Harnessing the Duality of e-Participation – Social Software Infrastructure Design
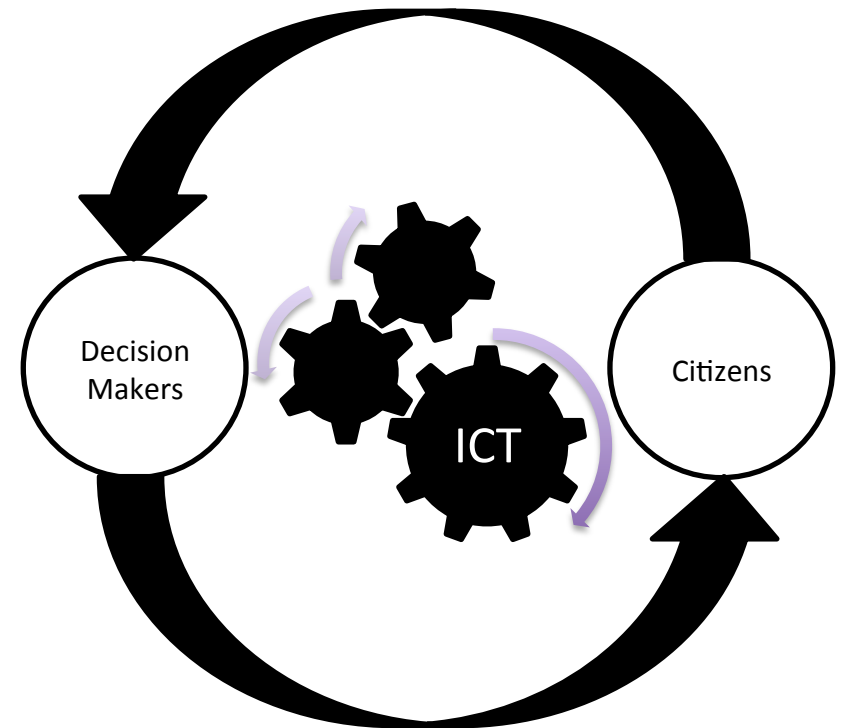
Lukasz Porwol, Adegboyega Ojo
and
John Breslin
(name).(surname)@deri.org
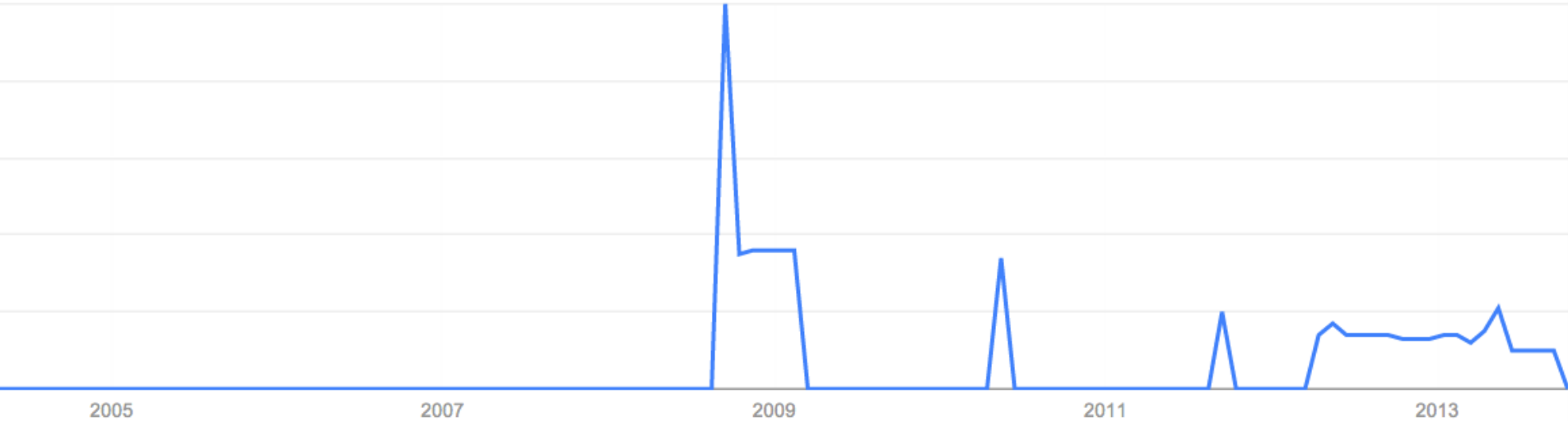
e-Participation employs technology-mediated dialogue between citizens and the politics sphere and citizens and administration
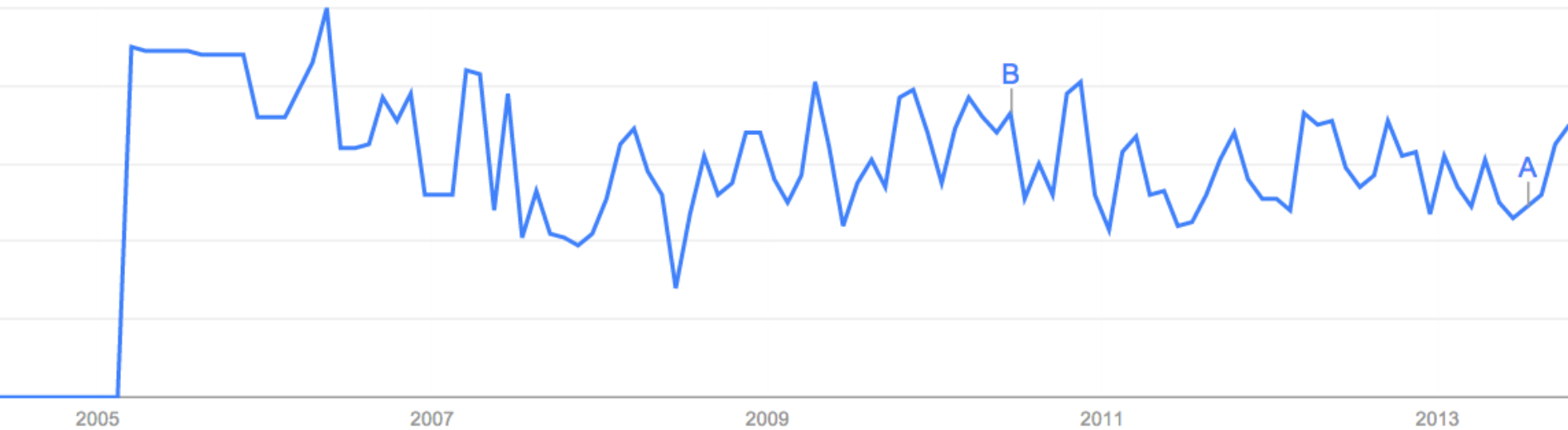
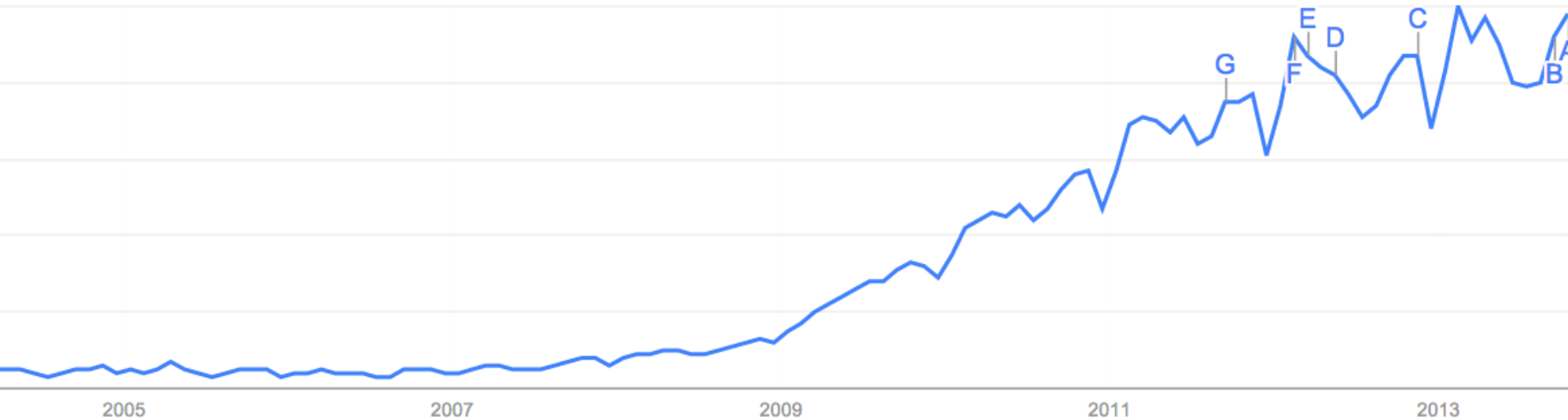# Motivation

e-Participation Term Popularity

Motivation

Online Participation Term Popularity

Motivation

Social Media Term Popularity

Motivation

- What causes e-Participation initiatives to fall short on citizen **engagement** and **sustainability**?

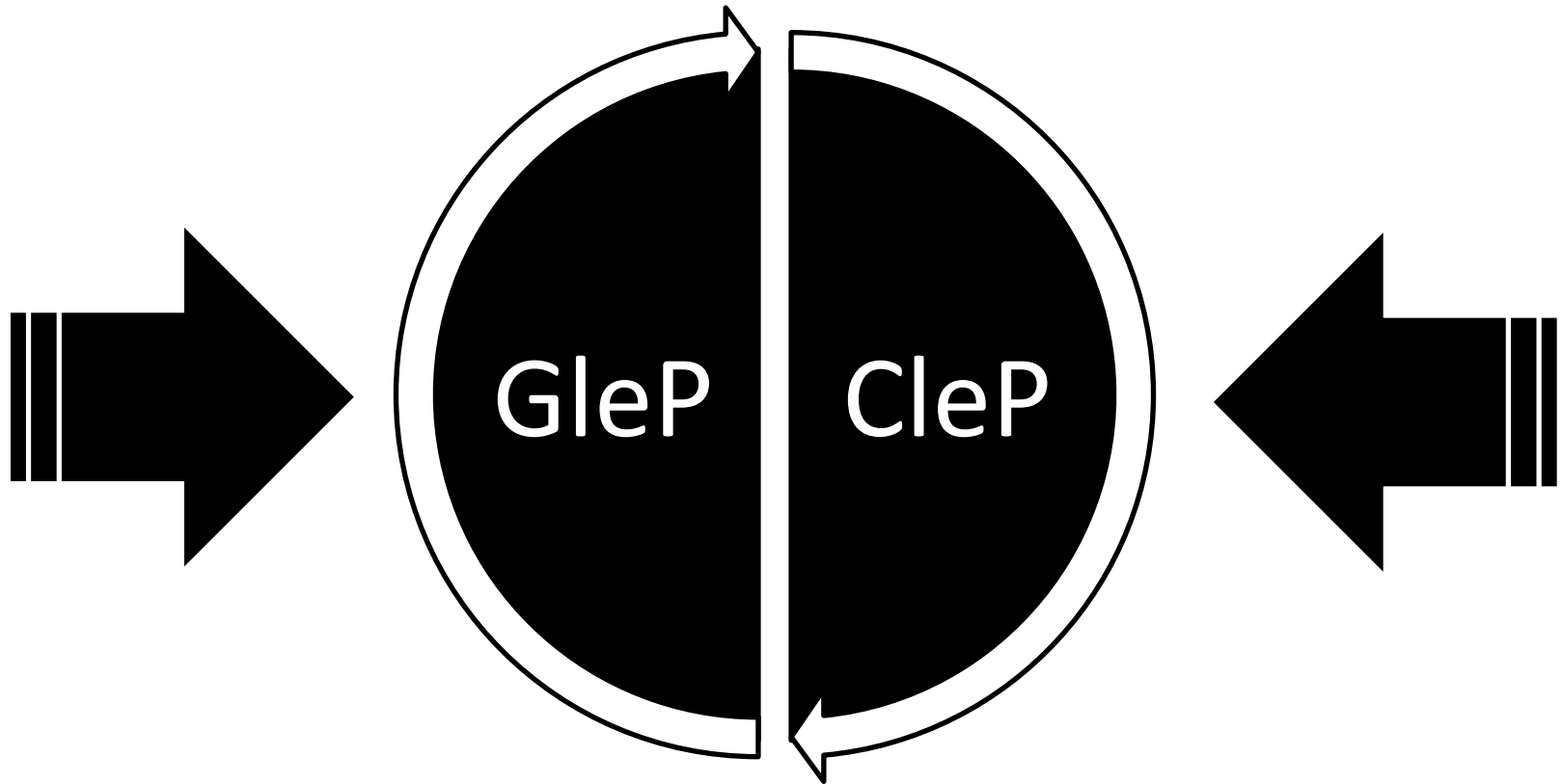- How can e-Participation be **improved**?

Motivation

Duality – eParticipation methodologies while considering public consultancy as a way to involve citizen in policy making process, fall short in harnessing the recent proliferation of spontaneous political discussions between citizens themself on Social Media

Motivation
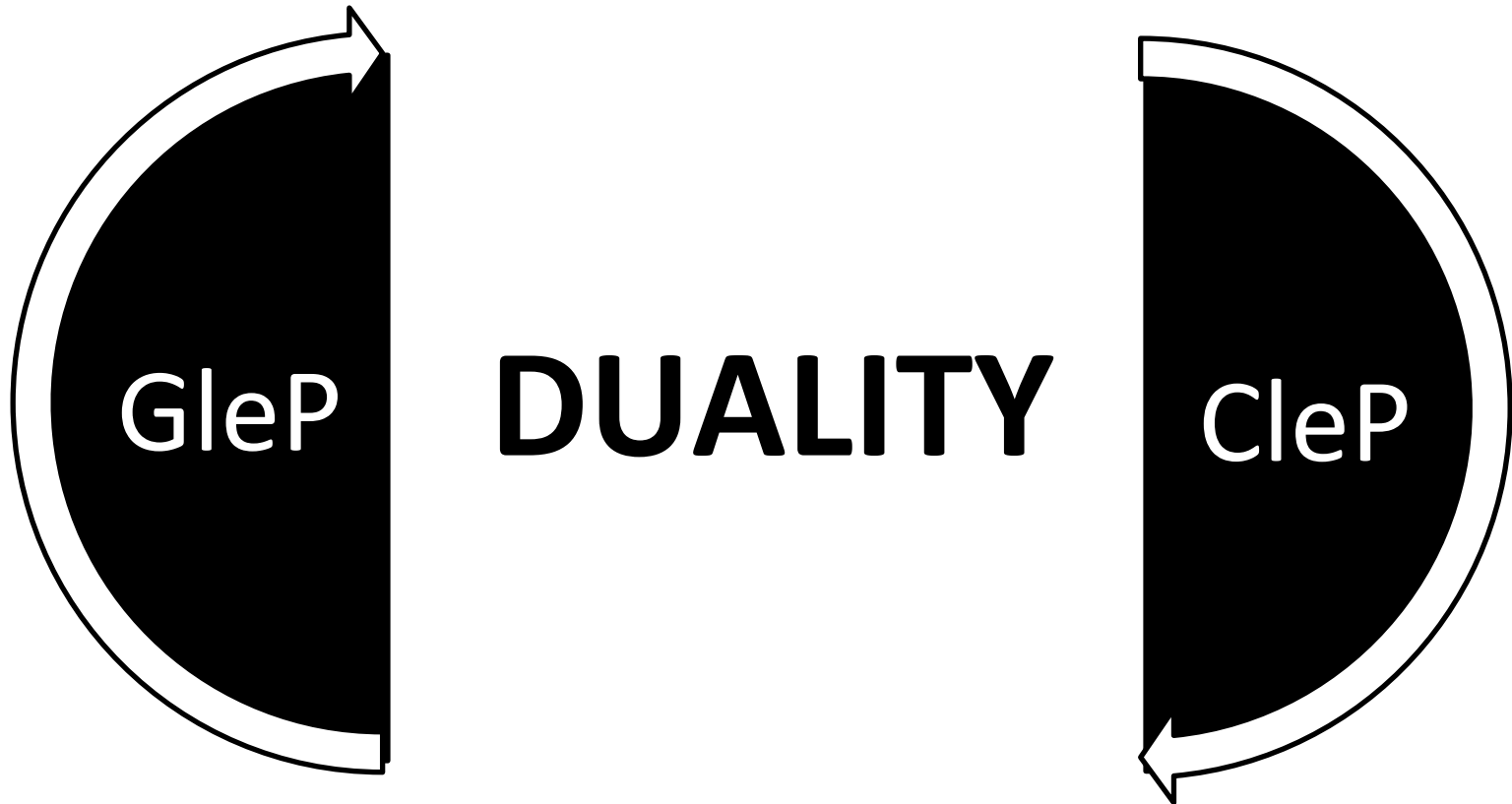
Motivation

Theoretical Framework

- **Structuration Theory** - duality of structure- recognizes the knowledgeability of the agents who leverage the resources provided to change social practices imposed upon them by the structure

- **Dynamic Capabilities Theory** - dynamic capabilities are intended to constantly integrate, re-create and reconfigure resources as well as the basic capabilities in order to enable the organization to adapt itself to fast changing environment

Structuration

1) **Domination (power) –** derived from authoritative resources enables control of people and allocative resources – enable control of material objects,

2) **Signification (meaning)**

3) **Legitimation (norms) -** rules through which the recourses are obtained.

Dynamic Capabilities

1) **adaptive capabilities:** dynamic resources (re-) distribution and acquisition, rules re-production and reformation process

2) **absorptive capabilities:** continuous monitoring process, participation shaping process, citizen information services

3) **innovative capabilities:** flexible monitoring process and ubiquitous e- Participation.

Framework
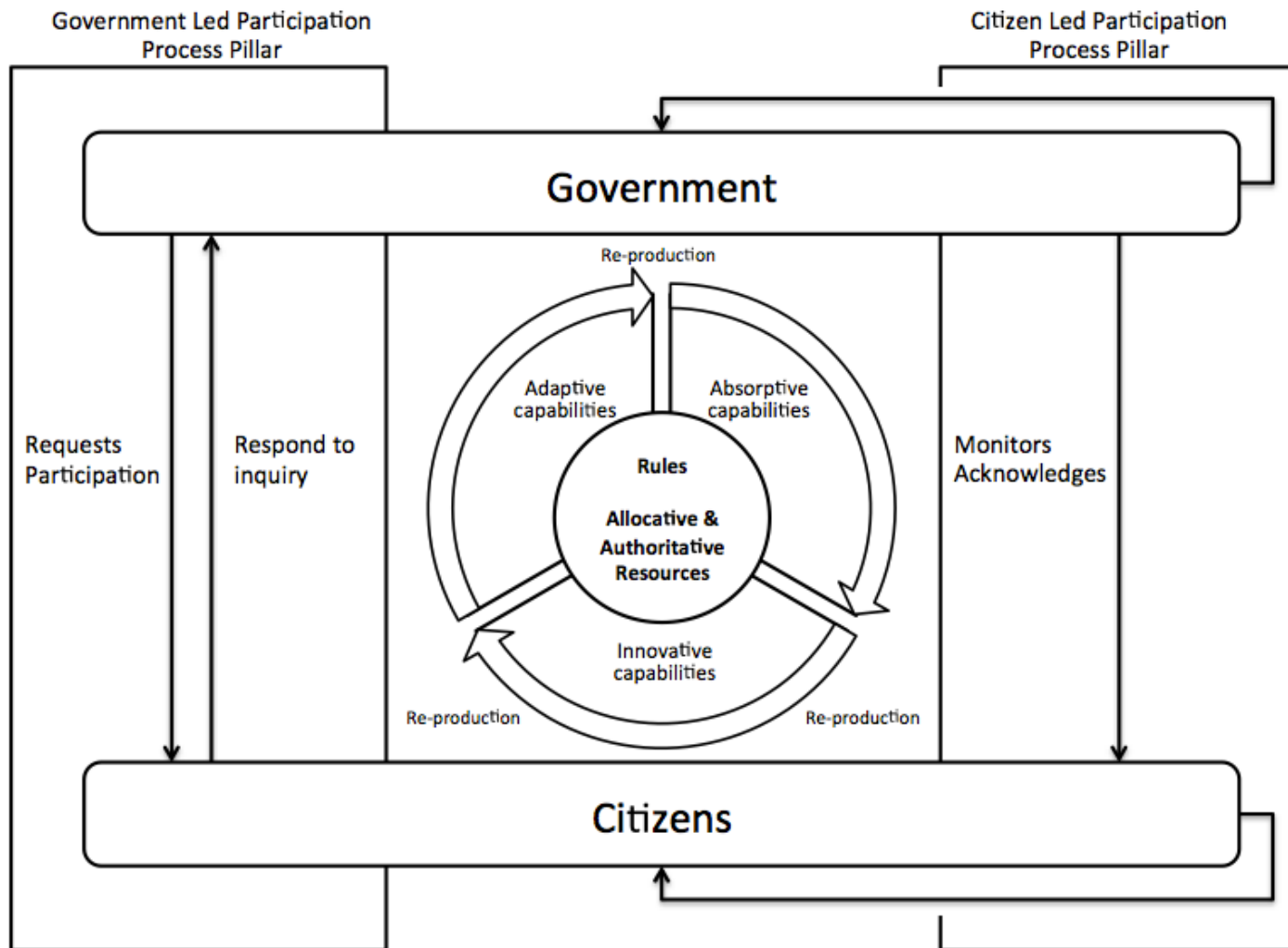
Approach

REQUIREMENTS

COVERAGE

Requirements

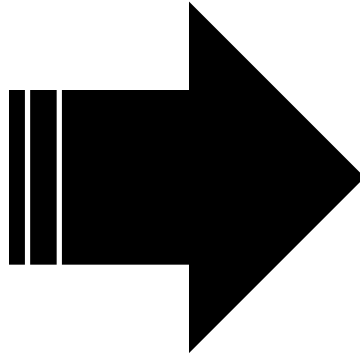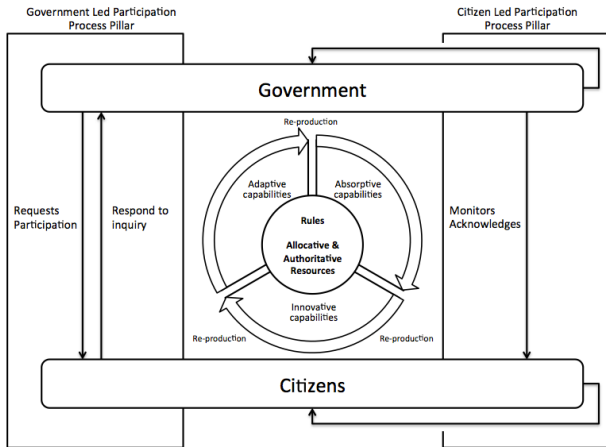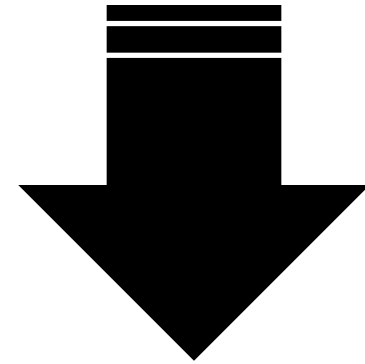| The Aspect of e-Participation		Dynamic Capabilities		
		Adaptive	**Absorptive**	**Innovative**
	Empower	R.22 Government needs to provide tools that would enable citizens to influence directly policy making	R.23 Government needs to built an approach where citizens suggestions are reflected directly in the policy making agenda	R.24 Government should constantly seek for new ways of involving citizens into policy making process
CLeP	**Process**	R.19 Government needs tool that would facilitate the processing of the vast Social Media participation data	R.20 Government should analyze the spontaneous citizens discussions and recognize the valuable contributions	R.21 Government should harness new technologies for better and faster citizen input processing
	Shaping	R.16 Government needs tools to interact effectively with citizens and shape discussion on deliberation platforms	R.17 Governments should analyze citizens' discussions and provide frequent feedback to guide the discussions (expert opinion)	R.18 Government should harness new technologies enabling faster and more relevant interaction with citizens
	Listening	R.13 Government needs tools to monitor the Social Media and similar places of spontaneous citizens' deliberation	R.14 Government needs to recognize and acknowledge the Social Media- mined citizen opinions.	R.15 Government needs to ensure support for technology-agnostic (desktop, mobile), ubiquitous e-Participation on multiple Social Media platforms
GLeP	**Process**	R.10 Government needs tool that would facilitate the processing of the participation data	R.11 Government should analyze citizens' discussions	R.12 Government should harness new technologies for better and faster citizen input processing
	Acknowledge	R.7 Government needs tools provide feedback to citizen's contributions	R.8 Government needs to be responsive to citizens ideas (recognize valuable contributions and provide constructive feedback)	R.9 Government should seek new ways of rewarding citizens for their contributions
	Stimulate	R.4 Government needs tools for dissemination and reaching wide audience to stimulate and sustain the e-Participation	R.5 Government should give recognition to citizens contributing significantly to the discussions	R.6 Government should explore new ways for citizen-engagement
	Request Participation	R.1 Government needs a platform to invite people to participate and discuss issues	R.2 Government should request participation on topics based drawn from citizens expectations	R.3 Government should explore new ways for e-Participation dissemination

- e-Participation literature
- e-Participation projects: eMPOWER, EUROPETITION,HUWY,U@MARENOSTRUM, VIDI, WAVE, VOICES, WEGOV, Puzzled by Policy, IMPACT, COCPIT, OCOPOMO, PADGETS, SPACES, NOMAD and EPOLICY.

| The Aspect of e-Participatnon		Dynamic Capabilities		
		Adaptive	Absorptive	Innovative
CLeP	Empower	Lack of tools to enable citizens to influence policy making directly	Lack of an approach where citizens suggestions would be reflected directly in the policy making agenda	Governments are reluctant to seek for new ways of involving citizens into policy making process. Slow e-Participation policy progress
CLeP	Process	Lack of effective, dedicated tools available to facilitate the processing of the vast Social Media political deliberation data, mostly manual processing or simple topic detection/trending – many general purpose business solutions available	Lack of relevant processes to analyze the spontaneous citizens discussions and recognize the valuable contributions. Limited recognition of citizen-suggestions on Social Media.	Governments are reluctant to harness new technologies for better and faster citizen input processing
CLeP	Shaping	Lack of validated, available, dedicated tools to interact effectively with citizens and shape discussion on Social Media platforms (information overload) – only general purpose business solutions available	Governments do not analyze citizens' political deliberations on Social Media nor provide frequent feedback to guide the discussions	Governments do not try to harness new technologies enabling faster and more relevant interaction with citizens
CLeP	Listening	Lack of validated, dedicated, available tools to monitor and analyze citizens' political deliberation on Social Media (information overload, low quality contributions) – only general purpose business solutions available	No official recognition or acknowledgement of the Social Media- mined citizen opinions.	Little support for technology-agnostic (desktop, mobile) or ubiquitous e-Participation on multiple Social Media platforms
GLeP	Process	Mostly manual processing and reporting on deliberation data, lack of highly specialized tools[6]	Insufficient interest from decision makers to analyze citizens suggestions [13][23]	Governments are slow to apply new technologies for information processing and decision support. Manual processing is considered satisfactory.[17]
GLeP	Acknowledge	Feedback through WEB 2.0 Web portals, discussion forums, digital surveys, online chat and consultation forms [3, 14, 15, 17]	Rare government participation and feedback on dedicated platforms [13, 23]	Government are reluctant to seek new ways of rewarding citizens for their contributions
GLeP	Stimulate	Lack of highly customized, dedicated dissemination tools. Mostly manual advertising or widget technologies (Puzzled by Policy, WEGOV, PAGETS) on Social Media [26][4]	Government does not give recognition to Citizens [13, 23]	Governments are reluctant to explore new ways for citizen-engagement. Very limited encouragement initiatives on Social Media
GLeP	Request Participation	Dedicated e-Participation Platforms or manual Social Media advertising [14][15].	Governments usually rely on their own expertise and agenda in forming the e-Participation discussion topics with exception for loud general public topics	Very limited, advertising on Social Media. Lack of significant innovative dissemination beyond the e-Participation platforms and governmental portals or mainstream media.

SSI Design Components

The Aspect of e-Participation		Dynamic Capabilities		
		Adaptive	**Absorptive**	**Innovative**
	Empower	Collaborative **Policy-making Agenda Creation Tool**	Collaborative **Policy-making Agenda Tool** explicit, citizen direct input inclusion support	Collaborative **Policy-making Agenda Tool** Monitoring Log, Feedback & Improvement support
CLeP	**Process**	**Multi-source Knowledge Extraction and Management Tool** (Filtering, Clustering, Linking, Content Recommendation)	**Multi-source Knowledge Extraction and Management Tool** political discussion detection and analysis support	**Multi-source Knowledge Extraction and Management Tool** Monitoring Log, Feedback and Improvement support.
	Shaping	**Discussion Control Tool** (topic tracking, user tracking, trends detection/prediction)	**Discussion Control Tool** political discussion analysis and direct engagement support	**Discussion Control Tool** Monitoring Log, Feedback and Improvement support.
	Listening	**Discussion Exploration and Analytics Tool** (leverages **Multi-source Knowledge Extraction and Management Tool**)	**Discussion Exploration and Analytics Tool** citizen opinion mining and tracking support	**Discussion Exploration and Analytics Tool** Monitoring Log, Feedback and Improvement support with assurance of new platforms discovery
GLeP	**Process**	**Knowledge Extraction and Management Tool** – can be realized as a subcomponent of CLEP Process	**Knowledge Extraction and Management Tool** – discussion analysis support	**Knowledge Extraction and Management Tool** Monitoring Log, Feedback and Improvement support.
	Acknowledge	**Mission Control Tool** (e-Participation promotion and feedback dissemination, targeted dissemination)	**Mission Control Tool** - support for recognition of valuable contributions and constructive feedback delivery	**Mission Control Tool** - Monitoring Log, Feedback and Improvement support.
	Stimulate	**Discussion Control Tool** (topic tracking, user tracking, trends detection/prediction)	**Discussion Control Tool** political discussion analysis and direct engagement support	**Discussion Control Tool** Monitoring Log, Feedback and Improvement support.
	Request Participation	**Mission Control Tool** (e-Participation promotion and feedback dissemination, targeted dissemination)	**Mission Control Tool** – support for participation topics based on citizens' input	**Mission Control Tool** - Monitoring Log, Feedback and Improvement support.

SSI Design
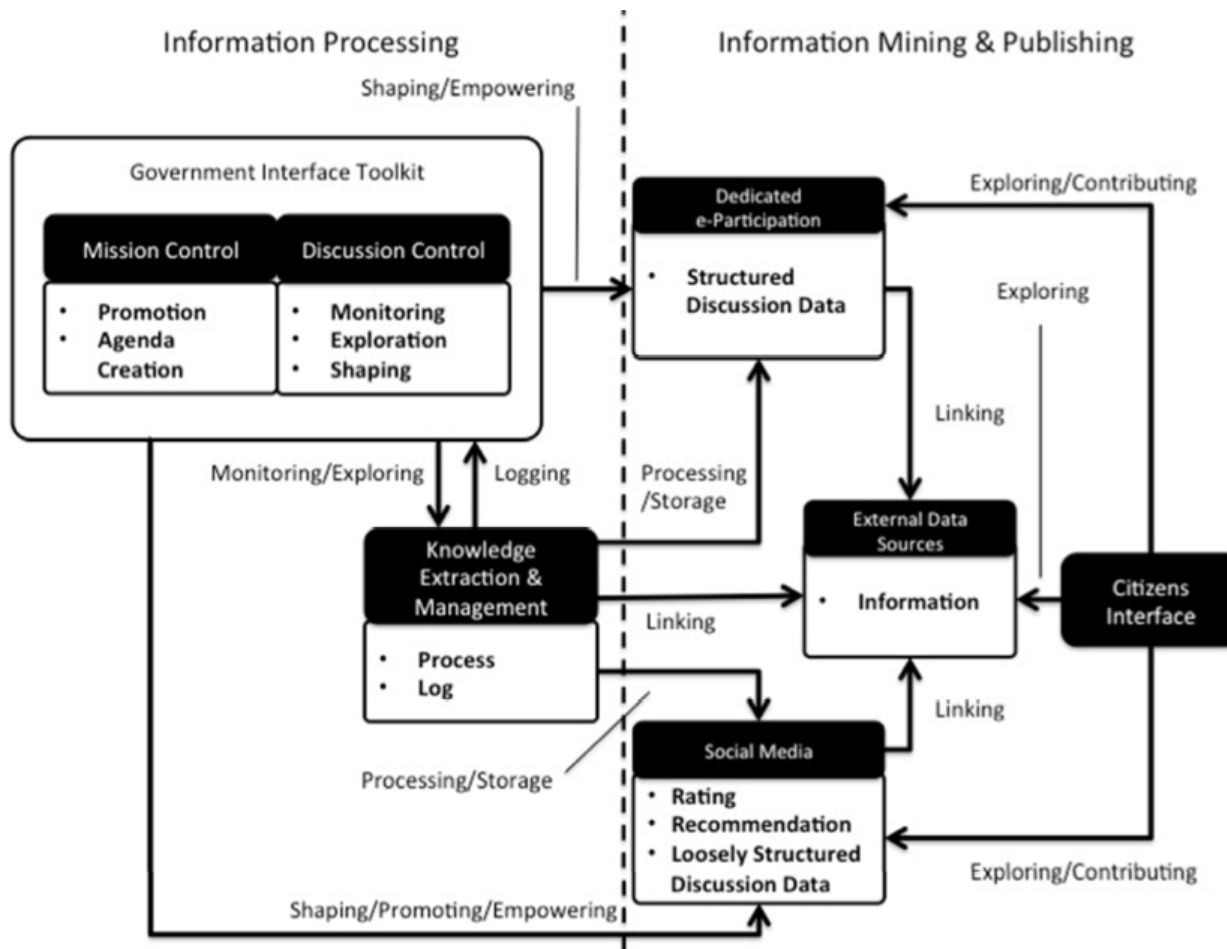
SSI Design
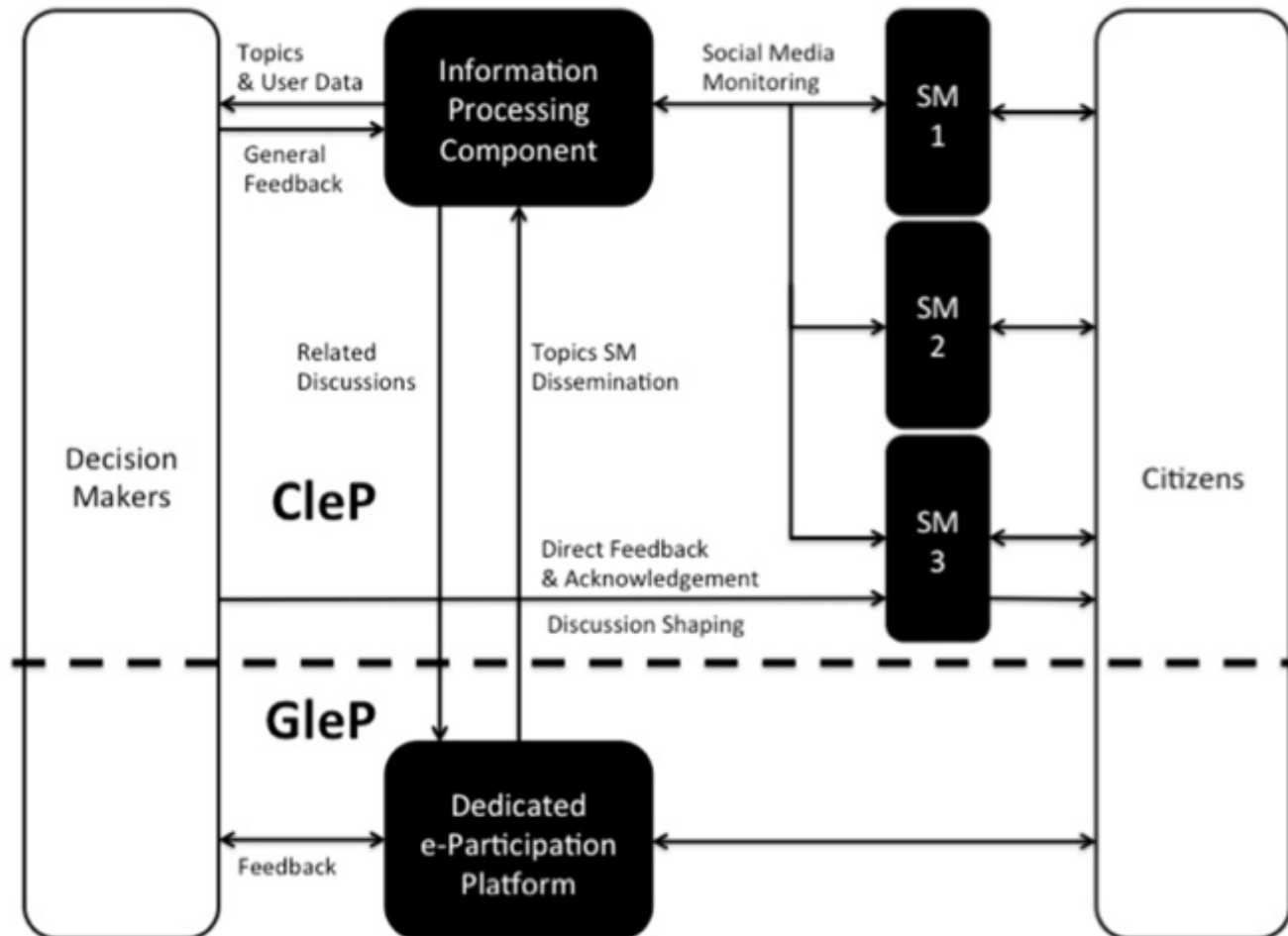
Suggested Tools

- Are there of-the-shelf tools that could serve as key building blocks for the architecture presented?

- What are the technologies essential to realize the architecture presented?

Suggested Tools

- **Discussion Stimulation**: Facebook Adds, Promoted Tweets

- **Data Provenance, Accessibility**: Metadata – RDF, Liked Data

- **Content Summarization**: OTS, MEAD, NLTK, Stanford NLP

Suggested Tools

- **Discussion Control and Knowledge Extraction & Management:** SocialMention, HootSuite or BuzzEquity

- **Mission Control:** Bottlenose, SproutSocial, UberVU, Visible, NetBase or NUVI

- **Knowledge Representation and Linking**: RDF Stores: FUSEKI, VIRTUOSO, SESAME,Apache JENA TDB

- **Vocabulary: SIOC, FOAF, SKOS, DC**

Future Steps

- Specialized e-Participation vocabulary

- Analytical tools leveraging the e-Participation vocabulary capabilities

- Pilot implementation and Evaluation