

# WeGov Analysis Tools to connect Policy Makers with Citizens Online

Timo Wandhöfer, GESIS  
tGov 2012, Brunel University

# WeGov Project

- Where eGovernment meets the eSociety
- Seventh framework programme ICT for “Governance and Policy Modelling”
- 7 partner: UK, Belgium, Greece, Germany
- Jan 2010 – Sep 2012
- *Evaluation of prototype 2.5*
- *Validation of analysis components*
- *Final toolbox version due Sep 2012*

# Stakeholder Engagement

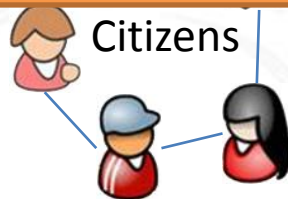
- Prototype 2.5
  - EU Parliament
  - German Bundestag
  - State Parliament NRW (Germany)
  - Cities (e.g. Ghent)
  - Parties
- Scheduled
  - States (e.g. state chancellery)
  - Media (Newspapers, Radio Channel)
  - Organisations / NGOs

# Real-Life Example

- What are citizens' opinions

## Key Questions

- What people are talking about?
- What their opinions are?
- Who are the influential people?
- Where on SNS are the debates happening?



### Information, dissemination:

- What do people think on similar topics – *nuclear energy, phase-out?*

# Functional Requirements

- Search SNS
  - General query-based searches
  - Multiple SNS
  - Long term automatic repeated searches
  - Focus on a geographical area
- Analyse search results
  - Summaries of discussion **themes** and **opinions**
  - Recommendations of which SNS users to follow
  - Current hot topics

# Toolbox

- Toolbox is as it says: a **box** of **tools**
- Box is the infrastructure
  - Contains tools
  - Link tools together to make composite tools
  - Modular: further tools can be added as they become available
- Tools do things
  - Intended to be flexible and applicable to many different use cases



# Toolbox Concept

## 1 – SNS search

- Local
- Global

## 2 – WeGov Analysis

- Topics and Opinions
- Frequency of Posts
- Prediction of Discussion Activity
- Modeling User Behavior

## 3 - Results

- Dialogue with citizens
- Public relation
- Press work





# Topics and Opinions

## Facebook Topics for Latest Post from: davidcamer

### 1. peopl, human, dolphin, creatur, wrong

#### Key Users:



Teresa Lewarn (Teresa Lewarn)



Rose Watters (Rose Watters)



Malcolm Stubley (Malcolm Stubley)

#### Key Posts:

2012-04-18 16:18:00 / Score 0.9953

used to come on here alot and saw alot of lee on here i was wondering about him. i was some time ago i was last on here until recently as i have been doing alot of campaigning against the whaling and slaughter and capturing of dolphin in japan . its been nice coming on here after so long

2012-04-18 16:20:54 / Score 0.9926

Thats good,my wife would love to see dolphins in their own enviroment,they are wonderfull creatures,like most animals on this planet,pity humans can not be like this

2012-04-18 16:52:41 / Score 0.9907

Dolphins are lovely creatures. Our daughter went to Cuba last Sept and went into the pool with them. She was fascinated by them .

### 2. pension, british, week, allow, age

#### Key Users:

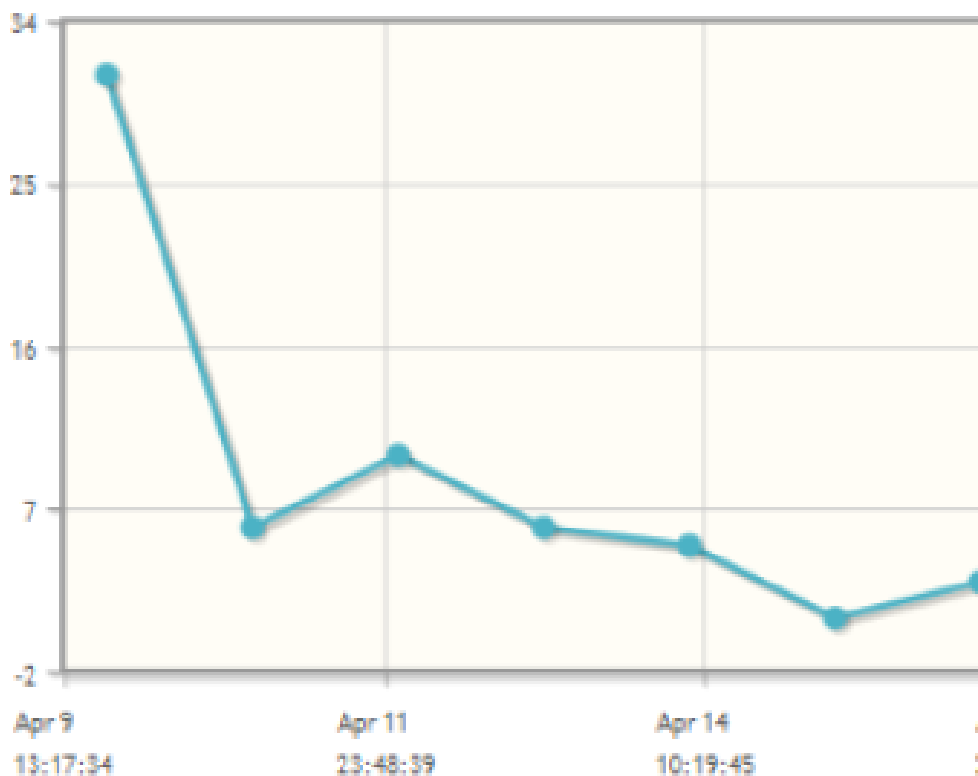
## Characteristics

- Identifies groups of words (topics) that arise in a wider debate
- Each topic has key users / key posts
- Uses content related factors (word frequency, hash tags)



# Frequency of Posts

Discussion activity (number of posts in time):



Discussion activity shows the number of posts published over time.

## Characteristics

- Shows concentration of tweets in the concerned time period
- Example is on search term "European citizen initiative"
- 62 posts with activity peaking on first day

# Prediction of Discussion Activity

## Top 5 Users to Watch:



**JUSTLIAM** (mrWard90)  
Score: 1.62, role: DailyUser  
Description: \*Explicit Tweeting\* #imagegang



**Dan Wigston-Richards** (wigzy91)  
Score: 1.23, role: DailyUser  
Description: they call me wiggles!



**MagsNews** (MagsNews)  
Score: 0.93, role: InformationSource  
Description: Researcher/writer. Worked for a MP in a previous life! Yearns for a fairer society UK. VC of Labour Left. Contributes to Huffington UK.



**Cookie Monster** (crowmogh)  
Score: 0.67, role: DailyUser  
Description: Wibble, wibble... Lefty Asian born teacher. A lot to love in that description. No I wear open toed sandals.



**Richard Snape** (snapey1979)  
Score: 0.66, role: DailyUser  
Description: PhD student, modeller, engineer, musician, ex operations manager. I like to play data, maths, politics, psychology and sociology.

## Top 5 Posts to Watch:

ohoi gaya nak ujan lebat nie, huhu mcm mana nak cameron ginie, aduishhh by [Qieia Azman](#) created on April 20, 2012 with score 0.4183

@JesusChristFTM do us a favour jee, RT this fella @Tony4Mayor1 he won't let that twat Cameron ruin Liverpool by [colin dalton](#) created on Friday, April 20, 2012 with score 0.4183

cameron ♥ by [etsha ayomi](#) created on Friday, April 20, 2012 with score 0.4175

I HATE FUCKING PUBLIC TRANSPORT FFS!! PULL YOUR FINGER OUT YOUR ARSE DAVID CAMERON! #StupidFuckingGovernmentCuts by [Hp in a pod](#) created on Friday, April 20, 2012 with score 0.4175

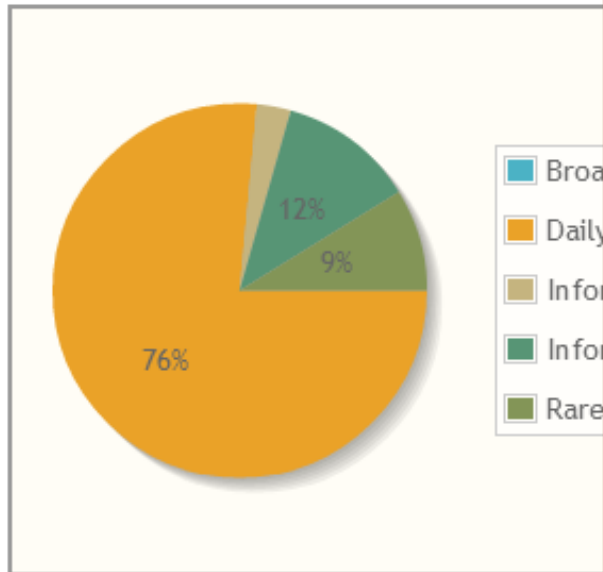
#FF James Cameron made a bio-pic of her life story called it "Avatar". It's @carolinejb17 by [Patrick Smyth](#) created on Friday, April 20, 2012 with score 0.4175

## Characteristics

- Predict which posts (top posts) are expected to generate more attention
- Content of post is important
  - Not written in the afternoon
  - Written in a familiar language
  - Written by people who follow many users and listen...
  - Statement states to be negative
- Top users generate more top posts

# Modeling User Behavior

User roles distribution:



Broadcaster is someone who posts with high frequency and has a very high following. However he follows few people, if any at all.

Daily User is someone with middle of the ground in terms of posting frequency and following.

Information Seeker is someone who posts with low frequency and follows a lot of people.

Information Source is someone who posts with high frequency and follows more people than the Broadcaster.

RarePoster is somebody who hardly ever posts.

## Characteristics

- Classify users according to their behavior and interactions within SNS
- Using user features
  - Number of followers / people to follow
  - Number of posts
  - Length of use
  - Frequency of posts
- Groups: Broadcaster, information source, daily user, information seeker, rare poster
- Most influential and engaged role is information source


# To be continued...

**wegov** Where eGovernment meets the eSociety Maxim Bashnev Logout

Home Advanced search Advanced analysis History Bookmarks Contacts Refresh All

**Current Location** Save location as

Not your location?




Southampton, United Kingdom

For IP address was used to determine your current location


**Latest Facebook posts by Angela Merkel**

Showing latest 6 posts out of 455

 hat Annegret Kramp-Karrenbauer und der CDU Saar sehr herzlich zum Wahlerfolg gratuliert. Kramp-Karrenbauer habe mutig gehandelt, als sie sich zum Wohle des Saarlandes für Neuwahlen entschieden habe.


March 29, 181 likes, 263 comments

[Like](#) [Comment](#) [Analyse comments](#) [Bookmark](#)

 Drei Tage vor der Wahl des neuen Frankfurter Oberbürgermeisters hat sich Bundeskanzlerin Angela Merkel klar für den bisherigen hessischen Innenminister Boris Rhein ausgesprochen. Er sei der Richtige, damit "Frankfurt auch in Zukunft stabil regiert wird".


March 23, 391 likes, 244 comments

[Like](#) [Comment](#) [Analyse comments](#) [Bookmark](#)

 hat Kontakt zu den neuen Besten des Gesprächs (E) CDU zu mir gemutet in Politik aufgeben. "Die Politik ist nicht für mich und ich will nicht an der Macht sein".


March 11, 565 likes, 281 comments

[Like](#) [Comment](#) [Analyse comments](#) [Bookmark](#)

 <http://www.dialog-ueber-deutschland.de>


March 11, 565 likes, 281 comments

[Like](#) [Comment](#) [Analyse comments](#) [Bookmark](#)

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**Most popular tweets for Berlin, Germany on "corruption"**

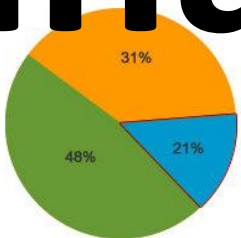
Showing 3 tweets out of 256 since March 29






 **WikiLeaks** @wikileaks  
Excellent John Pilger speech on media corruption: Freedom Next Teim  
<http://video.google.com/v=salk32n>  
April 2 1:28 PM, 56 retweets, 46 favorites  
[Retweet](#) [Favorite](#) [Analyse retweeters](#) [Bookmark](#)

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**Final tool box**



-  **Broadcaster**  
Broadcaster is someone who posts with high daily rate and has a very high following. However he follows very few people, if any at all.
-  **Daily User**
-  **Rare Poster**
-  **Information Seeker**
-  **Information Source**