





# Focus on what truly matters!

Impact Analysis of
Finance
Relevant Topics
in Social Media



## Finance Relevant Topics



#### What are relevant <u>Topics</u>?

- Underlyings: Stocks, Indices, Funds, Commodities
- Financial Events: Ratings, Earnings Announcements
- People: Opinion Leaders, Management
- Regions: US, Europe, European Union, Italy
- Regulations & Legislation: States, EU Parliament, FED, ECB
- Marco Indicators: Unemployment rate, interest rate



repeated rejection of the establishment, Nigel Farage has blasted.

express.co.uk

#### Classification and Estimation



- How is the Classification done and how is it used?
  - Classes: Tax, Fraud, Buy/Sell, Trading, GlobalEconomy
  - Goal: Filtering, Selection & Routing, Weighing



- How are (textual) statements <a href="Evaluated">Evaluated</a>?
  - Dimensions: Sentiment, Relevance, Confidence, Influence



- How to measure Impact?
  - Complex combination → 3 Tier Process
  - Time slots are generally small
  - No Absolute Truth: Explanations, Indications, and Tendencies

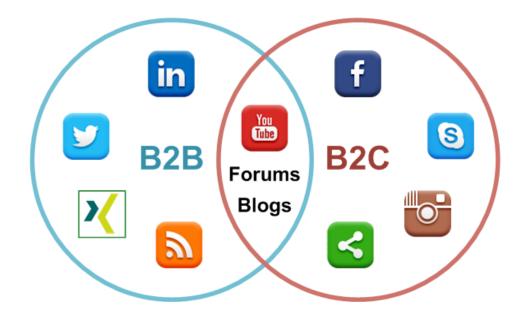




#### Sources and Goals



- Social Media Sources
  - Quantity
  - Language
  - Length
  - Quality
  - Veracity



- Selection should always be <u>Solution Driven</u>
  - Awareness & Overview, Reporting
  - Hot Topic Detection, Alerting
  - Countersteer Management, Communications
  - Trend Analysis, Forecasting
  - Action Taking, Interfacing

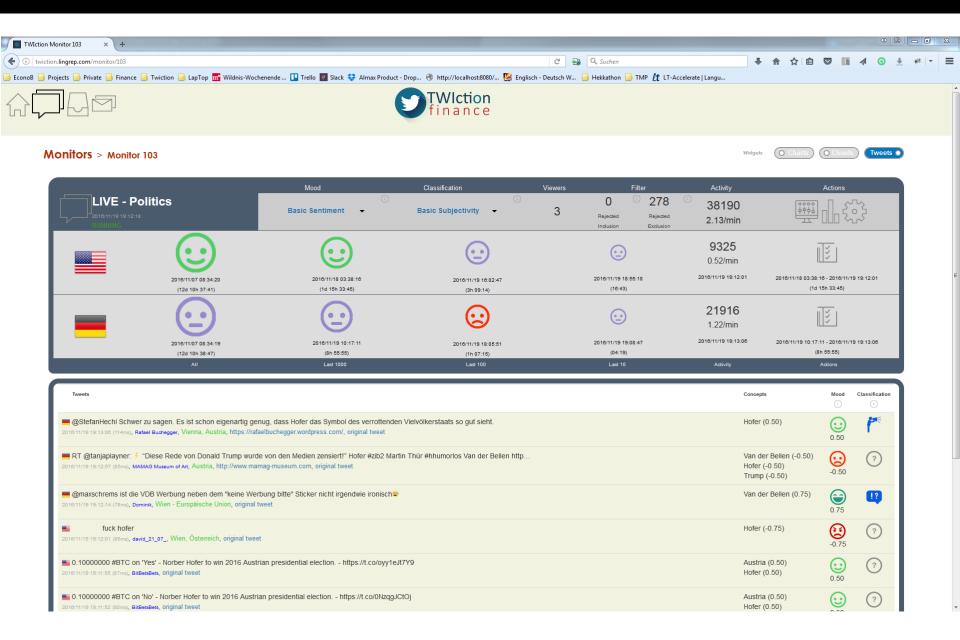
## Financial Monitoring in Twitter (1)



- TWIction Twitter in Action
  - Two Modes
    - Real time analytics
    - Research functionality on historic data
  - Tracking of
    - Finance: <u>Single Stocks</u>, <u>Rating Events</u>, and <u>Indicators (interest rate)</u>
    - Global: <u>Elections</u>, <u>People</u>, <u>Topics</u> (<u>crisis</u>, <u>terrorism</u>)
  - Qualitative analytics with drilldown
    - Content, HashTags, Locations, Users, Languages
- → Goal: Reduction of big data to managable amounts

## Financial Monitoring in Twitter (2)



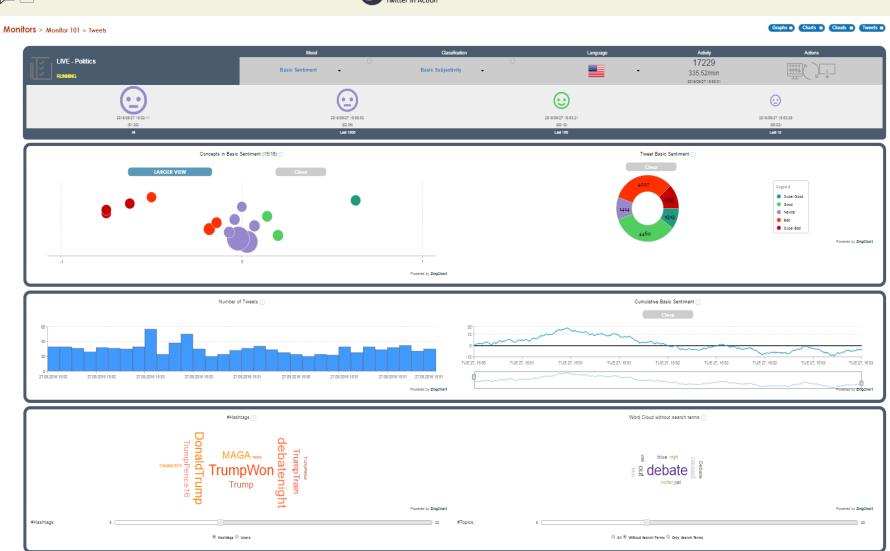


# Financial Monitoring in Twitter (3)











"Advice maybe wrong, but examples prove themselves."

Henry Wheeler Shaw

# Sample – Single Stock (1)



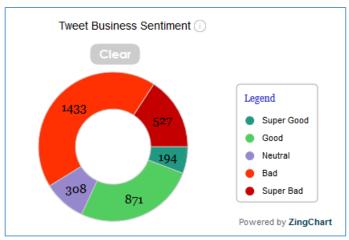
# Volkswagen (VOW3, DE0007664039)

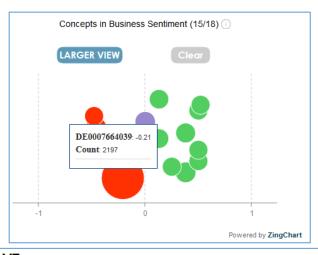
Tweet	Topic	Class	Eval
VW Emissions scandal: 30,000 jobs to go at Volkswagen https://t.co/heNUUo5qbF 2016/11/19 18:40:07 (385ms), Car Parse	VOW3	Fraud	-0.75
RT @business: BREAKING: Volkswagen confirms it's cutting 30,000 jobs worldwide https://t.co/ JpL4EiKDAt Latest video: https://t.co/7roZ6dfq	VOW3	?	-0.84
RT @kprescott: VW forsees 25% improvement in productivity at its German plants  2016/11/18 15:24:44 (445ms), RLS Business Studies, Buckingham, England	VOW3 Productivity	Global Economy	0.38
RT @WSJ: VW to slash up to 30,000 jobs over five years, as part of efforts to boost profits in wake of emissions scandal https://t.co/GVtlc  2016/11/18 15:19:02 (530ms), hayasinaoko	VOW3	Buy / Sell	0.42
Germany's VW to focus on electric vehicles, aims to return to profitable growth https://t.co/MIH4gXFYht 2016/11/18 15:46:24 (350ms), Graeme Paterson, London	VOW3	Trading	0.75
VW Amarok Naked Ute a commercial success #VolkswagenAmarok https://t.co/PJSJBpxH7I #VolkswagenAmarok  2016/11/18 15:10:52 (374ms), Peggy, Florida	VOW3	Trading	0.50

## Sample – Single Stock (2)



## Volkswagen (VOW3, DE0007664039)











# Sample – Macroeconomic Indicators (1)



## Indicators for Germany

Tweet	Topic	Class	Eval
@Cheeky_Blobfish a drop of just 25% in sales would cost the German auto industry about 5 billion pounds that ginna hurt any economy  2016/11/19 16:38:31 (165ms), mick	Sales	Buy / Sell	-0.27
German economy creates more jobs, but employment growth slows Related Articles: https://t.co/ 0ekUh2ZVJw https://t.co/YrXakcxA6Z  2016/11/18 17:24:34 (386ms), Business News	Labor Market	Global Economy	-0.50
RT @shelleypetersen: German economic growth to be slower for rest of 2016: ministry https://t.co/ 7FbszRazeU healthinnovations #pharma #ban 2016/11/18 17:02:11 (460ms), meeeh	Growth	Global Economy	-0.18
German exports to UK, U.S. fall sharply in third quarter https://t.co/WOwt59hFJ2 https://t.co/SiXhzEmOW1 2016/11/18 16:06:02 (208ms), Vanilla Bizcotti, Menasha, WI	Exports	Global Economy	-0.75
Performance still good despite Brexit – German economy ministry https://t.co/rJZwHOgGPA  2016/11/18 07:37:26 (562ms), Orix Capital Trading, Japan	Performance	Trading	0.66
RT @OlafGersemann: This just in: Inflation in #Germany was .8% yoy in October, hitting a two-year high, @destatis reports. Germany OlafGersemann,destatis  2016/11/11 09:01:54 (424ms), Isabel Schnabel, Bonn, Germany	Inflation	Global Economy	-0.25

## Sample – Macroeconomic Indicators (2)



1.860 1.850

1.840 1.830

1.820

1.810

1.800

1.790 1.780

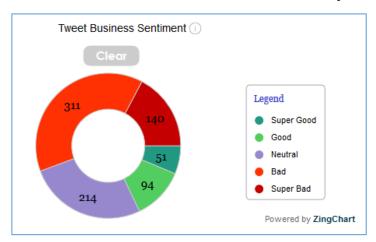
1.770

1.760

1.750

1.740

#### Indicators for Germany



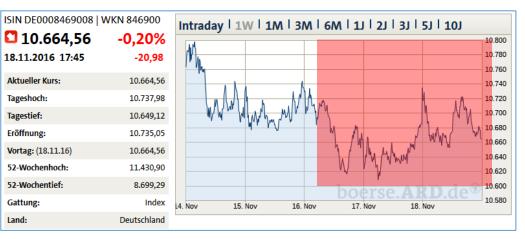




#### **DAXSector Basic Resources Perf.**

#### **German DAX**

18. Nov



# Sample – Politics (1)



# Trump vs Clinton

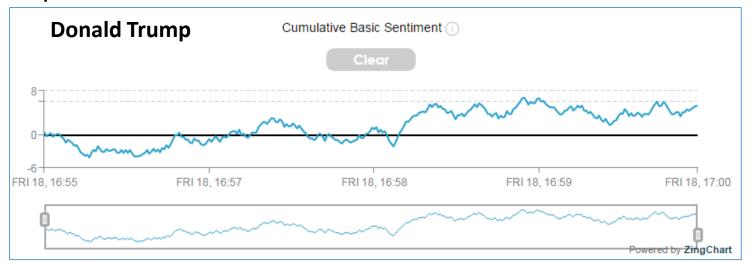
Tweet	Topic	Class	Eval
Michael Hudson: Donald Trump Wants to Make the 1% Even Richer https://t.co/0jvdPRYKCV	Trump	Intention	0.50
How Donald Trump will double growth and jobs - #Millennials watch and learn about pro growth @TPUSA https://t.co/luVaUo2sj6  2016/11/18 16:56:06 (87ms), Andrew Brandt, Southeastern Michigan	Trump	Psychological	0.88
If Donald Trump gets his way, his administration will be disastrous. https://t.co/11SJuG0WuN 2016/11/18 16:55:36 (86ms), SharonAvraham, Hertsmere CLP	Trump	!? Outlook	-0.75
I Wish I'd Said It: I Love Hillary Clinton https://t.co/58RCBLaueH via @ElleMagazine  2016/11/18 16:58:53 (81ms), Dr Lost, Alappuzha	Clinton	Psychological	0.75
From 'Bush doesn't care about why people' to this. I must say tho, that Hillary was no saint either, so man's got a https://t.co/Lx6EKmscKs  2016/11/18 16:57:08 (80ms), Soumiya Benaali, España	Clinton	Review	-0.25

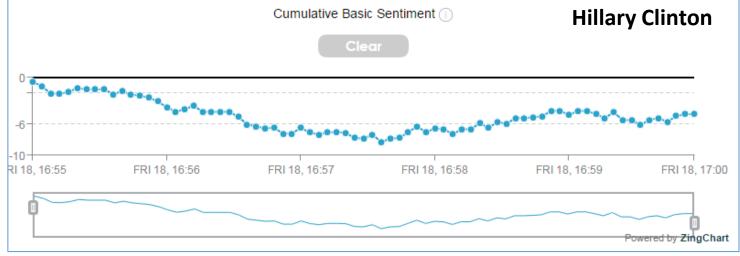
# Sample – Politics (2)



14

## Trump vs Clinton

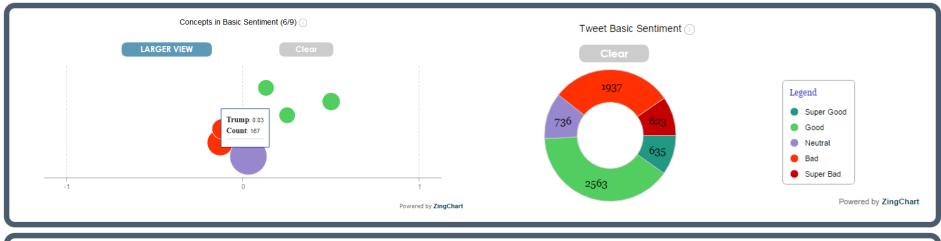


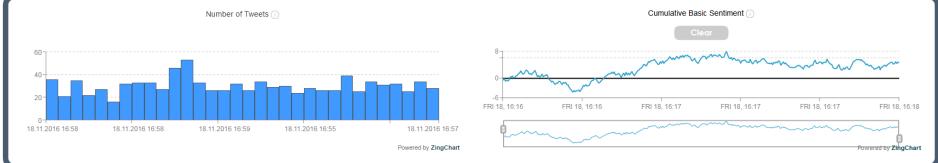


# Sample – Politics (3)



## Trump





## Sample – Politics (4)



#### ■ Trump – Wallstreet Impacts



#### **Bank of America**

#### **JPMorgan**





#### **BNPParibas**

#### WellsFargo



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## Take Away Messages



- Impact Analysis of Finance Relevant Topics
  - Financial Expertise Required
    - Topics + Classification + Evaluation (3 Tier Process)
    - Data Source Selection
  - Clear Goals
    - Use Case, Application, and Viewpoint dependent
    - Time Frame Considerations
  - → No Absolute Truth, but Good Indictions about the Impacts
- LingRep TextAnalytics
  - Customizable, fault tolerant, fast, simple API
  - Proven technology in
    - Finance, Insurance, eHealth, Communications, Marketing

http://lingrep.com, http://processing.lingrep.com

# Thank you!



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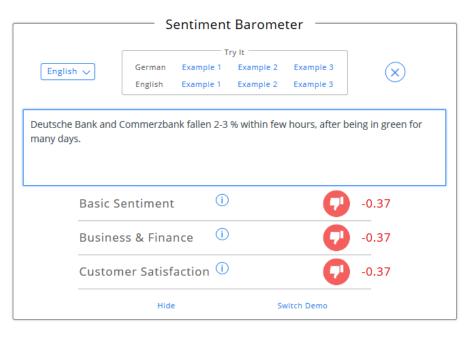
## LingRep TextAnalytics – Stocks: Deutsche Bank



#### Free API: <a href="http://processing.lingrep.com">http://processing.lingrep.com</a>

# LingRep Sentiment Barometer

The free text analytics is provided as REST web services via **processing.lingrep.com:8080**. It comprises a bunch of ultra fast, high quality and flexible methods of natural language processing. Simply try the **Sentiment Barometer** to gain insights into the attitudes expressed in your texts. Experience the power of professional large scale content interpretation!



Check out our advanced Text Analytics Methods



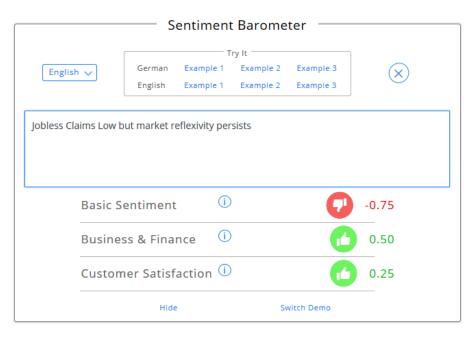
## LingRep TextAnalytics – Macroeconomics: jobless claims



#### Free API: <a href="http://processing.lingrep.com">http://processing.lingrep.com</a>

#### LingRep Sentiment Barometer

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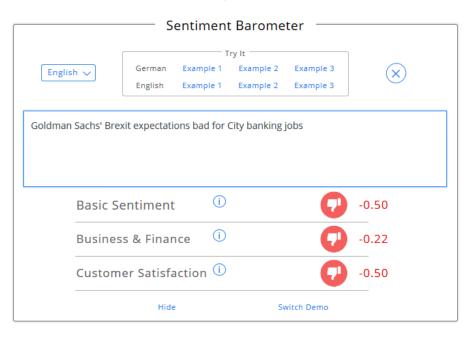
## LingRep TextAnalytics – Politics: Brexit



#### Free API: <a href="http://processing.lingrep.com">http://processing.lingrep.com</a>

#### LingRep Sentiment Barometer

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