

# Government Interactions with Citizens on YouTube to Solve Government Transparency Problems

## Abstract

This article investigates how government interacts with citizens on social media channels in solving government transparency deficit problems. In Indonesia, Jakarta's newly elected government adopted government's official YouTube channel to address the long-standing government bureaucracy and corruption. Using content analysis, 495 YouTube videos are examined whether or not government-generated YouTube videos dominantly communicate reform-oriented government transparency. The findings indicate that the government swiftly adopted YouTube for strategic leverage; advancing institutional reform within government, communicating government transparency to net-savvy citizens, and hence encouraging them to socially and politically interact on government's official YouTube channel. Logistic regression analysis was then applied to further explain YouTube-enabled government transparency. While the YouTube content sharing platform enables the visualization of otherwise complex and murky institutional reform process, the logit model indicates the importance of dynamic capabilities of government leadership and citizen-centric e-governance as the determinants of YouTube-enabled government transparency. We propose a theoretical framework for examining the dynamic interplay between citizen-centric e-governance and external political efficacy in harnessing the potential socio-political power of social media to optimize social media-enabled government transparency.

**Keywords:** Government transparency, social media, YouTube, institutional reform, dynamic capabilities of government leadership, citizen-centric e-governance, external political efficacy.

# Government Interactions with Citizens on YouTube to Solve Government Transparency Problems

## 1. Introduction

Government transparency is critically important to reduce government bureaucracies and corruptions, which diminish political accountability and legitimacy (Levi et al., 2009), erode trust in government (Kim, 2010; Levi et al., 2009), discourage citizens' political participation (Hetherington, 2005; Levi et al., 2009), and hinder government performance, including the provision of effective and efficient public services (Kim, 2010). Berlin-based Transparency International found that two-thirds of countries being surveyed in 2012 had the Corruption Perceptions Index (CPI) below 50, indicating serious corruption problems in the world (Transparency International, 2012). Needless to say, the institutional and societal challenges in effecting institutional reforms can be greater in developing countries.

Social media networks in government have radically increased the speed, reach and transparency of information, in the turbulent and social change environment (Kavanaugh et al., 2012), for example, in the context of the 2010 Arab Spring (Shirkey, 2011), the 2012 Indonesia's Twitter-based early tsunami warning (Chatfield et al., 2013), the crowdsourcing of 2013 Oklahoma tornado weather reports through Twitter (Chatfield and Brajawidagda, 2014), and the 2013 Hurricane Sandy disaster information sharing through Twitter's #sandy (Chatfield et al., 2014).

Despite the potential institutional and societal benefits from government transparency, however, social media-enabled government transparency has not been sufficiently studied in information systems (IS) literature. Therefore, this article investigates how government can harness the socio-political power of social media networks for advancing and communicating government transparency by using a longitudinal multi-method research approach. Specifically, our research questions are:

1. What is social media-enabled government transparency and its determinants?
2. How can government harness the socio-political power of social media networks to advance and communicate government transparency?
3. Whether and how can reform-oriented YouTube video contents be distinguished from non-reform-oriented ones?

In addressing the first question, a theoretical framework for understanding social media-enabled government transparency was developed based on insights from the literature. In order to answer the second and third questions, we conducted a longitudinal study of two observations, spanning from October 17, 2012 to January 4, 2014, in the research context of the use of an official YouTube channel by Jakarta's new local government for strategic leverage.

With the 2012 Transparency International's CPI of 32, Indonesia faces a very serious corruption problem. Indonesia's central government has identified bureaucratic reform and governance as the top priority of national development in 2013 (Prasojo, 2012). *The Economist* (2014) reported that the word, "politician", has become often synonymous with "crook" in Indonesia. While the central government did not specifically mention government transparency, Governor and Deputy Governor of Jakarta's new local government won the 2012 election, by promoting "The New Jakarta" to create a transparent local government that can deliver citizen-centric public services through institutional reforms and corruption eradication. Indonesia's mass media capitalized on the open, entrepreneurial, and transformative leadership of Joko Widodo (known to all as Jokowi) displayed during his election campaign. Today Jokowi is officially a candidate for the 2015 presidential election, with 43% of the popular vote even before his official nomination was announced (The Economist, 2014). His open, entrepreneurial, and transformative leadership has been in stark contrast to Indonesia's typical political leaders. Previously, Jakarta's local governments held high-level political meetings under a closed-door policy, sustaining a critical and fundamental flaw in policy-making and fueling government inefficiency and corruption.

In this longitudinal study, we also developed a video content classification scheme, conducted content analysis and logistic regression analysis of 495 Jakarta's local government-generated YouTube videos. These unedited long online videos, with the average duration of over 36 minutes per video, were viewed, rated, and commented by Jakarta's 7.8 million net-savvy citizens. Content analysis results show that Jakarta's new local government swiftly adopted effective use of YouTube social media networks for strategic leverage; namely, advancing institutional reform-in-progress within government, communicating government transparency to net-savvy ordinary citizens, and enhancing their political efficacy through the visualization of otherwise complex and murky institutional reform processes. Moreover, logistic regression model provides some preliminary empirical evidence for the utility of dynamic capabilities of entrepreneurial leadership and citizen-centric e-governance as the determinants of YouTube-enabled government transparency. The findings also

indicate patterns of social and political interactions between government's use of social media technologies and net-savvy citizens are a crucial consideration for harnessing, realizing benefits from social media networks, and achieving greater government transparency.

The remainder of this paper is structured as follows: Section 2 provides a theoretical foundation and framework for social media-enabled government transparency developed in this study. Section 3 presents the research context in which the research questions are addressed. Section 4 describes our research methods on video sampling, a new classification scheme for government-generated YouTube video content, content analysis, and logistic regression analysis. Section 5 presents results from our analyses. Section 6 presents our discussion and the final section describes the conclusion of this study, including our research contributions and limitations, institutional and societal implications for advancing government transparency through effective use of social media networks, and future research directions.

## 2. Theoretical Foundation and Framework

A theoretical framework, derived from existing literature, was developed to understand determinants of social media-enabled government transparency. Figure 1 shows this theoretical framework. In this article, we hold that long-standing government corruption often motivates government adoption and use of social media channel. We also hold that government transparency is essential for institutional reform. Although the actual observation of institutional reform is outside the scope of this article, the conception is briefly discussed here. Furthermore, the key constructs identified in the framework are also discussed in this section.

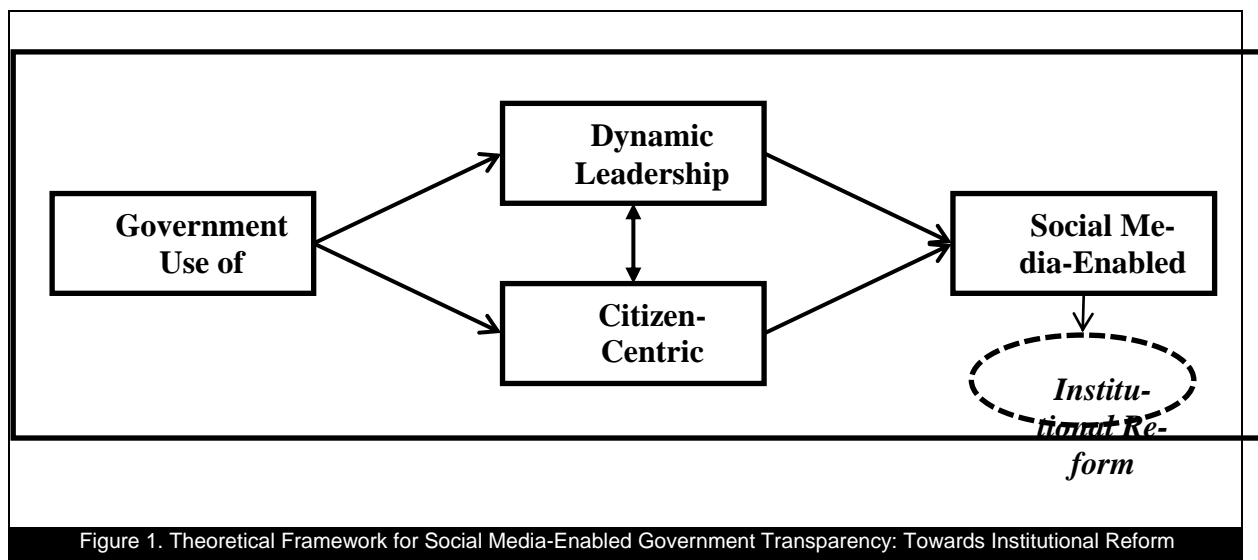


Figure 1. Theoretical Framework for Social Media-Enabled Government Transparency: Towards Institutional Reform

### 2.1. Institutional Reform

Government bureaucracy and corruption diminish political accountability and legitimacy (Levi et al., 2009), erode trust in government (Kim, 2010; Levi et al., 2009), discourage citizen engagement (Hetherington, 2005; Levi et al., 2009) and hinder government performance, including the provision of effective and efficient public services (Kim, 2010). When a new government is elected, a key factor influencing its success is the degree to which it can establish legitimacy among its citizens (Gibson, 2004; Levi et al., 2009). New governments often initiate institutional (or administrative) reforms for legitimacy or other reasons when their previous governments' bureaucracies and corruptions have been public issues. Institutional reform in the context of government performance and new public management involves transforming government through strategic objectives of cutting the bureaucratic inefficiency and corruption and improving external political efficacy (or government responsiveness to citizen demands) (Parent et al., 2005). Empirical studies show that bureaucratic reforms require institutional transformation, such as new transformative leadership (Lee and Lee, 2009) strategic use of e-government (or government use of ICTs) and citizen participation (Ahn and Bretschneider, 2011; Bertot et al., 2010; Lee and Lee, 2009). The e-government and public administration literatures suggest that institutional reform initiatives need institutional, technological and/or social mechanisms for producing desired outcomes.

In agreement with Fukuyama (2014), we have taken the position in this article that institutional reform is extremely difficult to achieve without a major disruption of the political order. Fukuyama (2014, p. 7, italics added) defines political decay as “a specific political process – sometimes an individual government agency – has become dysfunctional. This is *the result of intellectual rigidity and the growing power of entrenched political actors that prevent reform and rebalancing.*” Here he implies that the root cause of political decay needs an inquiry into dysfunctional political actors or political leadership. The difficulty in achieving institutional reform is consistent with empirical evidence from e-government research. Norris and Reddick (2013) did not find compelling evidence of transformative effects of e-government, based on the findings of both their comprehensive literature review and their survey research of local e-government developments and practices in the United States. Similarly, Ciborra and Navarra (2005) also found the difficulty in achieving institutional reforms through the adoption of e-government in Jordan. They strongly argue for the imperative of good governance in advancing further development of e-government in developing countries.

## **2.2. Government Use of Social Media**

Open government policies in the U.S., such as the Open Government Directive (US Executive Office of The President, 2009), aim to create a new culture of openness in government for achieving *greater government transparency*, citizen participation and inter-agency collaboration *through social media use in government*. The policies acknowledge the rapid technological changes in societies across the globe.

Social media, with the proliferation of multimedia data as well as multimedia mobile devices, including laptops, tablets, iPods, and smart phones, have become increasingly integrated in citizens’ daily lives. In this dynamically changed information environment, “the political power of social media” (Shirky, 2011) in *providing new forms of self-organization to ordinary citizens*, who take power and make political and institutional change, was demonstrated during recent political upheavals that, for example, toppled dictatorial regimes in the Arab world. Social media in the hands of networked citizens, with *neither hierarchical power nor positional power*, have facilitated the leaderless ‘social media revolution’ in the turbulent aftermath of the 2009 Iranian Presidential election (Chatfield et al., 2012).

Besides the remarkable growth of social media use among citizens across the globe, government use of social media has also proliferated since the participatory open government and open data policies promote social media use in government. In an era of digital government, governments not only in the US but also worldwide (Open Government Partnership, 2013) are increasingly using social media data to improve *external political efficacy*, which is defined as *citizens’ perceived government responsiveness* (Parent et al., 2005; Anderson, 2010), provide *greater citizen engagement* (Reddick, 2005; Reddick, 2011a), and improve *levels of openness, transparency and collaboration* (Jaeger and Bertot, 2010). This recent strategic thinking has led to large-scale investments in social media technologies in government (Mergel, 2013; Abdelsalam et al., 2013; Chatfield et al., 2013; Bekkers et al., 2013; Hofmann et al., 2013; Mossberger et al., 2013; Ferro et al., 2013; Zheng, 2013). Evidently, in time-critical government services, such as disaster preparedness, response, recovery and risk mitigation, governments have capitalized on speed, reach and (financial) affordance of social media channels to give tsunami (Chatfield et al., 2013) and tornado (Chatfield and Brajawidagda, 2014) early warnings to citizens and share disaster-related information with citizens, such as information on warm shelters during the 2012 Hurricane Sandy (Chatfield et al., 2014). Prior research on government use of social media indicates the potential in transforming public services. For example, Indonesian government issued its tsunami early warning Tweet, which was “re-tweeted” without delay by its followers to their own followers to warn tsunami hazards during the 2012 earthquake. Social network analysis findings indicated that within 15 minutes it reached over 4 million Twitter users (Chatfield et al., 2013).

## **2.3. Social Media-Enabled Government Transparency**

In recent years there has been an increased interest in the institutional, social and economic determinants and the effects of government transparency. While conceptions of government transparency are diverse; encompassing policy-making transparency, openness of political process and public service programs priority transparency (Grigorescu, 2003; Kim et al., 2009; Sol, 2013; von Haldenwang, 2004). Specifically, empirical research on the effects of public service reform found that the institution’s act of adopting administrative reform by itself produced the beneficial impact on government transparency in new Eastern European democracies (Neshkova and Kostadinova, 2012). Survey studies in East Central Europe explained variation in local government transparency as a function of the institutions, as opposed to socioeconomic development or locality size (Dowley, 2006). In another cross-national study, regression analysis found that telecommunications infrastructure and free press influenced the perceptions of government transparency in a positive and significant way (Relly and Sabharwal, 2009). Similarly, citizens’ online information-seeking was positively associated with their increased support for government transparency (Cuillier and Piotrowski, 2009), and citizens’ e-

participation seemed to be positively related to their assessment of local government transparency and their trust in government (Kim and Lee, 2012). Despite the increased interest in government transparency, however, there has been very little research focusing on the mechanisms for advancing and communicating government transparency to stakeholders. Finally, studies on local government transparency are still very limited (Sol, 2013).

The effects of government transparency have been heavily examined in the public administration literature (Grimmelikhuijsen, 2009; Kim and Lee, 2012; Meijer et al., 2011). E-government research has also emerged to examine the potential benefits of social media to promote government transparency (Bertot et al., 2010; Lee and Kwak, 2012; Picazo-Vela et al., 2012).

Earlier studies on computer-mediated government transparency (Meijer, 2009; Grimmelikhuijsen, 2011; Grimmelikhuijsen and Welch, 2012) have largely focused on the impact of government website transparency on societal trust in government, but these studies focus on neither social media technologies nor social media networks. Of these studies, only Grimmelikhuijsen and Welch (2012) explored three dimensions of computer-mediated government transparency: decision-making transparency, policy information transparency, and policy outcome transparency. The earlier studies found both the benefits and the risks involved with disclosing information. On the one hand, computer-mediated transparency is “a powerful tool to attain policy goals to transform government” (Grimmelikhuijsen, 2012, p. 293) and provides citizens with better information (Meijer, 2009). On the other hand, computer-mediated transparency can drive citizens away from government, by government’s strategic failure to control disclosing information; for example, information overload, cyber propaganda, and inadvertent information release (Grimmelikhuijsen, 2012). Similarly, Meijer (2009, p. 255) warns against the complicated risks of computer-mediated transparency: “unidirectional, structured and decontextualized forms of transparency will result in a loss of societal trust.” The future research directions for computer-mediated transparency would require diversity in systems of government transparency to optimize effects of computer-mediated transparency on societal trust in government (Meijer, 2009), as well as more government transparency of quantifiable performance indicators and increased control of government information disclosure (Grimmelikhuijsen, 2012).

With regard to social media-enabled government transparency, e-government research on government use of social media is emerging but still new. One of its first studies examined the ways in which social media and advanced ICTs were integrated into collaborative e-government initiatives at the state government level to facilitate greater government transparency (Bertot et al., 2012). However, the maturity of social media-enabled local government transparency is still at its very early stage (Bonsón, et al., 2012). There are institutional barriers to implementing a culture of government transparency. *Not only the effective use of social media (Hetherington, 2005) but also political will of government leadership* must be mobilized to overcome these challenges (Bertot et al. 2010).

#### **2.4. Dynamic Leadership Capabilities**

The dynamic capability theory extends the resource-based view’s core argument by addressing how internal resources of strategic value can be created and how the current stock of valuable resources can be reconfigured and transformed to meet the challenge of rapidly changing environments (Ambrosini and Bowman, 2009). In a recent review of the literature on dynamic capabilities, Barreto (2010) proposed a new conceptualization of dynamic capability as an aggregate multidimensional construct in an effort to explain the proliferation of different definitions and disconnected conceptualizations of the construct in the literature. Additionally, prior research proposed the distinction between dynamic and operational (or ordinary) capabilities (Helfat and Winter, 2011; Winter, 2003) and between higher-order (or second-order) dynamic (e.g. higher-order executive cognition and entrepreneurial leadership) and ordinary capabilities (Eisenhardt et al., 2010; Chaston and Sadler-Smith, 2012).

Strategic management and business administration literatures on dynamic capabilities found the critical roles of higher-order dynamic entrepreneurial leadership capabilities in developing and shaping operational capabilities and what Helfat and Winter (2011) referred to as operational capabilities at the firm level (Ambrosini and Bowman, 2009). Helfat et al. (2009) argued that creating, adapting to, and exploiting strategic change are inherently entrepreneurial. *Therefore, entrepreneurial dynamic leadership is more critical under conditions of strategic change in developing and deploying dynamic capabilities to survive and prosper.* Similarly, entrepreneurial dynamic leadership was the key common factor in the success in health care reforms across six states in USA (Oliver and Paul-Shaheen, 1997). In a case study of the NCR in the rapidly changing technological environment explicated how organizational rigidities that were built over the firm’s past successful practice led eventually to a crisis. It was successfully resolved, however, by the new entrepreneurial dynamic leadership, which enabled the firm to actualize “latent dynamic capabilities” (Rosenbloom, 2000). Similarly, in a case study of Radio Fukushima, its entrepreneurial board members and dynamic executive

managers played a critical role in exploring, adopting and leveraging Twitter social media networks rapidly to crowdsource disaster information (Scholl and Chatfield, 2014).

Under rapidly changing and highly uncertain conditions of environmental turbulence, dynamic capabilities literature suggests the critical importance of the organization's dynamic capability to sense and then seize opportunities quickly and proficiently (Teece et al., 1997; Teece, 1998; Teece, 2006; Teece, 2007; Teece, 2000; Eisenhardt and Martin, 2000). Prior research hypothesized a direct link between dynamic capabilities possessed by the organization and superior organizational performance, but without specific attention to the role of entrepreneurial dynamic leadership capabilities. Increasingly, however, recent studies found the critical roles played by entrepreneurial leadership and dynamic senior leadership in managing resources strategically (Ireland et al., 2003) and shaping and deploying dynamic capabilities to effectively and rapidly respond to environmental turbulence (Rosenbloom, 2000; Ambrosini and Bowman, 2009). Organizations slow to respond to the emergent reality will not survive or prosper (Teece, 2000). This finding on entrepreneurial dynamic leadership capabilities is consistent with the IS literature. While its research setting was not in a turbulent environment, a study in IS literature also showed that senior leadership was critical in assimilating IT innovation in the organization (Armstrong and Sambamurthy, 1999). The finding is also consistent with the e-government literature. In a survey research, strong empirical evidence found indicates the importance of the orientation of "managerial innovativeness" in realizing the promised benefits of e-government (Moon and Norris, 2005).

For this article we define *dynamic leadership capabilities* to include salient dimensions of entrepreneurial strategic and transformative vision for value creation and growth (Santora et al., 1999; Ruvio et al., 2010), creative exploration and strategic sense-making through challenging the dominant logic (Ireland et al., 2003; Pandza and Thorpe, 2009; Pavlou and El Sawy, 2011; Scholl and Chatfield, 2014), managerial innovativeness (Menguc and Auh, 2006; Moon and Norris, 2005), effective entrepreneurial (interactive) communications with stakeholders (Darling and Beebe, 2007), agile decision-making and action in turbulent environments (Augier and Teece, 2008), despite its serious risk implications (Carlsson and El Sawy, 2008; Pavlou and El Sawy, 2011; Scholl and Chatfield, 2014), emotional energy and social exchange (Goss, 2008), and entrepreneurial political skills (Prieto, 2010). In the literature, we found other overlapping constructs such as strategic entrepreneurship (Ireland et al., 2003) and corporate entrepreneurship (Dess et al., 2003). However, we distinguish the concept of entrepreneurial leadership capabilities from other related concepts such as entrepreneurial leadership style (McCarthy et al., 2010) and entrepreneurial leadership personality traits (Nicholson, 1998).

## 2.5. Citizen-Centric E-Governance

The conception of citizen-centric e-governance articulated by Reddick (2011<sub>a</sub>) underscores the imperative of empowering ordinary citizens to engage in democratic governance through the use of the Internet and other emergent social media network technologies. Citizen-centric e-governance, therefore, provides the new ability to transform the government-to-citizen and the citizen-to-citizen relationships (Reddick, 2011<sub>a</sub>; Linders, 2012). It also provides networked ordinary citizens with the new virtual public spheres – for example, e-government portals, government's official YouTube channels, or social media networks in government – through which they can influence (or even co-produce) innovations in political institutions, and hence helping government moving away from traditional supply-side, government-centric provision and delivery of public services, towards more demand-side, citizen-centric public services for greater citizen satisfaction and participation (Reddick, 2011<sub>b</sub>; Gauld et al., 2010).

Citizen-centric e-governance represents a significant shift from prior e-government and public administration studies on "e-participation", "e-governance", or general use of the Internet in government. On the one hand, these studies view citizens as passive consumers or users of government website or portal service offerings designed largely from a supply-side perspective (government imperative). On the other hand, citizen-centric e-governance, from a demand-side perspective (citizen imperative) (Reddick, 2005), explains the potential high payoffs from facilitating more active roles played by networked ordinary citizens as co-producers (Linders, 2011), in governing public services and helping government more clearly understand citizens' diverse needs such a way which they can facilitate government innovation and redesign in e-government services: for example, one-way access to government data and policy information and two-way interaction and transaction with government (Reddick, 2004).

Therefore, the construct of citizen-centric e-governance in this article underscores the critical importance of the limited power (and resources) of government in governing the complex and murky processes towards greater government transparency. Simultaneously, it recognizes the potential social and political power net-savvy ordinary citizens can provide government in achieving the goals of *greater government transparency* and *greater external political efficacy* (or citizens' perceived government responsiveness to their demands and concerns) through greater opening of government policy formulation and policy implementation.

### 3. Research Context: “The New Jakarta” for Government Transparency, Reforms and Corruption Eradication

This article addresses the research questions in the research context of Jakarta’s new local government inaugurated in October 2012. In terms of government structure, the province is the highest level of local government hierarchies in Indonesia. Provinces are broken down further into regencies and cities. Jakarta as a providence is officially known as the Special Capital Region of Jakarta, which geographically encompasses a regency and five cities. However, public services in the Special Capital Region of Jakarta are centralized, with government agencies such as public housing and public transportation to provide public services to all the citizens in the Special Capital Region of Jakarta. With its metropolitan population of over 28 million, Jakarta is not only the capital city but also the largest city and primary port city in Indonesia. Jakarta is the third largest city in the world based on metropolitan population (American Live Wire, 2012). As the economic center of Indonesia, Jakarta generates approximately 70% of Indonesia’s capital flows.

On September 29, 2012, Joko Widodo (known to all as Jokowi) and Basuki Tjahaja Purnama (known by his Chinese nickname as Ahok) were elected as the Governor and the Deputy Governor, respectively, for the local government in Jakarta. The Governor won the second-round voting despite his absolute lack of experience in either national or state-level politics. Traditionally, the Governors of the Special Capital Region of Jakarta descended from Indonesian military or high politics. The Governor was the Mayor of Surakarta (a small city in the Java Island), whereas the Deputy Governor was the head of Belitung Regency (a small island in the Sumatra region). They (and the coalition of two political parties) won the second-round election over the incumbent who built his career in Jakarta politics since 1987, by promoting their shared reform visions, “The New Jakarta” (“Jakarta Baru” in Indonesian), during the gubernatorial elections campaign. It promised the provision of citizen-centric public services through greater local government transparency and cuts in bureaucracies to improve government performance (“Jakarta Baru 2012”). It also promised that the Governor would spend one hour in his office and the rest of the time for site visits to identify the bureaucratic inefficiency and corruption problems, provide timely decision-making and closely monitor government performance and quality.

### 4. Research Methods

#### 4.1. Research Design and Data Collection

A comprehensive review of the literatures was undertaken to develop a new theoretical framework for understanding determinants of social media-enabled government transparency, which was earlier presented in Figure 1. We used a longitudinal multi-method research design, with repeated observations of the same local government-organization over time, to address the remaining two research questions identified earlier in this article.

The Jakarta’s local government generated YouTube videos show video title, with the standard metadata structure: [upload date] [actor] [activity] [part]. The [part] was occasionally used to show long videos as separate parts. In this research, each part of a video is treated as a single video because it shows its own viewer-generated comments, rating and number of viewers.

Table 1. Data Collection from Two Observation Periods

	Observation 1	Observation 2
Data Collection Period	17 October 2012 – 4 January 2013	17 October 2013 – 4 January 2014
Number of downloaded videos	266	248
Number of content analyzed videos	250	245
Total Video viewing time	152 hours 33 minutes and 4 seconds	145 hours 30 minutes and 9 seconds
Average video duration	36.6 minutes	35.6 minutes
<b>Total</b>	<b>495</b>	

As of March 28, 2014, Jakarta’s local government uploaded 1,635 videos to YouTube through its official account “PemprovDKI” since its inauguration on October 15, 2012. In this longitudinal research, we made two observations, with each period lasting the same duration of 80 days. The crawler retrieved information on both the number of all the uploaded government-generated YouTube videos and the number of viewers through the YouTube API. As Table 1 above shows, we collected the YouTube videos which had been produced and

uploaded by the government during each observation period: 266 videos and 248 videos. *Based on each video's title and metadata, "actor",* we eliminated four inauguration videos and fifteen videos showing other actors than "Governor", "Deputy Governor" or both. After the elimination, we had datasets of 250 from Observation 1 and 245 from Observation 2, with a combined sample of 495 YouTube videos (or 30% of the population of the uploaded videos). On average, the duration of these YouTube videos we viewed and analyzed is 36 minutes.

#### 4.2. Video Content Classification Scheme

As discussed earlier in the Theoretical Foundation and Framework section, we drew on the dynamic capability theory on *dynamic leadership capabilities to identify the leaders' goal-directed activities*; not leadership styles or leaders' character traits. Based on the insights from this literature, we developed a new video content classification scheme on the main activities performed by the political leaders. Table 2 below shows *seven categories* used to understand how government actually used an official government YouTube channel immediately after the inauguration since October 2012.

Table 2. Seven Categories of Video Content Classification	
Political Leaders' Activity	Operational Definition
High-Level Political Meetings	High-level internal meetings with internal and/or external stakeholders (e.g. policy makers, politicians, decision makers and senior public administrators) to discuss key political issues of interest to the public from perspectives of "The New Jakarta" reform visions
Community Engagement	Activities to promote informal social interactions and exchanges between the Governor (or less frequently, the Deputy Governor) and local citizens through community events.
Site Visits	Direct observation activities for face-to-face fact-finding with citizens and government officials alike, engaged by the Governor (or on rare occasions by the Deputy Governor) outside his Executive Office
Press/Media Conferences	News media interviews given by either the Governor or the Deputy Governor
Ceremonies	Activities of the government officials who represent the local government in sponsoring an official ceremonious event
Public Speeches	Invited keynote speeches delivered by the Governor or the Deputy Governor at seminars and workshops
Making/Hosting Honorary Visits	Official gubernatorial visits to a place or an event to represent the government to interact with other parties or agencies, as well as official gubernatorial receptions for other parties or agencies

Of the seven categories, we consider *High-level Political Meetings*, *Community Engagement* and *Site Visits* clearly as institutional reform-oriented political activities, whereas *Ceremonies* and *Hosting/Making Honorary Visits* are not reform-oriented in nature. *Press/Media Conferences* and *Public Speeches* are mixed in terms of reform-oriented activities that were briefed or explained during the media interviews.

#### 4.3. Main Issues Discussed on High-Level Political Meeting Videos

Since the *High-Level Political Meeting videos* are considered as the most reform-minded strategy, all the videos in this category are further classified into four main issues based on the insights from the exiting literatures: (1) Institutional Reform and Governance, (2) Budget Transparency, (3) Investment Climate Improvement, and (4) Corruption Eradication.

#### 4.4. Inter-Rater Reliability

For the Observation 2, two Indonesian coders, who hold Indonesian university lecturer positions in Information Systems with master's degree in computer science, viewed the sample of 245 government-generated YouTube videos in Indonesian language. Independently, they classified the videos into one of the seven categories. The inter-rater reliability between the two coders at this initial step was 84.8%. In contrast, for

the Observation 1, only one of the aforementioned raters viewed and classified the sample of 250 YouTube videos.

Of the category of High-Level Political Meeting videos for the Observation 2, the same coders classified the videos into one of the four main issues, again independently. The inter-rater reliability between the two coders was 86.7%. For the Observation 1, only one rater was engaged to classify the 250 videos into one of the four issues.

## 5. Results

### 5.1. Descriptive Statistics on Government-Generated YouTube Videos

Tables 3-4 present descriptive statistics of the 250 (Observation 1) and 245 (Observation 2) government-generated YouTube videos we analyzed for this study. Of the political activities listed in the first column of each Table, the *High-Level Political Meetings*, *Community Engagement*, and *Site Visits* are shown in gray shade, because they are considered as *institutional reform-oriented* in this study and they are of high interest. Operational definitions of these activities were provided in the Methodology section (see Table 2).

Political Activities	Number of YouTube Videos (%)	Average Length of a Video (in seconds)	Average Number of Viewers	Average Viewer-Generated Comments per Video	Average Viewer-Generated Rating of a Video
High-Level Political Meetings	90 (36%)	3,194	48,773	310	4.96
Community Engagement	77 (31%)	2,195	29,161	268	4.98
Site Visits	33 (13%)	1,183	21,022	212	4.95
Press/Media Conferences	33 (13%)	485	17,044	222	4.97
Ceremonies	8 (3%)	2,513	16,214	130	4.98
Public Speeches	5 (2%)	2,600	24,296	379	4.97
Making/Hosting Honorary Visits	4 (2%)	1,134	15,936	226	4.94
<b>Total</b>	<b>250 (100%)</b>		<b>7,815,549</b>		

Political Activities	Number of YouTube Videos (%)	Average Length of a Video (in seconds)	Average Number of Viewers	Average Viewer-Generated Comments per Video	Average Viewer-Generated Rating of a Video
High-Level Political Meetings	85 (35%)	2,716	3,892	46	4.96
Community Engagement	65 (26%)	1,821	4,465	43	4.96
Site Visits	37 (15%)	966	6,476	59	4.98
Press/Media Conferences	21 (9%)	1,570	5,754	49	4.97
Ceremonies	8 (3%)	1,817	3,787	36	4.99
Public Speeches	16 (7%)	4,355	6,040	45	4.99
Making/Hosting Honorary Visits	13 (5%)	1,669	4,252	49	4.95

<b>Total</b>	<b>245 (100%)</b>		<b>1,163,669</b>		
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For each category of political activities captured in the videos, Tables 3-4 show the number of YouTube videos (and percentage), the average length of a YouTube video (in seconds), the average number of viewers, the average number of viewer-generated comments per video, and the average viewer-generated rating of a video. The third column of Table 3 shows that the longest average duration of videos is 3,194 seconds (or 53 minutes) for the *High-Level Political Meetings*' videos, whereas the shortest average duration is 485 seconds (or 8 minutes) for the *Press/Media Conferences* category. In contrast, the third column of Table 4 shows that the longest average duration of videos is 2,716 seconds (or 45 minutes) for the *High-Level Political Meetings*' videos, while the shortest average duration is 966 for the Site Visits videos. The local government-generated videos across all the categories, except the *Press/Media Conferences* category, are much longer than the norm of YouTube video length. A large-scale analysis of 2.5 million unique YouTube videos found that the average length of a YouTube video was 4 minutes and 12 seconds (Sysomos, 2010). Finally, YouTube video-sharing website provides users with a video rating function. All categories of political activities received an excellent average rating (out of the maximum of 5.0). Ratings ranged from 4.94 for the Ceremonies category to 4.98 for the Site Visits and the Press/Media Conferences categories. The overall high-level ratings mean that the viewers would recommend their friends to view the government-generated YouTube videos.

During the Observation 1 period, the 250 government-generated YouTube videos attracted *a total of 7,815,549 viewers during the 80-day data collection period of this research*. Descriptive statistics on Jakarta's net-savvy citizens who viewed the government-generated YouTube videos are shown in the columns 4-5 of Table 3. Given the vast array of other user-generated videos available on YouTube for choice, we argue that the average number of viewers for the category may be used *as a proxy for measuring the level of citizens' political interest, participation, and interaction in the category of political activities* captured by the government-generated videos on YouTube.

Of the Observation 1 period, we found that the *High-Level Political Meetings*, the *Community Engagement* and the *Site Visits* categories attracted the highest (48,773), the second highest (29,161) and the fourth highest (21,022) average number of viewers. As we discussed earlier, videos in these three categories show *the political activities that are institutional reform-oriented*. We also found that the *Public Speeches* category received the third highest average number of viewers (24,296), even though it is not reform-oriented and the number of videos was only 5. One of the videos showed that the Governor, who had been criticized by the oppositions for his lack of national and state-level public administration and political experiences, represented the Office of the Governor of Jakarta Capital Region when he interacted competently and confidently with Singapore's ambassadors and diplomats. Jakarta's net-savvy citizens must have liked these videos.

An analysis on the average number of viewer-generated comments per video showed that the *High-Level Political Meetings* and the *Site Visits* generated the second (310) and the third (268) highest comments per video from the viewers. These two categories are institutional reform-oriented. In contrast, one of the non-reform categories, the *Public Speeches*, attracted the highest average number of viewer-generated comments per video. Finally, YouTube video-sharing website provides users with a video rating function. All categories of political activities received an excellent average rating (out of the maximum of 5.0). Ratings ranged from 4.94 for the Ceremonies category to 4.98 for the Site Visits and the Press/Media Conferences categories. The overall high-level ratings mean that the viewers would recommend their friends to view the government-generated YouTube videos.

## **5.2. Institutional Reform-Oriented Political Activities: Observation 1 and Observation 2**

We performed content analysis of the 90 videos classified into the *High-Level Political Meetings* category to identify key issues captured and communicated by the local government. Figure 2 below shows our analysis results. We found four categories of political issues: *Bureaucratic Reform and Governance*, *Budget Transparency*, *Investment Climate Improvement* and *Corruption Eradication*. There are 47 videos (or 52%) in which *bureaucratic reform and governance* issues were discussed. A prime example is a video in which the Governor told the Mayors and Heads of Districts and Sub Districts at the meeting about the need to transform the ways which they interact with local citizens, by adopting a new mindset of a public servant, away from their bureaucratic mindset. In another video, the Deputy Governor had a series of meetings with several government agencies in healthcare services for radically improving healthcare access for the poor through the new "Jakarta Health Card" program. The Deputy Governor discussed the coherent and fair governance structure and processes for enhancing agency readiness for the Jakarta Health Card program, which was one of his campaign promises. The governance structure and processes for better inter-agency cooperation seem to reflect the new local government leadership's political will to better respond to the citizen needs.

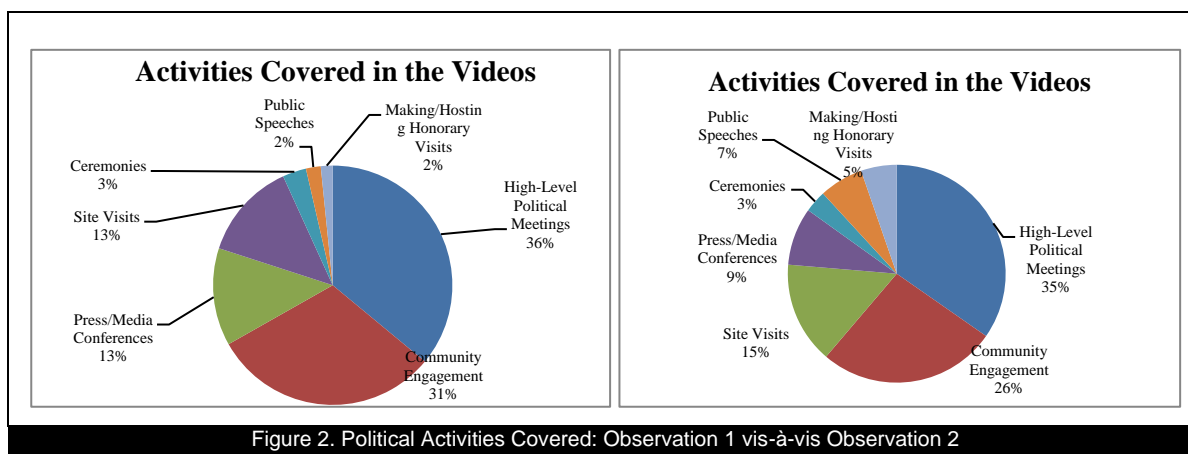


Figure 2. Political Activities Covered: Observation 1 vis-à-vis Observation 2

There are 33 videos (37%) in which the 2013 *budget transparency* issues were discussed. A prime example is a video which was viewed by 1,470,188 viewers. In this video the Deputy Governor discussed 25% deep cuts in the 2013 budget proposed from the Department of Civil Works and others. In other videos, the Governor and the Deputy Governor discussed the priority programs for the 2013 budget at the parliament. These videos made the political decision making process transparent regarding the priority programs and the budget allocation. There are 6 videos (or 7%) in which *investment climate* issues were discussed. A prime example is a video in which the Deputy Governor met with the labor union representatives during their street demonstration on October 24, 2012. The Deputy Governor discussed their demand for the 40% regional minimum wage increase, which generated strong responses from 90 companies in Jakarta, indicating the intent to move their investments out of Jakarta. Other videos show the Deputy Governor’s meetings with businesses to create a new investment climate of transparency through a new public service office, “One Stop Service,” to facilitate new business investment in Jakarta. Finally, there are 4 videos (4%) in the *High-Level Political Meetings* category in which *corruption eradication* issues were discussed. A prime example is a video in which the Governor visited the Corruption Eradication Commission (KPK) to discuss new measures for identifying the potential government corruption based on the KPK’s analysis of the proposed 2013 budget. The Governor also discussed the KPK recommendations for better procurement process, better fraud reporting mechanism and enhanced public information access regarding government fraud cases. Another video shows the Governor’s meeting with the Audit Board of Republic Indonesia (BPK) regarding the implementation of a new “e-audit” system for the local government. Using the e-audit, The BPK argued for the new “e-audit” as ICT tools for detecting budget misuse or corruption.

When we compared the two Tables 3-4, it is clear that, over time, the number of viewers was significantly reduced to 1,163,669 during our Observation 2 period, down from 7,815,549 viewers during our Observation 1 period. Did Jakarta’s local government lose its initial momentum to sustain its promised institutional reforms through the official government’s YouTube channel? Figure 2 shows the two political leaders’ activities during the Observation 1 period in comparison to those during the Observation 2 period. In this study we consider the *High-Level Political Meetings*, *Community Engagement*, and *Site Visits* as institutional reform-oriented political activities, and hence they are of our high interest to answer the second question. The *High-Level Political Meetings* is 36% (N=90) for the Observation 1 period in comparison to 35% (N=85) for the Observation 2 period. The *Community Engagement* is 31% (N=77) for the Observation 1 period, whereas it is decreased down to 26% (N=65) for the Observation 2 period. The *Site Visits* is 13% (N=33) for the Observation 1 period vis-à-vis 15% (N=37) for the Observation 2 period, showing a slight increase. Overall, the political leaders’ institutional reform-oriented activities slightly reduced from 80% for the Observation 1 period to 76% for the Observation 2 period. Based on these findings, the supply-side (government’s) institutional reform efforts did not change radically over time.

Does this mean that the demand-side (citizens’) interest in the government’s institutional reform initiatives waned over time? The average number of viewers per video for the *High-Level Political Meetings* per video was 48,773 for the Observation 1 period vis-à-vis 3,892 for the Observation 2 period, which shows a radical change in citizens’ interest in the *High-Level Political Meeting* videos. The average number of viewers per video for the *Community Engagement* was 29,161 for the Observation 1 period, which was significantly reduced to 4,465 for the Observation 2 period. Finally the average number of viewers per video for the *Site Visits* was 21,022 for the Observation 1 period, which was changed to 6,476 for the Observation 2 period. These findings of this study indicate that a radical change – the reduction – in citizens’ interest in viewing the government’s institutional reform-oriented YouTube videos.

### 5.3. Main Issues Covered by High-Level Political Meetings

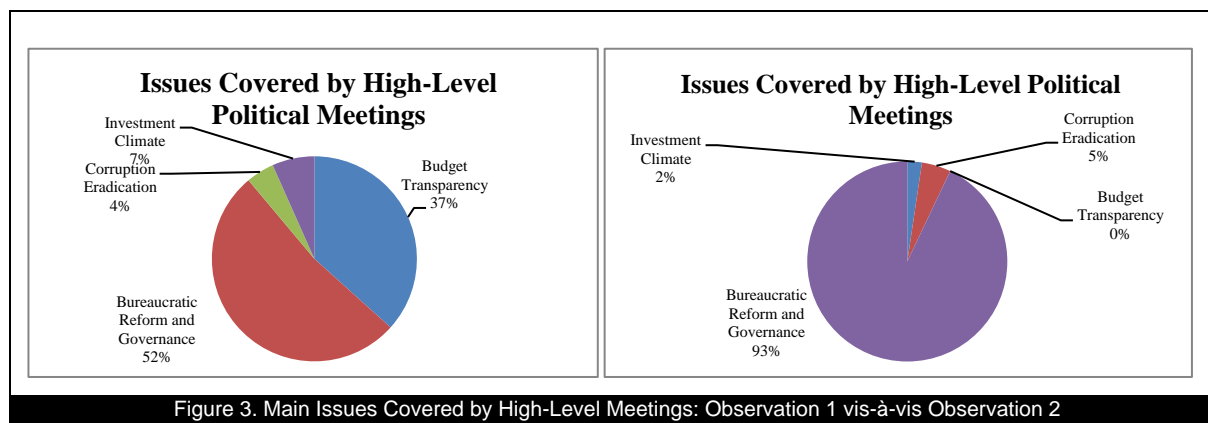


Figure 3. Main Issues Covered by High-Level Meetings: Observation 1 vis-à-vis Observation 2

Previously, Jakarta's local governments held high-level political meetings under a closed-door policy, sustaining a critical and fundamental flaw in policy-making and fueling government inefficiency and corruption. Effective use of YouTube can open doors to the high-level political meetings and visually link citizens with the political leaders in action in discussing the main issues that matter to the institutional reform initiatives in progress. Figure 3 compares the main issues covered by the *High-Level Political Meetings* videos between the Observation 1 period and the Observation 2 period. Bureaucratic reform and governance issues (52%) dominated the meetings held during the Observation 1 period but during the Observation 2 period they radically increased to 93%. Meanwhile, with 37% budget transparency issues were the second most frequently discussed issues during the Observation 1 period. However, the budget transparency issue was totally absent during the Observation 2 period. This radical change may be explained by the recent launch of the open budget data initiative by Jakarta's local government, which allows citizens to openly examine the local government's proposed and approved budget line items for all the programs and for all the public services (Jakarta Government, 2014). Indonesia at the national government level was one of the founding members of Open Government Partnership established in 2012 as a global platform for promoting open government and open data best practices among its 63 member nations. Finally, investment climate issues declined from 7% for the Observation 1 period to 2% for the Observation 2 period, whereas corruption eradication issues slightly increased from 4% to 5% over time.

### 5.4. Logistic Regression Analysis

This section empirically tests, through logistic regression, our theoretical framework outlined in the beginning of our article.

#### 5.4.1. Dependent Variable

As we discussed earlier in our second section on Theoretical Foundation and Framework, our theoretical framework (see Figure 1) shows social media-enabled government transparency (GT) as our dependent variable, which we hold as essential for institutional reform. Based on this theoretical framework, we postulate that traditionally murky or opaque processes of opening the government and making its policy making more transparent to its citizens can be facilitated by government use of social media, or in this research, government use of an official YouTube channel, and its visualization effects on citizens who are YouTube video viewers.

For logistic regression analysis, the dependent variable GT is measured by the category of government-generated YouTube videos. As discussed in our Research Methods section, of the seven categories, we consider *High-level Political Meetings* clearly as *institutional reform-oriented political activities* captured by the government-generated YouTube videos. We hold that this category of YouTube videos is positively associated with the generation of GT. Therefore, we assign a numeric value of 1 if a given YouTube video represents high-level political meetings (Table 5). In contrast, the other two categories (Community Engagement and Site Visits) which are reform-oriented, as well as the four non-reform-oriented categories (Press/Media Conferences, Ceremonies, Public Speeches, and Making/Hosting Honorary Visits) are assigned a numeric value of 0. This

strategic choice is made *because the High-Level Political Meetings represent the most reform-minded strategy*, which we want to test using logistic regression.

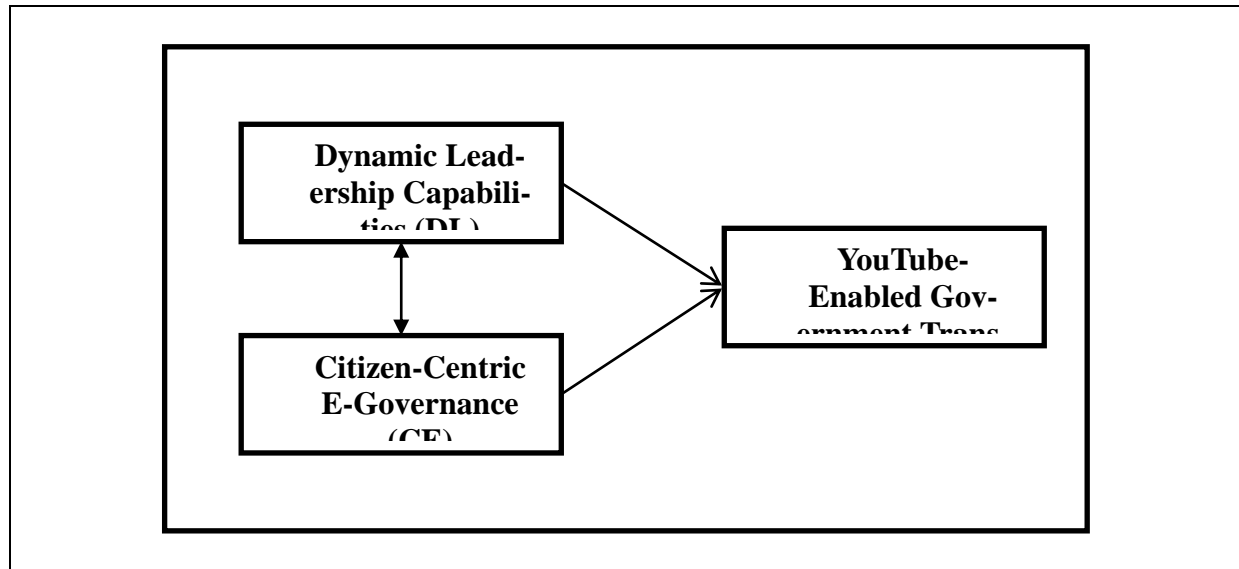


Figure 4. Research Model for Logistic Regression

Table 5: Descriptive Statistics of Dependent and Independent Variables

	N	Minimum	Maximum	Mean	Std. Dev.
Government Transparency (GT)	495	0.00	1.00	0.35	0.48
Dynamic Leadership Capability (DL)	495	0.00	1.00	0.46	0.49
Viewers (NV)	495	1055	1470188	18139.83	73830.91
Rating (VR)	495	4.46	5.00	4.96	0.05
Comments (NC)	495	4.00	989.00	148.17	178.23

#### 5.4.2. Independent Variables

As discussed in our Theoretical Foundation and Framework section, social media-enabled government transparency (GT) is associated with two constructs: Dynamic leadership capabilities (DL) and citizen-centric e-governance (CE) (Table 5). In our Research Model (shown in Figure 5), DL represents a supply-side (or government controlled) construct, whereas CE is viewed as a demand-side (or citizen controlled) construct. We hold that DL, CE and the interplay between DL and CE are positively associated with the generation of GT.

The construct of DL is categorical in nature and measured by the actor in a given video. As discussed in our research context, the dynamic leadership capability has been demonstrated by the Governor during his election campaign with the new reform vision towards “The New Jakarta” and in the immediate aftermath of the inauguration of the new local government. His campaign promise was to spend one hour in his office and the rest in the Jakarta streets to achieve his new reform vision. Hence, we assign a numeric value of 1 if the actor of a given YouTube video is the Governor (“Jokowi”), whereas we assign a numeric value of 0 for the Deputy Governor (“Ahok”) if he is shown as the actor. While the Deputy Governor seemed to be technically competent and diligent administrator, he was not portrayed by Indonesian mass media as a politician with dynamic leadership capability. If both the Governor and Deputy Governor were identified we assigned a score of 0.5.

Evidently, citizens also view Jokowi as a unique political leader with dynamic leadership capability even to lead the nation. Today Jokowi is officially a candidate for the 2015 presidential election, with 43% of the popular vote even before his official nomination was announced (The Economist, 2014). His open, entrepreneurial, and transformative leadership has been in stark contrast to Indonesia’s typical political leaders. Previously, Jakarta’s local governments held high-level political meetings under a closed-door policy, sustaining a critical and fundamental flaw in policy-making and fueling government inefficiency and corruption.

The construct of CE is measured by three variables: (1) the number of citizens who viewed a given YouTube video generated by the local government (NV), (2) the viewer rating of a given YouTube video (VR) using a standard rating scale provided by the YouTube website, and (3) the number of written comments generated by citizen viewers of a given YouTube video (NC).

#### 5.4.3. Logistic Regression Model

Since our dependent variable in the logit model, reform-oriented YouTube videos for measuring government transparency, is categorical (value of 0 or 1) in nature, modelling the relationship between the categorical variable and predictor variable (or independent) variables is best achieved through the logistic regression model. Logistic regression (or “a logit model”) has been used in various academic research fields to estimate the effects of several independent variables on a categorical dependent variable such as cancer survival among patients or information system adoption among firms. In this research, four factors are tested as independent variables using logistic regression in distinguishing reform-oriented YouTube videos for government transparency (GT) from non-reform oriented YouTube videos. For a logit model of YouTube-mediated government transparency (GT) as a function of supply-side independent variable: dynamic leadership (DL) and also as a function of demand-side independent variables: the number of citizen viewers (NV), viewer rating (VR), and the number of citizen comments (NC). Logit models were tested with SPSS and we generated coefficients in the form of log-relative odds among a sample of 495 government-generated YouTube videos analyzed in this research.

Table 6 shows the logistic regression model results with GT as the dependent variable regressed against the four independent variables. The regression model shows that two of the four independent variables were statistically significant. The number of comments, or NC, predicted government transparency, and dynamic leadership predicted transparency as well. It should be noted, that dynamic leadership was found to be significant, but in the opposite direction that we predicted. This could suggest that Deputy Governor (“Ahok”) may be a determinant to government transparency. According to both our video content analysis and media accounts, the Deputy Governor, as competent administrator in implementing new government policies, often performed “exceedingly dramatic” acts of not only cutting largely inflated budget proposals by government agencies, but also admonishing some of their high-level policy makers loudly and angrily in front of the camera. Citizens must have appreciated external political efficacy (Craig et al., 1990) (or perceived fairness of government procedures and outcomes) displayed by Ahok. Arguably, the most highly viewed video showed Ahok on budget transparency and drastic budget cuts.

	Beta	Stand. Error	Wald Statistic	Prob. Sign.	Odds Ratio
DL	-1.54	0.22	48.97	0.00	0.22
NV	0.00	0.00	0.02	0.88	1.00
VR	-0.46	2.02	0.05	0.82	0.63
NC	0.00	0.00	8.23	0.00	1.00
Constant	2.04	10.04	0.04	0.84	7.68
Percent classified correct	64.60				
Nagelkerke R-Square	0.17				
-2 Log likelihood	578.14				

## 6. Discussion

Our analysis results show that the local government-generated YouTube videos captured and dynamically communicated the new government's central message on greater local government transparency. Much of the leaders' political activities captured in the videos are value-adding towards advancing their shared reform visions of "The New Jakarta." This central message seemed to be well received, as the analysis results show that a total of 7.8 million net-savvy citizens viewed and highly rated the videos during our two observation periods of 80 days each, longitudinally, from October 17, 2012 to January 4, 2014. The viewer-generated comments and ratings suggest that the institutional reform processes and the necessary political activities to achieve the reforms were made visible, transparent and comprehensible to the net-savvy ordinary citizens through the visualization effects of YouTube channel.

Our analysis using logistic regression showed that the number of comments (in a form of citizen-centric e-governance measured in this study) and dynamic leadership capabilities predicted greater levels of government transparency. These results show the importance of citizens' democratic e-governance in providing comments on government-generated YouTube videos and having a government official more responsive to citizens' comments and more actively engaged in producing the YouTube videos are important determinates of greater government transparency. This demonstrates citizen-centric e-government, in which citizens and officials take the lead and ask for real reforms and changes of more transparent and open government. Moreover, these findings on social media-enabled citizens' civic engagement in response to government use of social media for achieving government transparency seem to support the validity of the emergent perspective on causal agency in effecting change in social systems (Markus and Robey 1988). Emergent (unpredictable) patterns of social and political interactions between government and net-savvy citizens hold first-order importance in harnessing, realizing benefits from social media network technologies, and achieving greater government transparency.

Therefore, we argue that social media tools by themselves are not sufficient to demonstrate local government transparency. Jakarta's new local government leadership signalled and communicated strong political will and political efficacy to fulfil their "New Jakarta" visions through its rapid-fire reform-oriented political activities. Leadership's strong political will and political efficacy, as part of dynamic capabilities of entrepreneurial leadership, is important to align their political activities with the shared reform visions they promised during the elections campaign. Leaders also play a critical role in governing the government's strategic communication: what information is produced and communicated to citizens in the manner which is in alignment with their reform visions. The inclusion or exclusion of certain attributes in content has important implications for signaling government transparency to stakeholders and building public trust in government. This new social media-enabled government transparency is radically different from the traditional Jakarta politics where high-level political meetings were held under a closed-door policy and the Governors engaged in non-value adding political activities. These findings on the importance of dynamic capabilities of political leadership in our study are consistent to the literature on dynamic capabilities under the dynamically changing strategic environment we reviewed earlier in this article.

The new leaders in Jakarta demonstrated strong political will and political efficacy to advance their shared reform visions by engaging in rapid-fire, energetic political activities: high-level political meetings with internal and external stakeholders and site visits with local citizens and government officials alike for fact-finding at various parts of the city. They then made strategic use of YouTube video-sharing social media channel to capture and communicate their reform-oriented political activities to Jakarta's net-savvy citizens. Only two days after the Governor and the Deputy Governor were inaugurated, government-generated videos were uploaded on YouTube. All the videos show the Special Capital Region of Jakarta logo at the upper-right corner on video frames. Through the strategic use of YouTube, the local government aimed to "open doors" to its net-savvy citizens who could view the YouTube videos and assess the new leadership efforts to make government policy-making governance and political actions transparent. The videos were shot, accompanied by narration in the form of audio and/or captions and uploaded without a video frame edit. On one hand, the government leadership's decision not to edit its YouTube content before its public release may reflect its political will to open government for greater government transparency. On the other hand, the videos showing idle activities made the duration of the YouTube videos longer than necessary.

## 7. Conclusion

While government transparency deficit is rather ubiquitous across the globe, very few governments even in highly developed nations have demonstrated clear evidence of institutional reforms through government transparency. In this longitudinal study, therefore, we have strategically selected a local government with reforms-in-progress through effective implementation of enhanced government transparency. Historically, Jakarta's local governments lacked government transparency, holding high-level meetings under a closed-door policy, sustaining a critical and fundamental flaw in policy-making, and fueling government inefficiency and

corruption. Without critical information of value, citizens were left in the dark and most crucially, they were taking a back seat. Since its October 2012 inauguration, the new Jakarta government, which had promised government transparency during its election campaigns, has swiftly adopted strategic use of YouTube online videos for openly communicating its institutional reform-in-progress and other political decision-making process to Jakarta's net-savvy citizens. This longitudinal study collected, classified, and performed a content analysis of 495 government-generated YouTube online videos, which were viewed, rated, and commented by Jakarta's 7.8-million net-savvy citizens. The study also performed logistic regression analysis to test whether the research model is capable of distinguishing between reform-oriented online videos and non-reform-oriented online videos.

Results of our research suggest that, with the high-level social media monitoring by social media networks (of citizens and mass media), social media can be a powerful channel for increasing institutional reform awareness among citizens through the visualization of the complex and murky process of government transparency and institutional reform. However, results of our research also suggest that the dynamic interplay of entrepreneurial leadership and citizen-centric e-governance is the key to harnessing the socio-political power of YouTube-mediated government transparency, especially when the interplay is sustained over a period of time on a continuous basis.

Based on our analysis results we conclude that two enabling factors are important to increase government transparency in government. Dynamic capabilities of entrepreneurial leadership seem to include strong political will in the face of the complex political challenges involved in institutional reforms, and the ability to align institutional reform visions with effective use of YouTube video sharing platforms to communicating to net-savvy citizens about reform-oriented political activities and institutional reforms in progress.

This exploratory empirical research contributes to the emerging literature on social media-enabled local government transparency. As discussed, very little has been written in the political science and public administration literatures about effective mechanisms for advancing and communicating government transparency to stakeholders. Particularly, studies on local government transparency are still very limited (Sol 2013). E-government research on social media-enabled government transparency is emerging but still new (Bertot et al., 2010; Bertot et al., 2012; Bonsón et al., 2012; Hetherington, 2005). In this exploratory empirical research, we have addressed this research gap in understanding how governments are using social media to promote transparency and increase citizens' awareness and understanding of their reform activities. From our analysis it shows that governments can use social media to promote greater transparency. Therefore, governments should encourage more citizens to go online, so they can become more civically engaged. In addition, governments should combine both digital and non-digital means, perhaps through town hall meetings, that can be online to bridge the digital divide. Findings ways of getting more citizens civically engaged through social media is just part of the important solution.

Our research limitations include our research attention on the dynamic leadership behavior of the two political leaders. Moreover, while we have adopted a longitudinal method, our observation periods are too short to investigate the hypothesized effect of social media-enabled government transparency on greater institutional reform. Our future research directions include an extended longitudinal study of government use of social media for greater government transparency and reviewer-generated comments and ratings to observe the potential changes in communicating local government transparency over a period of time.

## References

- Ahn, M. J., and Bretschneider, S. 2011. "Politics of E-Government: E-Government and the Political Control of Bureaucracy," *Public Administration Review* (71:3), pp. 414-424.
- Ambrosini, V. and Bowman, C. 2009. "What are dynamic capabilities and are they a useful construct in strategic management?," *International Journal of Management Reviews* (11:1), pp. 29-49.
- American Live Wire. 2012. "Top 10 Largest Cities in the World 2013 – Metropolitan Populations." Retrieved March 12, 2013, from <http://americanlivewire.com/top-10-largest-cities-in-the-world-2013/>
- Barreto, I. 2010. "Dynamic capabilities: A review of past research and an agenda for the future," *Journal of Management* (36:1), pp. 256-280.
- Bertot, J. C., Jaeger, P. T., and Grimes, J. M. 2010. "Using Ict's to Create a Culture of Transparency: E-Government and Social Media as Openness and Anti-Corruption Tools for Societies," *Government Information Quarterly* (27:3), pp. 264-271.
- Bertot, J. C., Jaeger, P. T., and Grimes, J. M. 2012. "Promoting Transparency and Accountability through Ict's, Social Media, and Collaborative E-Government," *Transforming Government: People, Process and Policy* (6:1), pp. 78-91.
- Bonsón, E., Torres, L., Royo, S., and Flores, F. 2012. "Local E-Government 2.0: Social Media and Corporate Transparency in Municipalities," *Government Information Quarterly* (29:2), pp. 123-132.
- Carlsson, S. A. and El Sawy, O. A. 2008. "Managing the five tensions of IT-enabled decision support in turbulent and high-velocity environments," *Information Systems and e-Business Management* (5:3), pp. 225-237.
- Chaston, I. and Sadler-Smith, E. 2012. "Entrepreneurial cognition, entrepreneurial orientation and firm capability in the creative industries," *British Journal of Management* (23), pp. 415-432.

- Chatfield, A. T., Akbari, R., Mirzayi, N., and Scholl, H. J. 2012. "Interactive Effects of Networked Publics and Social Media on Transforming the Public Sphere: A Survey of Iran's Leaderless 'Social Media Revolution'," *System Science (HICSS)*, 2012 45<sup>th</sup> Hawaii International Conference on System Sciences, Hawaii, USA, pp. 2552-2562.
- Chatfield, A.T., Brajawidagda, U. 2013. "Twitter early tsunami warning system: A case study of Indonesia's disaster management agencies," *Proceedings of the 46th Hawaii International Conference on System Sciences (HICSS)*.
- Chatfield, A.T., Scholl, H.J. and Brajawidagda, U. 2013. "Tsunami early warnings via Twitter in government: Net-savvy citizens' co-production of time-critical public information services," *Government Information Quarterly* (30:4), Special Issue on Social Media in Government.
- Chatfield, A.T., Scholl, H.J. and Brajawidagda, U. 2014. "#Sandy tweets: Citizens' co-production of time-critical information during an unfolding catastrophe," *Proceedings of the 47th Hawaii International Conference on System Sciences (HICSS)*.
- Chatfield, A.T. and Brajawidagda, U. 2014. "Crowdsourcing hazardous weather reports from citizens via Twittersphere under the short warning lead times of EF5 intensity tornado conditions," *Proceedings of the 47th Hawaii International Conference on System Sciences (HICSS)*.
- Ciborra, C., and Navarra, D. D. 2005. "Good governance, development theory, and aid policy: Risks and challenges of e-government in Jordan," *Information Technology for Development* (11:2), pp. 141-159.
- Craig, S.C., Niemi, R.G., Silver, G.E. (1990). Political efficacy and trust: A report on the NES pilot study items, *Political Behavior*, 12 (3), 289-314.
- Cuillier, D., and Piotrowski, S. J. 2009. "Internet Information-Seeking and Its Relation to Support for Access to Government Records," *Government Information Quarterly* (26:3), pp. 441-449.
- Darling, J. R. and Beebe, S. A. 2007. "Effective entrepreneurial communication in organization development: Achieving excellence based on leadership strategies and vision," *Organization Development Journal* (25:1), pp. 76-93.
- Dess, G. G., Ireland, R. D., Zahra, S. A., Floyd, S. W., Janney, J. J. and Lane, P. J. 2003. "Emerging issues in corporate entrepreneurship," *Journal of Management* (29:3), pp. 351-378.
- Dowley, K. M. 2006. "Local Government Transparency in East Central Europe," *Local Government Studies* (32:5), pp. 563-583.
- Eisenhardt, K. M., Furr, N. R., Bingham, C. B. 2010. "Microfoundations of performance: Balancing efficiency and flexibility in dynamic environments," *Organization Science* (21:6), pp. 1263-1273.
- Eisenhardt, K. M. and Martin, J. A. 2000. "Dynamic capabilities: What are they?," *Strategic Management Journal* (21), pp. 1105-1121.
- Fukuyama, F. 2014. "The decay of American political institutions," *Foreign Affairs* (9:3), pp. 6-19.
- Gauld, R., Goldfinch, S. and Horsburgh, S. 2010. Do they want it? Do they use it? The 'Demand-Side' of e-Government in Australia and New Zealand, *Government Information Quarterly* (27:2), pp. 177-186.
- Gibson, J. L. 2004. *Overcoming Apartheid: Can Truth Reconcile a Divided Nation?* New York: Russel Sage.
- Grigorescu, A. 2003. "International Organizations and Government Transparency: Linking the International and Domestic Realms," *International Studies Quarterly* (47:4), pp. 643-667.
- Grimmelikhuijsen, S. 2009. "Do Transparent Government Agencies Strengthen Trust?," *Information Polity: The International Journal of Government & Democracy in the Information Age* (14:3), pp. 173-186.
- Grimmelikhuijsen, S. G. 2011. "Being transparent or spinning the message? An experiment into the effects of varying message content on trust in government," *Information Polity* (16:1), pp. 35-50.
- Grimmelikhuijsen, S. G. and Welch, E. W. 2012. "Developing and testing a theoretical framework for computer-mediated transparency of local governments," *Public Administration Review* (72:4), pp. 562-571.
- Grimmelikhuijsen, S. G. 2012. "A good man but wizard, about the limits and future of transparency of democratic governments," *Information Polity* (17:3-4), pp. 293-302.
- Grimmelikhuijsen, S. G. 2013. "A good man but a bad wizard. about the limits and future of transparency of democratic governments," *Innovation and the Public Sector* (20), pp. 83-92.
- Helfat, C., Finkelstein, W., Mitchell, M., Peteraf, H., Singh, D., Teece, D., Winter, S.G. 2009. *Dynamic capabilities: Understanding strategic change in organizations*. Oxford: Blackwell Publishing.
- Helfat, C.E. and Winter, S.G. 2011. "Untangling dynamic and operational capabilities: Strategy for the (N)ever-changing world," *Strategic Management Journal* (32:11), pp. 1243-1250.
- Hetherington, M. J. 2005. *Why Trust Matters: Declining Political Trust and the Demise of American Liberalism*. Princeton, NJ: Princeton University Press.
- Ireland, R. D., Hitt, M. A. and Sirmon, D. G. 2003. "A model of strategic entrepreneurship: The construct and its dimensions," *Journal of Management* (29:6), pp. 963-989.
- Jakarta Baru. 2012. "The New Jakarta Vision and Mission." Retrieved January 25, 2013, from <http://jakartabaru.co/home/visimisi>
- Jakarta Government. 2014. "Transparency on Budget Management of Special Capital Region of Jakarta." Retrieved April 4, 2014, from <http://www.jakarta.go.id/web/apbd>
- Kavanaugh, A., Fox, E. A., Sheetz, S. D., Yang, S., Li, L. T., Shoemaker, D. J., Natsev, A. and Xie, L. 2012. "Social media use by government: From the routine to the critical," *Government Information Quarterly* (29), pp. 480-491.
- Kim, S. 2010. "Public Trust in Government in Japan and South Korea: Does the Rise of Critical Citizens Matter?," *Public Administration Review* (70:5), pp. 801-810.
- Kim, S., Kim, H. J., and Lee, H. 2009. "An Institutional Analysis of an E-Government System for Anti-Corruption: The Case of Open," *Government Information Quarterly* (26:1), pp. 42-50.
- Kim, S., and Lee, J. 2012. "E-Participation, Transparency, and Trust in Local Government," *Public Administration Review* (72:6), pp. 819-828.
- Lee, G., and Kwak, Y. H. 2012. "An Open Government Maturity Model for Social Media-Based Public Engagement," *Government Information Quarterly* (29:4), pp. 492-503.
- Lee, K. R., and Lee, K.-S. 2009. "The Korean Government's Electronic Record Management Reform: The Promise and Perils of Digital Democratization," *Government Information Quarterly* (26:3), pp. 525-535.
- Levi, M., Sacks, A., and Tyler, T. 2009. "Conceptualizing Legitimacy, Measuring Legitimizing Beliefs," *American Behavioral Scientist* (53:3), pp. 354-375.
- Linders, D. 2012. "From e-government to we-government: Defining a typology for citizen coproduction in the age of social media," *Government Information Quarterly* (29:4), pp. 446-454.

- Markus, M. L. and Robey, D. 1988. "Information technology and organizational change: Causal structure in theory and research," *Management Science* (34:5), pp. 583-598.
- McCarthy, D. J., Puffer, S. M. and Darda, S. V. 2010. "Convergence in entrepreneurial leadership style: Evidence from Russia", *California Management Review* (52:4), pp. 48-72
- Meijer, A. 2009. "Understanding modern transparency," *International Review of Administrative Sciences* (75:2), pp. 255-269.
- Meijer, A., Bannister, F., and Grimmelikhuijsen, S. 2011. "Being Transparent or Spinning the Message? An Experiment into the Effects of Varying Message Content on Trust in Government," *Information Polity: The International Journal of Government & Democracy in the Information Age* (16:1), pp. 35-50.
- Menguc, B. and Auh, S. 2006. "Creating a firm-level dynamic capability through capitalizing on market orientation and innovativeness," *Journal of the Academy of Marketing Science* (34:1), pp. 63-73.
- Moon, M. J. and Norris, D. F. 2005. "Does managerial orientation matter? The adoption of reinventing government and e-government at the municipal level," *Information Systems Journal* (15:1), pp. 43-60.
- Neshkova, M. I., and Kostadinova, T. 2012. "The Effectiveness of Administrative Reform in New Democracies," *Public Administration Review* (72:3), pp. 324-333.
- Nicholson, N. 1998. "Personality and entrepreneurial leadership: A study of the heads of the UK's most successful independent companies," *European Management Journal* (16:5), pp. 529-539.
- Norris, D. F. and Reddick, C. G. 2013. "Local e-government in the United States: Transformation or incremental change?," *Public Administration Review* (73:1), pp. 165-175.
- Oliver, T. R. and Paul-Shaheen, P. 1997. "Translating ideas into actions: Entrepreneurial leadership in state health care reforms," *Journal of Health Politics, Policy and Law* (22:3), pp. 721-788.
- Open Government Partnership. 2013. OGP Annual Report 2013. <http://www.opengovpartnership.org/> (Accessed January 6 2014).
- Pandza, K. and Thorpe, R. 2009. "Creative search and strategic sense-making: Missing dimensions in the concept of dynamic capabilities," *British Journal of Management* (20), pp. S118-S131.
- Parent, M., Vanderbeek, C. A. and Gemino, A. C. 2005. "Building citizen trust through e-government," *Government Information Quarterly* (22:4), 720-736.
- Pavlou, P. A. and El Sawy, O. A. 2011. "Understanding the elusive black box of dynamic capabilities," *Decision Sciences* (42:1), pp. 239-273.
- Pavlou, P.A. and El Sawy, O.A. 2006. "From IT leveraging competence to competitive advantage in turbulent environments: The case of new product development," *Information Systems Research* (17:3), pp. 198-227.
- Picazo-Vela, S., Gutiérrez-Martínez, I., and Luna-Reyes, L. F. 2012. "Understanding Risks, Benefits, and Strategic Alternatives of Social Media Applications in the Public Sector," *Government Information Quarterly* (29:4), pp. 504-511.
- Prasojo, E. 2012. "Bureaucratic Reform Beyond Realization?," in: *Jakarta Post*, p. 7.
- Reddick, C. G. 2005. "Citizen interaction with e-government: From the streets to servers?," *Government Information Quarterly* (22:1), pp. 38-57.
- Reddick, C. G. 2004. "A two-stage model of e-government growth: Theories and empirical evidence for US cities," *Government Information Quarterly* (21:2), pp. 51-64.
- Reddick, C. G. 2011<sub>a</sub>. "Citizen-centric e-governance and innovative developments of public services," *Innovation and the Public Sector* (15), pp. 217-233.
- Reddick, C.G. 2011<sub>b</sub>. "Citizen interaction and e-government Evidence for the managerial, consultative, and participatory models," *Transforming Government: People, Process, and Policy* (5:2), PP. 167-184.
- Relly, J. E., and Sabharwal, M. 2009. "Perceptions of Transparency of Government Policymaking: A Cross-National Study," *Government Information Quarterly* (26:1), pp. 148-157.
- Prieto, L. C. 2010. "Proactive personality and entrepreneurial leadership: Exploring the moderating role of organizational identification and political skills," *Academy of Entrepreneurship Journal* (16:2), pp. 107-121.
- Rosenbloom, R.S. 2000. "Leadership, capabilities, and technological change: The transformation of NCR in the electronic era," *Strategic Management Journal* (21:10-11), pp. 1083-1103.
- Rubio, A., Rosenblatt, Z. and Hertz-Lazarowitz, R. 2010. "Entrepreneurial leadership vision in nonprofit vs. for-profit organizations," *Leadership Quarterly* (21:1), pp. 144-158.
- Santora, J. C., Seaton, W. and Sarros, J. C. 1999. "Changing times: Entrepreneurial leadership in a community-based nonprofit organization," *Journal of Leadership and Organizational Studies* (6:3-4), pp. 101-109.
- Scholl, H.J. and Chatfield, A.T. 2014. "The role of resilient information infrastructures: The case of Radio Fukushima during and after the 2011 Eastern Japan Catastrophe," *International Journal of Public Administration in the Digital Age* (1:2), 2014 (in print).
- Shirky, C. 2011. "The Political Power of Social Media," *Foreign Affairs* (90:1), pp. 28-41.
- Sol, D. A. d. 2013. "The Institutional, Economic and Social Determinants of Local Government Transparency," *Journal of Economic Policy Reform* (16:1), pp. 90-107.
- Sysomos. 2010. "Inside Youtube Videos." Retrieved March 26, 2013, from <http://www.sysomos.com/reports/youtube/>
- Teece, D. 2000. "Strategies for managing knowledge assets: The role of firm structure and industrial context," *Long Range Planning* (33:1), pp. 35-54.
- Teece, D. J., Pisano, G. and Shuen, A. 1997. "Dynamic capabilities and strategic management," *Strategic Management Journal* (18:7), pp. 509-533.
- Teece, D. J. 1998. "Capturing value from knowledge assets: The new economy for know-how and intangible assets," *California Management Review* (40), pp. 55-78.
- Teece, D. J. 2006. "Reflections on "Profiting from innovation"", *Research Policy* (35), pp. 1131-1146.
- Teece, D. J. 2007. Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance, *Strategic Management Journal* 28, 1219-1350.
- The White House. 2009. Memorandum for the Heads of Executive Departments and Agencies: Transparency and Open Government. [http://www.whitehouse.gov/sites/default/files/opengov\\_report.pdf](http://www.whitehouse.gov/sites/default/files/opengov_report.pdf). (Accessed December 10 2009)
- Transparency International. 2012. "Corruption Perceptions Index 2012." Retrieved January 21, 2013, from [http://files.transparency.org/content/download/533/2213/file/2012\\_CPI\\_DataPackage.zip](http://files.transparency.org/content/download/533/2213/file/2012_CPI_DataPackage.zip)
- YouTube. 2013. Statistics. <http://www.youtube.com/yt/press/statistics.html>. (Accessed March 23 2013)
- US Executive Office of The President. 2009. "Open Government Directive." WASHINGTON, D.C.
- von Haldenwang, C. 2004. "Electronic Government (E-Government) and Development," *European Journal of Development Research* (16:2), pp. 417-432.
- Wikipedia. 2012. "Youtube." Retrieved November 27, 2012, from <http://en.wikipedia.org/wiki/YouTube>
- Winter, S. G. 2003. "Understanding dynamic capabilities," *Strategic Management Journal* (24 ) Special Issue, pp. 991-995.