YouTube-Enabled Government Transparency

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Presentation Outline

- Introduction
  - Government transparency & corruption
  - Effects of government corruption
  - Open government policy and social media
- Research Questions
- Research Background
- Research Methodology
- Results
- Discussion
- Conclusion
Government Transparency

- Critically important to reduce government corruption (Bertot et al., 2010; Bertot et al., 2012; Kim et al., 2009)

- More than 2/3 of countries scored Corruption Perception Index (CPI) < 50 on a scale from 0 (very corrupt) to 100 (very clean) (Transparency International, 2014)
Effects of Government Corruption

- diminishes political accountability and legitimacy (Levi et al., 2009)
- erodes citizens’ trust in government (Anderson & Tverdova, 2003; Kim, 2010; Levi et al., 2009)
- discourages citizens’ political engagement (Heatherington, 2005; Levi et al., 2009)
- Discourages their positive evaluations of political system performance (Anderson & Tverdova, 2003)
- threatens economic growth (Transparency International, 2014)
- negatively impacts on government performance, including effective and efficient public services delivery (Kim, 2010)
Open Government Policy

- In the new era of ubiquitous digitalization of business, government and society, open government policies in the U.S., such as the Open Government Directive (U.S. Executive Office of the President, 2009), aim to create a new culture of openness in government for achieving:
  - greater government transparency
  - citizen engagement
  - inter-agency collaboration
  - through the use of Web 2.0 technologies and social media in government.
YouTube Video/ Content Sharing Platform

- Has 1 billion unique users (YouTube, 2015)
- Can provide “greater digitally induced visibility” (Rhue & Sundararajan, 2014, p. 40)
- Positive network effects (Goldenberg et al., 2012; Susarla et al., 2012)
- Social influence (Cortese & Roffitt, 2012; Susarla et al., 2012; Yoganarasimhan, 2012)
- Political influence (Chatfield et al., 2014; Vraga et al., 2014)
Motivation for This Research

- Despite the literature on the socio-political power of YouTube, however, YouTube-enabled government transparency in general, and YouTube-enabled local government transparency in particular, have not received necessary attention in information systems (IS) literature.

- Moreover, despite the growing literature on the negative impacts of national government transparency, little has been written on local government transparency and its determinants (del Sol, 2013).
Research Questions

- **QS1**: How is YouTube-enabled government transparency conceptualized and what are its determinants?

- **QS2**: How do political leaders leverage the (potential) socio-political power of YouTube networks to communicate their reform-oriented local government transparency initiatives to the public?
Theoretical Framework for YouTube-Enabled Government Transparency
YouTube-Enabled Government Transparency

- Our focal construct of interest
- The ends for which the government uses YouTube as means for *magnifying* its capability to communicate complex government transparency initiatives more simply, more concretely, and more clearly to the net-savvy public for their political support and engagement.
- Public administration literature has focused on positive or negative consequences of government transparency.
- But less is known about its determinants.
Concepts of Government Transparency


- Grimmelikhuijsen and Welch (2012) explored three dimensions of computer-mediated government transparency: decision-making transparency, policy information transparency, and policy outcome transparency

- More recently, a new attention has been paid to the institutional, social, and economic determinants of government transparency

- In our research, we view YouTube as a technological enabler for facilitating government transparency.

- We also view transformational political leadership (institutional) and citizen engagement in the political process (social) dimensions of determinants of government transparency.
Citizen Engagement

- Citizens rate videos to share their approvals or disapprovals
- Citizens volunteer their insights into political issues
- Citizens view videos for seeking government information
- Government produces & posts YouTube videos

Increased Policy Success through Engaged Citizens

Enhanced Democracy through Citizen-Centric E-Governance

Enhanced Public Services through Informed Citizens

Government Transparency Initiatives to Garner the Public's Approval

(Reddick, 2011; Gould et al., 2010)
Transformational Leadership

- Salient components of TL (Bass, 1990; Bass and Steidlmeiser, 1999; Burns, 1978; Yammarino and Bass, 1991)
  - Actor
  - Actions
- Rafferty & Griffin (2004) factor analysis: 5 dimensions of TL
  - vision
  - inspirational communication
  - intellectual stimulation
  - supportive leadership
  - personal recognition
Research Background

- Special Capital Region of Jakarta with over 28 M population
- On September 29, 2012 Joko Widodo (also popularly known as Jokowi) and Basuki Tjahaja Purnama (known by his Chinese nickname as Ahok) – with their absolute lack of experience in either national or state-level politics – were elected as the Governor and the Deputy Governor for Jakarta local government.
- They promoted their shared reform visions, “The New Jakarta” ("Jakarta Baru" in Indonesian), during the gubernatorial elections campaign.
- They pledged the provision of citizen-centric public services through greater government transparency and cuts in bureaucracies to improve government performance.
- Jokowi would spend one hour in his office and the rest of the time for site visits (e.g., poor neighborhood and frequently flooded areas) to identify the bureaucratic inefficiency and corruption problems.
2012 Campaign on “The New Jakarta”
CPI

CPI=32 Indonesia
YouTube standard metadata structure: [upload date] [actor] [activity] [part].

A longitudinal, multi-method study with two time points of data collection, spanning from October 17, 2012 to January 4, 2014

A dataset of 495 government-generated YouTube videos from the Jakarta local government’s official YouTube channel

<table>
<thead>
<tr>
<th>Table 1. Data Collection from Two Observation Periods</th>
<th>Observation 1</th>
<th>Observation 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of downloaded videos</td>
<td>266</td>
<td>248</td>
</tr>
<tr>
<td>Number of content analyzed videos</td>
<td>250</td>
<td>245</td>
</tr>
<tr>
<td>Total Video viewing time</td>
<td>152 hours 33 minutes and 4 seconds</td>
<td>145 hours 30 minutes and 9 seconds</td>
</tr>
<tr>
<td>Average video duration</td>
<td>36.6 minutes</td>
<td>35.6 minutes</td>
</tr>
<tr>
<td>Total Video viewing time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Video viewing time</td>
<td>495</td>
<td></td>
</tr>
</tbody>
</table>
### Table 2. Seven Categories of Video Content Classification

<table>
<thead>
<tr>
<th>Political Leaders’ Activity</th>
<th>Operational Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-Level Political Meetings</td>
<td>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</td>
</tr>
<tr>
<td>Community Engagement</td>
<td>Activities to promote informal social interactions and exchanges between the Governor (or less frequently, the Deputy Governor) and local citizens through community events.</td>
</tr>
<tr>
<td>Site Visits</td>
<td>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</td>
</tr>
<tr>
<td>Press/Media Conferences</td>
<td>News media interviews given by either the Governor or the Deputy Governor</td>
</tr>
<tr>
<td>Ceremonies</td>
<td>Activities of the government officials who represent the local government in sponsoring an official ceremonious event</td>
</tr>
<tr>
<td>Public Speeches</td>
<td>Invited keynote speeches delivered by the Governor or the Deputy Governor at seminars and workshops</td>
</tr>
<tr>
<td>Making/Hosting Honorary Visits</td>
<td>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</td>
</tr>
</tbody>
</table>
Inter-Rater Reliability

- **Observation 1**
  - Indonesian Ph.D. student viewed 250 YouTube videos
  - Classified each video into one of the 7 political activities
  - High-Level Political Meetings classification by 2 Indonesian Ph.D. students – Inter-rater reliability = 86.7%

- **Observation 2**
  - 2 Indonesian Ph.D. students viewed 245 YouTube videos independently
  - Classified each video into one of the 7 political activities
  - Inter-rater reliability = 84.8%
<table>
<thead>
<tr>
<th>Political Activities</th>
<th>Number of YouTube Videos (%)</th>
<th>Average Length of a Video (in seconds)</th>
<th>Average Number of Viewers</th>
<th>Average Viewer-Generated Rating of a Video</th>
<th>Average Viewer-Generated Comments per Video</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-Level Political Meetings</td>
<td>90 (36%)</td>
<td>3,194</td>
<td>48,773</td>
<td>4.96</td>
<td>310</td>
</tr>
<tr>
<td>Community Engagement</td>
<td>77 (31%)</td>
<td>2,195</td>
<td>29,161</td>
<td>4.98</td>
<td>268</td>
</tr>
<tr>
<td>Site Visits</td>
<td>33 (13%)</td>
<td>1,183</td>
<td>21,022</td>
<td>4.95</td>
<td>212</td>
</tr>
<tr>
<td>Press/Media Conferences</td>
<td>33 (13%)</td>
<td>485</td>
<td>17,044</td>
<td>4.97</td>
<td>222</td>
</tr>
<tr>
<td>Ceremonies</td>
<td>8 (3%)</td>
<td>2,513</td>
<td>16,214</td>
<td>4.98</td>
<td>130</td>
</tr>
<tr>
<td>Public Speeches</td>
<td>5 (2%)</td>
<td>2,600</td>
<td>24,296</td>
<td>4.97</td>
<td>379</td>
</tr>
<tr>
<td>Making/Hosting Honorary Visits</td>
<td>4 (2%)</td>
<td>1,134</td>
<td>15,936</td>
<td>4.94</td>
<td>226</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>250 (100%)</strong></td>
<td><strong>7,815,549</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Activities</td>
<td>Number of YouTube Videos (%)</td>
<td>Average Length of a Video (in seconds)</td>
<td>Average Number of Viewers</td>
<td>Average Viewer-Generated Rating of a Video</td>
<td>Average Viewer-Generated Comments per Video</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----------------------------</td>
<td>----------------------------------------</td>
<td>----------------------------</td>
<td>--------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>High-Level Political Meetings</td>
<td>85 (35%)</td>
<td>2,716</td>
<td>3,892</td>
<td>4.96</td>
<td>46</td>
</tr>
<tr>
<td>Community Engagement</td>
<td>65 (26%)</td>
<td>1,821</td>
<td>4,465</td>
<td>4.96</td>
<td>43</td>
</tr>
<tr>
<td>Site Visits</td>
<td>37 (15%)</td>
<td>966</td>
<td>6,476</td>
<td>4.98</td>
<td>59</td>
</tr>
<tr>
<td>Press/Media Conferences</td>
<td>21 (9%)</td>
<td>1,570</td>
<td>5,754</td>
<td>4.97</td>
<td>49</td>
</tr>
<tr>
<td>Ceremonies</td>
<td>8 (3%)</td>
<td>1,817</td>
<td>3,787</td>
<td>4.99</td>
<td>36</td>
</tr>
<tr>
<td>Public Speeches</td>
<td>16 (7%)</td>
<td>4,355</td>
<td>6,040</td>
<td>4.99</td>
<td>45</td>
</tr>
<tr>
<td>Making/Hosting Honorary Visits</td>
<td>13 (5%)</td>
<td>1,669</td>
<td>4,252</td>
<td>4.95</td>
<td>49</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>245 (100%)</strong></td>
<td><strong>1,163,669</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Comment Contributions over 7 Political Activities: A Comparison between Observation 1 and Observation 2

Ratio of Comments/Viewers (%) Observation 1

Ratio of Comments/Viewers (%) Observation 2

Community Engagement

High-Level Political Meetings

Site Visits

Ceremonies
Critical Issues Covered by High-Level Political Meetings

Issues Covered by High-Level Political Meetings

- Bureaucratic Reform and Governance: 52%
- Corruption Eradication: 4%
- Investment Climate: 7%
- Budget Transparency: 37%

Issues Covered by High-Level Political Meetings

- Bureaucratic Reform and Governance: 93%
- Corruption Eradication: 5%
- Investment Climate: 2%
- Budget Transparency: 0%
Logistic Regression Model
Descriptive Statistics

Table 5: Descriptive Statistics of Dependent and Independent Variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Transparency (GT)</td>
<td>495</td>
<td>0.00</td>
<td>1.00</td>
<td>0.35</td>
<td>0.48</td>
</tr>
<tr>
<td>Transformational Leadership (TL)</td>
<td>495</td>
<td>0.00</td>
<td>1.00</td>
<td>0.46</td>
<td>0.49</td>
</tr>
<tr>
<td>Citizen Engagement: Viewing (NV)</td>
<td>495</td>
<td>1055</td>
<td>1470188</td>
<td>18139.83</td>
<td>73830.91</td>
</tr>
<tr>
<td>Citizen Engagement: Rating (VR)</td>
<td>495</td>
<td>4.46</td>
<td>5.00</td>
<td>4.96</td>
<td>0.05</td>
</tr>
<tr>
<td>Citizen Engagement: Commenting (NC)</td>
<td>495</td>
<td>4.00</td>
<td>989.00</td>
<td>148.17</td>
<td>178.23</td>
</tr>
</tbody>
</table>
## Logistic Regression Analysis Results

### Table 6: Logistic Regression of GT

<table>
<thead>
<tr>
<th></th>
<th>Beta</th>
<th>Stand. Error</th>
<th>Wald Statistic</th>
<th>Prob. Sign.</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>TL</td>
<td>-1.54</td>
<td>0.22</td>
<td>48.97</td>
<td>0.00</td>
<td>0.22</td>
</tr>
<tr>
<td>NV</td>
<td>0.00</td>
<td>0.00</td>
<td>0.02</td>
<td>0.88</td>
<td>1.00</td>
</tr>
<tr>
<td>VR</td>
<td>-0.46</td>
<td>2.02</td>
<td>0.05</td>
<td>0.82</td>
<td>0.63</td>
</tr>
<tr>
<td>NC</td>
<td>0.00</td>
<td>0.00</td>
<td>8.23</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Constant</td>
<td>2.04</td>
<td>10.04</td>
<td>0.04</td>
<td>0.84</td>
<td>7.68</td>
</tr>
</tbody>
</table>

Percent classified correct: 64.60%

Nagelkerke R-Square: 0.17

-2 Log likelihood: 578.14
We have addressed our first research question by identifying and articulating the four salient constructs and their relationships as was shown in Figure 1.

It is hoped that the theoretical framework which is generic can be applicable to all levels of YouTube-enabled government transparency.

We have examined the utility and the validity of the framework at the local government level in the specific research context of Indonesia’s local government’s use of YouTube for communicating local government transparency.
As we have shown in our logistic regression model, with government transparency (GT) as the dependent variable regressed against the four independent variables, found that two of the four independent variables were statistically significant.

Importantly, the number of comments (NC), which represents the highest level of citizen engagement in our theoretical framework, predicted government transparency.

Moreover, transformational leadership (TL) also predicted government transparency as well. Overall, the logistic regression model classified 64.6% of the dataset of 495 government-generated YouTube videos correctly.

Higher level correct classification might be achieved if we can further refined the video classification of the Public Speeches and the Press/Media Conferences which have mixed communications of some reform-oriented government transparency and more predominantly non-reform-oriented events.

Overall, we hold that the proposed framework for YouTube-enabled government transparency is valid and useful in explaining and predicting YouTube-enabled government transparency at the local government level (del Sol, 2013) under the condition of the strategic change environment (Helfat et al., 2009).
The newly elected political leadership has leveraged the socio-political power of YouTube networks by producing and uploading a high volume of unedited YouTube videos which captured the political leaders’ actions which are government transparency-oriented to communicate the complex government transparency initiatives such as initiating budget transparency and eradicating government fraud in public housing programs.

Our analysis results show that the local government-generated YouTube videos captured and dynamically communicated the new political leader, Jokowi’s central message on greater local government transparency. Much of his political actions captured in the videos are transformational and in strong alignment with advancing the new leadership’s shared reform visions of “The New Jakarta” – the campaign promise Jokowi made to the public.
Discussion – QS#2

- This central message was well received by the public, as the analysis results show that almost 9 million YouTube-savvy citizens viewed and positively rated the videos during our two observation periods.

- The combination of the overall positive viewer-generated comment contributions and excellent ratings suggest that the institutional reform processes and the necessary political activities to achieve the intended government transparency were made visible, transparent, and comprehensible to the YouTube-savvy ordinary citizens through the visualization and network effects of the government official YouTube channel.
Conclusion

- 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 government transparency initiatives in progress towards institutional reform and other public policy decision-making process to Jakarta’s net-savvy citizens.
Conclusion

- Results of our research suggest that YouTube can be a powerful socio-political communication channel for increasing government transparency awareness among citizens through the visualization and network effects of YouTube networks.

- However, results of our research also suggest that the enabling effects of transformational political leadership and highest-level citizen engagement need to be considered if the government intends to achieve YouTube-enabled government transparency, especially when government transparency initiatives are designed to bring about radical strategic change towards institutional reforms.
However, our research has some inherent limitations. Our research focuses on the actions of the two political leaders whose transformational visions and goals are congruent.

Moreover, while we have adopted a longitudinal research method, our observation periods are too short to observe the expected effect of YouTube-enabled government transparency towards institutional reforms.

Our future research directions include an extended longitudinal study of government use of other social media tools such as Twitter and Facebook for communicating government transparency over a longer period of time.
Thank you for your attention!

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