred (N)	Starred (%)
1	Brazil	28	0.88
2	Mexico	25	0.68
3	*United States*	*20*	*0.77*
4	Croatia	22	0.67
5	*United Kingdom*	*23*	*0.56*
6	Indonesia	10	0.83
7	El Salvador	12	0.57
8	Uruguay	10	0.53
9	Moldova	15	0.32
10	Bulgaria	10	0.38
11	Philippines	9	0.47
12	Latvia	8	0.47
13	Peru	12	0.25
14	Colombia	9	0.32
15	Chile	7	0.37
16	Jordan	9	0.27
17	Slovakia	7	0.32

18	Denmark	8	0.24
19	Albania	7	0.23
20	Georgia	4	0.33
21	Dominican Republic	6	0.25
22	South Africa	3	0.38
23	Ukraine	6	0.20
24	Italy	4	0.25
25	Honduras	6	0.19
26	Finland	4	0.22
27	Macedonia	6	0.17
28	Netherlands	4	0.22
29	Tanzania	5	0.20
30	Liberia	2	0.33
31	Spain	3	0.23
32	Canada	5	0.17
33	Ghana	1	0.33
34	Estonia	3	0.20
35	Paraguay	3	0.20
36	Montenegro	4	0.07
37	Argentina	3	0.16
38	Azerbaijan	3	0.08
39	Israel	2	0.15
40	Kenya	1	0.11
41	Greece	1	0.09
42	Guatemala	1	0.07
43	Armenia	1	0.07
44	South Korea	1	0.06
45	Romania	1	0.06
46	Costa Rica	0	0.00
47	Czech Republic	0	0.00
48	Hungary	0	0.00
49	Panama	0	0.00
50	Sweden	0	0.00

Appendix 3. Definitions of content analysis categories

Consultation
Members
Public Involvement or impacts of stakeholders defined as "public", "citizens", "community" or in reference to the group of people with a particular nationality.
Government

Involvement or impacts of stakeholders defined as "government", "public agency", "public department", or by reference to a specific known public body such as "the National Health Service (NHS)"

CSOs
Involvement or impacts of stakeholders defined as "civil society organization (CSO)", "nonprofit", "charity" "nongovernment organization" or by reference to a specific known CSO such as "the Open Government Network".

Academia
Involvement or impacts of stakeholders defined as "academics", "scholars", "university", "college", or by specific academic titles such as "professor" or by reference to specific individuals known to be academics.

Business
Involvement or impacts of stakeholders defined as "business", "the private sector", "companies", "corporations", "commercial organization", etc, or specific fields of business such as "banking" or "mining".

International
Involvement or impacts of stakeholders defined as "international organization" or specific named organizations that have known international coverage and influence such as "the United Nations".

Modes of communication	

Meetings
A planned gathering of people (offline) to discuss a matter pertaining to the open government initiative. Specific terms include "meeting", "forum", "town hall", "summit" etc.

Email
Organized and sustained planning of communication channels among stakeholders or planners using email.

Telephone
Organized and sustained planning of communication channels among stakeholders or planners using the telephone.

Offline
Reference to the mode of communicating offline specifically using the word "offline", "non-electronic" or "in-person" to distinguish it from online forms of communication. It is not sufficient to mention a form of offline communication such as "meeting".

Online
Reference to the mode of communicating online specifically using the word "online", "electronic", "digital", etc to distinguish it from offline forms of communication. It is not sufficient to mention a form of online communication such as "email".

Social media
Reference to "social media" or to specific named social media platforms such as "Facebook", "Twitter", etc.

Surveys
Reference to the word "survey", "questionnaire" or other systematic collection of the views of stakeholders.

Governance

Shared
Reference to "decisions", "policy", "planning", or "implementation" etc performed together with stakeholders.

Unilateral
Reference to "decisions", "planning", or "implementation" etc being carried out by the leading government agency responsible for the open government initiative without reference to other stakeholders.

Quality

Two-way
Consultation with stakeholders that mentions a change in decision, policy, planning, or implementation resulting from the preferences of stakeholders.

Openness
Reference to the words "openness" or "open" when describing the process of consultation in decision-making, policy-making, planning, or implementation.

Partnership
Reference to an action or project undertaken where the stakeholder has responsibility for a part of the action or project.

Unengaged
A negative reference to a lack of participation or involvement either by the stakeholders or the lead government agency responsible for the open government initiative.

Dedication
A reference to the degree or effort undertaken by the stakeholders or the lead government agency responsible for the open government initiative. Textual references include "tried very hard", "spent time and resources", "reached out" etc.

Closeness

A reference to the strength of the relationship between the stakeholders or the lead government agency responsible for the open government initiative. Textual references include

Regularity
A reference to the number of times or the schedule of frequency with which the stakeholders has formal, planned interactions with the lead government agency responsible for the open government initiative.

One-way
A negative reference to the lead government agency responsible for the open government initiative taking an action without consulting stakeholders.

Narrowness
A reference to the lack of representation or diversity of backgrounds, areas of expertise, and sectors among the stakeholders.

Continuity with prior networks

Continuous
The open government initiative is using stakeholders who had a preexisting network before the advent of the initiative.

Not continuous
The open government initiative is using stakeholders who had a preexisting network before the advent of the initiative.

Structure

Level of oversight and control

Centralized
Control or monitoring is described as "centralized", "strongly controlled", or there is reference to the specific head agency and it having a characteristic of monopolizing decision-making.

Hierarchy
The text describes the oversight and control as coming from the top of the government agency responsible for the open government initiative.

Decentralized
Control or monitoring is described as "decentralized", "loosely controlled", or there is reference to the specific head agency and it having a characteristic of delegating decision-making.

Breadth
The oversight or control is described as being widely spread among multiple governmental authorities rather than in the auspices of one specific agency.

Head organization
Directing The role of the head organization is described as involving giving orders, instructions, or offering authoritarian leadership.
Supporting The role of the head organization is described as involving providing support in terms of resources or advice.
President or prime minister office The head organization with responsibility for the open government initiative is the president or prime minister's office in that country.
Other ministry The head organization with responsibility for the open government initiative is an agency other than the president or prime minister's office in that country.

Funding arrangement
Agency source The textual reference to the funding for the open government initiative says that the funding comes from agency that is responsible for implementing the open government initiative.
Central source The textual reference to the funding for the open government initiative says that the funding comes from the head organization of the open government initiatives in that country rather than the agency that is responsible for implementing the initiative.

Milestones
Measurability The milestones described in the text are said to be precise in the way that they can be identified or measured.

Strategy

Goal-setting
Values The text refers to one of the OGP's core values: "transparency", "participation", technology", or "accountability" in the intended goals of the open government initiative.
Ambition and impact

The text refers to the intended broader effects and impacts of the open government initiative on society and/or government in the intended goals of the open government initiative.

Measurability
The text refers to the intended specificity or measurability of the intended outcomes of the open government initiative.

Policy design

Focus
The text references the intent of the agenc(y/ies) to design an open government initiative that is focused on a specific area or topic of policy.

Diversity
The text references the intent of the agenc(y/ies) to design an open government initiative that is diverse in the range of topics or policy areas that is focuses on.

Skill and specialization

Specialist teams
The text references engaging, hiring, or appointing an individual or group of individuals who bring specialist knowledge or expertise on the open government initiative.

Policy tools

New technologies
The text references the use of new technologies in designing or implementing the open government initiative. Examples of new technologies are any kind of tool that enables web 2.0 type of information and communications technology (ICT) such as "mobile phone", "social media", "API", "GIS", etc.

Advocacy
The text references using forms or lobbying or advocacy to leverage political support for the open government initiative.

Breadth
The text references the use of a broad range of policy tools either by naming several different kinds of tools or by saying that many different kinds of tools were used even if the specific types are not explicitly mentioned.

Legislative change
The text references the use of the legislative assembly in the country to create new laws as part of the open government initiative.

Appendix 4. Textual frequencies for the theme of consultation according to the IRM progress reports of high (n=5) and low (n-5) performing OGP countries. Years 2013-2016.

	High	Low
Consultation	62	35
Continuity with prior networks	3	3
Continuous	3	3
Not continuous	0	0
Governance	2	0
Shared	2	0
Unilateral	0	0
Location	14	2
Centralized	2	0
Decentralized	1	1
Offline	6	1
Online	9	0
Modes of communication	11	3
Blogs	5	1
Email	0	1
Interviews	0	0
Meetings	4	1
Social media	3	0
Surveys	0	0
Telephone	0	0
Public comment process	13	5
Accessibility	6	0
Awareness-raising	3	2
Transparency of comments	4	3
Quality	23	18
Closeness	5	3
Co-production	1	0
Dedication	3	1
Inclusiveness	0	4
Narrowness	6	1
One-way	1	3
Openness	0	2
Partnership	4	0
Regularity	3	0
Two-way	2	1
Unengaged	1	4

	High	Low
Stakeholders	19	7
Academia	6	1
Business	3	2
CSOs	9	6
Government	10	1
International	0	0

Appendix 5. Textual frequencies for the theme of governance according to the IRM progress reports of high (n=5) and low (n=5) performing OGP countries. Years 2013-2015.

	High	Low
Governance	10	8
Funding arrangement	0	2
Agency source	0	2
Central source	0	0
Head organization	3	5
Directing	0	0
Foreign ministry	0	1
Other Ministry	1	1
Prime minister or President office	2	2
Supporting	0	1
Level of oversight and control	3	2
Breadth	0	0
Centralized	2	0
Decentralized	1	1
Hierarchy	0	1
Specificity of responsibility	5	0
Central entity responsible for all programs	0	0
One entity per policy area	1	0
Shared responsibility per policy area	4	0

Appendix 6. Textual frequencies for the theme of strategy according to the IRM progress reports of high (n=5) and low (n=5) performing OGP countries. Years 2013-2016.

	High	Low
Strategy	11	4
Policy area	1	1
Clustering	1	1
Diversity	0	0
Focus	0	0
Goal-setting	2	3
Level of ambition and impact	2	1
Relevance to OGP values	1	1
Specificity and measurability	1	1
Milestones	2	1
Specificity and measurability	2	1
Policy tools	6	0
Advocacy	1	0
Breadth	1	0
Legislative change	2	0
New technologies	2	0
Skill and specialization	0	0
Specialist teams	0	0