How the World Views Itself?

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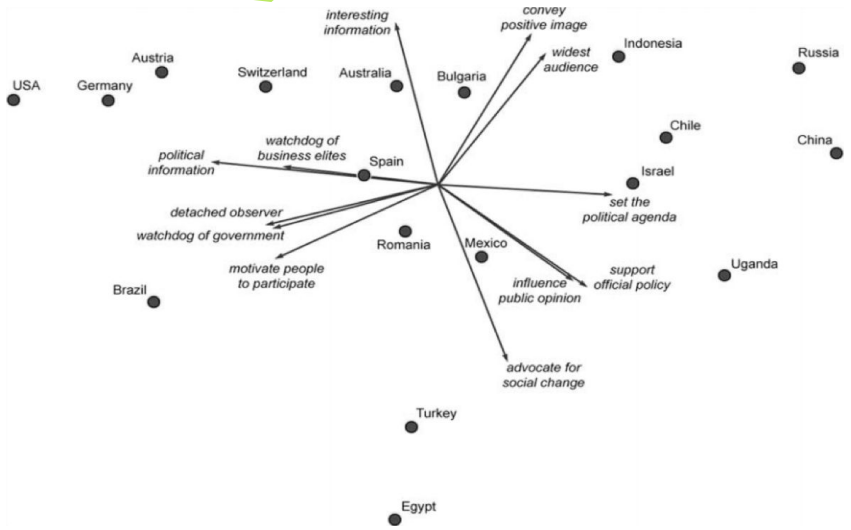
1.
INTRODUCTION

Problem Overview

Diversity of positions of countries regarding issues



Problem Overview

Under-representation of issues by English media

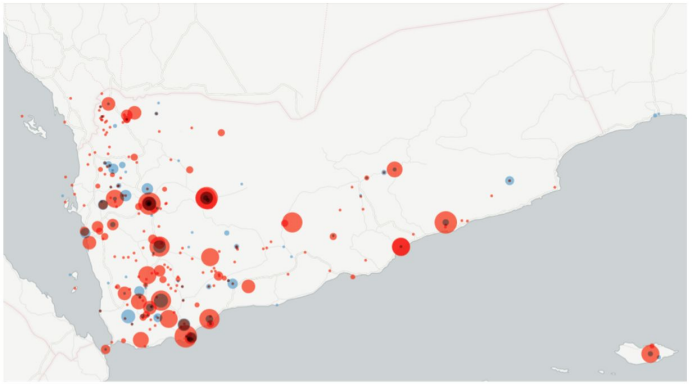


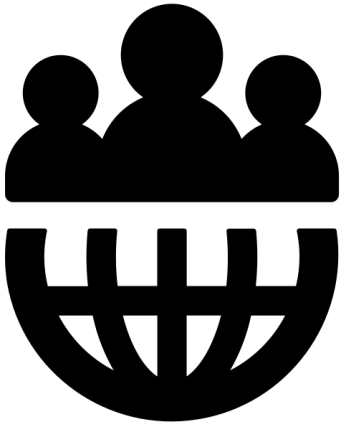
Figure 1 – Locations mentioned in global news coverage of Yemen 2/19/2015 – 3/1/2015. (Blue = English news media, Red = Non-English news media.)

Problem Overview

Extensive circulation of vernacular media

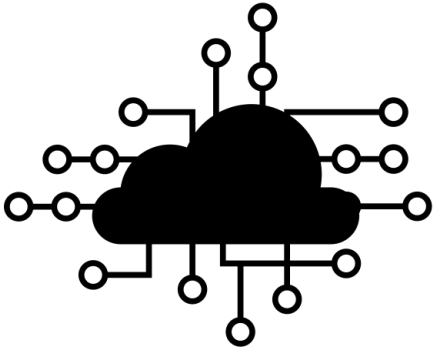
Newspaper	Country	Circulation (thousands)						
		2016	2013[6]	2012	2011	2010	2009	2008
Yomiuri Shimbun	Japan		9,690	N/A	9,969	10,019	10,018	10,021
Asahi Shimbun	Japan		7,450	N/A	7,750	7,930	8,025	8,038
Mainichi Shimbun	Japan		3,322	N/A	3,438	3,551	3,771	3,857
The Times of India	India	2,730,000	18,500	17,000	16,800	16,800	16,500	16,400
Dainik Jagran	India		3,113	2,674	2,662	2,796	2,384	2,523
Reference News	China		3,073	N/A	2,450	2,591	2,701	2,751
The Nikkei	Japan		2,769	N/A	3,020	3,024	3,052	3,056
Bild	Germany		2,658	N/A	N/A	2,990	3,300	3,142
People's Daily	China		2,603	N/A	2,106	2,316	2,329	2,315
Chunichi Shimbun	Japan		2,533	N/A	N/A	N/A	2,728	2,761
The Wall Street Journal	United States		2,379	N/A	2,107	2,077	2,053	2,041
Hindustan Dainik	India		2,237	1844	1,868	1,699	1,300	1,036
Malayala Manorama	India		2,233	2130	2,048	1,903	1,760	1,700
The Sun	United Kingdom		2,172	2520	2,770	2,954	3,030	3,096
Amar Ujala	India		2,018	1644	1,480	1,459	938	1,344
Guangzhou Daily	China		1,880	N/A	1,280	1,402	1,480	1,529
The New York Times	United States		1,865	N/A	1,034	914	983	1,039
Nanfang Daily	China		1,853	N/A	N/A	N/A	N/A	850
Eenadu	India		1,801	1737	1,717	1,671	1,293	1,172
Yangtse Evening Post	China		1,790	N/A	N/A	N/A	N/A	1,483
Sports Nippon	Japan		1,770	N/A	N/A	N/A	N/A	1,800
The Daily Mail	United Kingdom		1,796	1921	2,044	2,107	2,169	2,246
The Mail on Sunday	United Kingdom		N/A	1798	1,981	1,970	2,056	2,203
The Chosun Ilbo	South Korea		1,757	1326	1353	1393	2,300	2,300
Qianjiang Evening News	China		1,750	N/A	980	1,004	1,002	1,002

Motivation



Rise of globalization and need for holistic overview

Accessibility of media

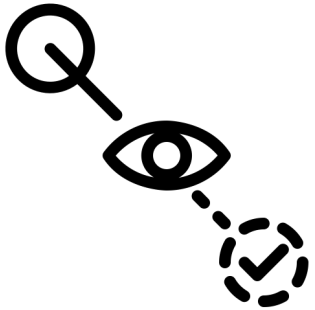


Technological advancements

Objective

“Design a news translation and visualization application that collates articles from around the world for the average English news reader”

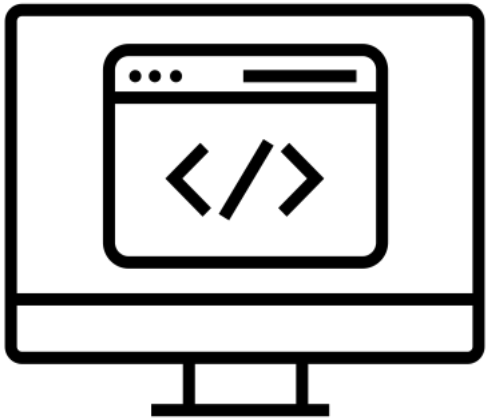
User-friendly



Easy to compare and analyze

2.
IMPLEMENTATION

Application Features



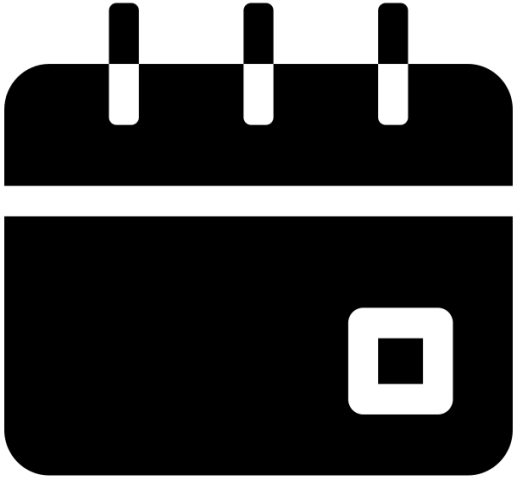
Web-Based

User enters Category, Country, Query Term

Google News feed for retrieval

APIs for Translation, NLP

Application Features



Today’s News Mode

User enters Category, Country

Displays news articles from past 24 hours

Generates Word Cloud for visualization

Application Features

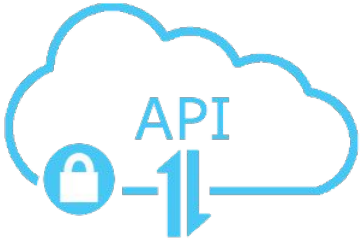
Search Mode

User enters Country, Query Term

Displays news articles related to query

Generates Sentiment Analysis for visualization

Tools

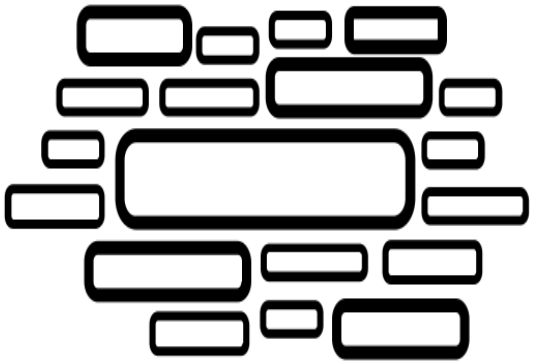


Back-end

Middle-end

Front-end

Methodologies



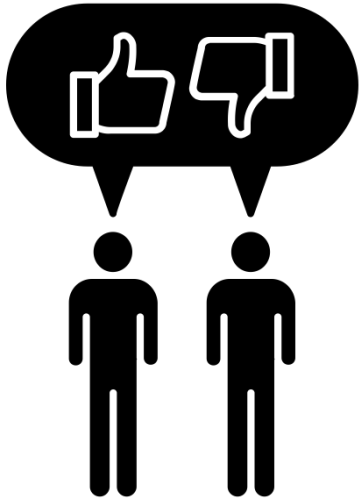
Word Cloud

Articles are tokenized, lemmatized, stopwords eliminated

Generates Word Cloud with word size based on frequency

Topics colour coded based on exclusivity to country

Methodologies



Sentiment Analysis

Articles are tokenized, lemmatized, stopwords eliminated

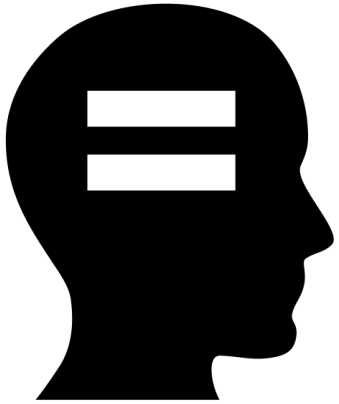
Compound polarity scores calculated for each article

Generates Sentiment Analysis pie chart for each country

3.
DEMONSTRATION

4.
CONCLUSION

Significance

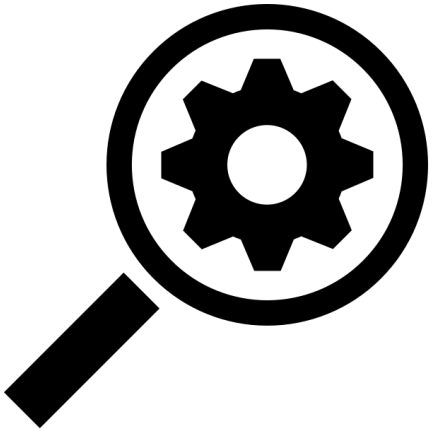


Obtain unbiased perception of issues without any language barrier

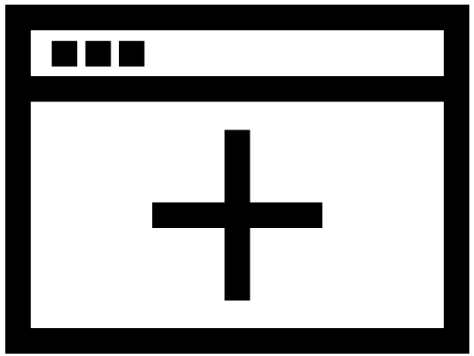
International participation to resolve issues

Visualize trends and sentiment contributing to stronger public opinion

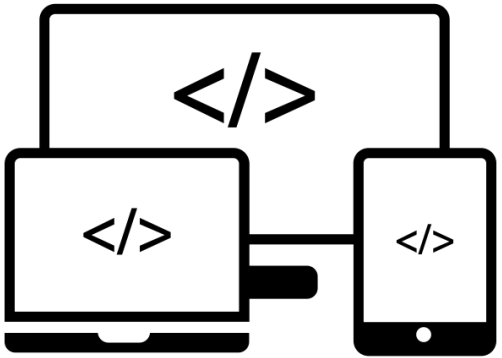
Future Scope



Advanced search capabilities



Addition of categories and languages



Extension of compatibility to other platforms

THANK YOU!

Q&A