KALEIDO
INSIGHTS

Automatically Generated Content

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Media Hungary | May 8., 2018

Agenda

1. What Is AI in Journalism?
2. Technologies
3. Risks
4. Rewards

What Is Automation in Journalism?

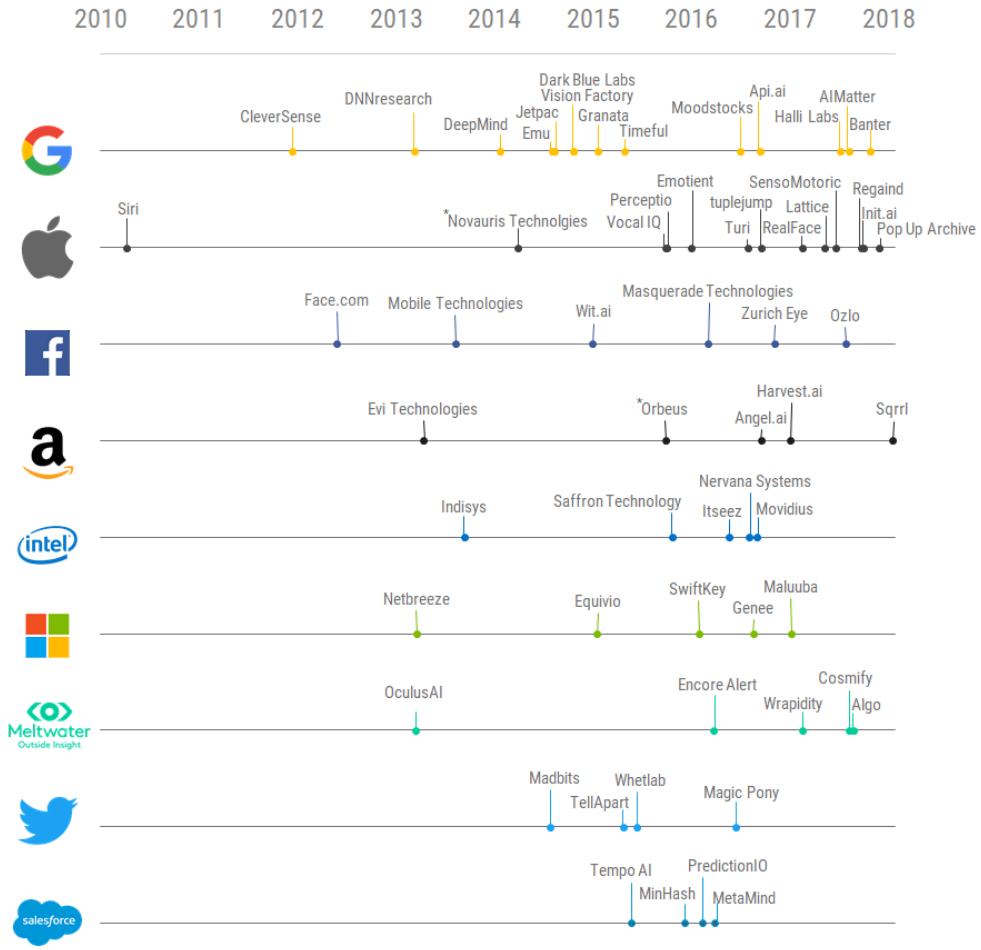
- Machines automate some of the repetitive tasks and chores involved in getting news published.

- Inputs: Analyzing sources, information and data.

- Outputs: Automatically-generated stories and reporting.

Race To Acquire Top AI Startups Heats Up

Date of acquisition (only includes 1st exits of companies)



Source: cbinsights.com

*approximate dates of acquisition

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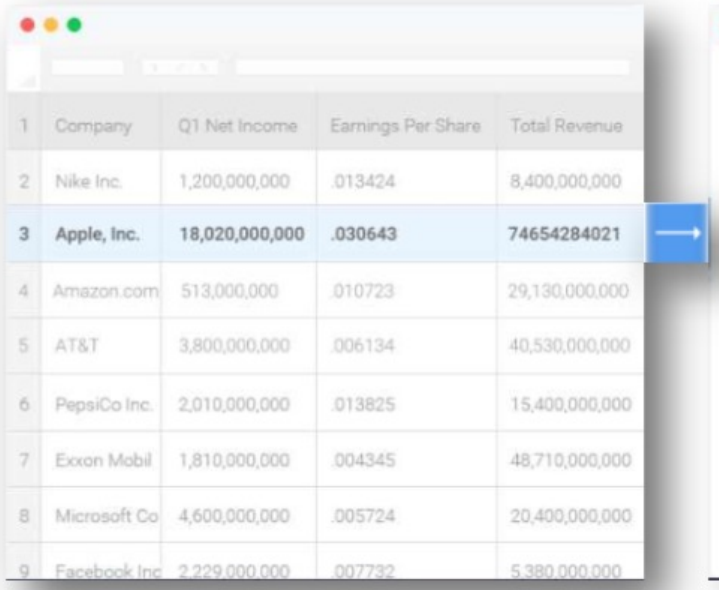
Journalistically Relevant AI Technologies

1. Machine Learning
    - Supervised
    - Unsupervised
2. Natural Language
    - Generation
    - Processing
3. Speech
    - Speech to text
    - Text to speech
4. Vision
    - Image recognition
    - Computer Vision
5. Robotics

Natural Language Generation



1	Company	Q1 Net Income	Earnings Per Share	Total Revenue
2	Nike Inc.	1,200,000,000	.013424	8,400,000,000
3	**Apple, Inc.**	**18,020,000,000**	**.030643**	**74654284021**
4	Amazon.com	513,000,000	.010723	29,130,000,000
5	AT&T	3,800,000,000	.006134	40,530,000,000
6	PepsiCo Inc.	2,010,000,000	.013825	15,400,000,000
7	Exxon Mobil	1,810,000,000	.004345	48,710,000,000
8	Microsoft Co	4,600,000,000	.005724	20,400,000,000
9	Facebook Inc	2,229,000,000	.007732	5,380,000,000

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Apple tops Wall Street 1Q forecasts

CUPERTINO, Calif. (AP) - Apple, Inc. (AAPL) on Tuesday reported fiscal first-quarter net income of $18.02 billion. The Cupertino, California-based company said it had profits of $3.06 per share. The results surpassed Wall Street expectations.

The average estimate of analysts surveyed by Zacks Investment Research was for earnings of $2.60 per share. The maker of iPhones, iPads and other products posted revenue of $74.6 billion in the period, also exceeding Street forecasts. Analysts expected $67.38 billion, according to Zacks. For the current quarter ending in March, Apple said it expects revenue in the range of $52 billion to $55 billion. Analysts surveyed by

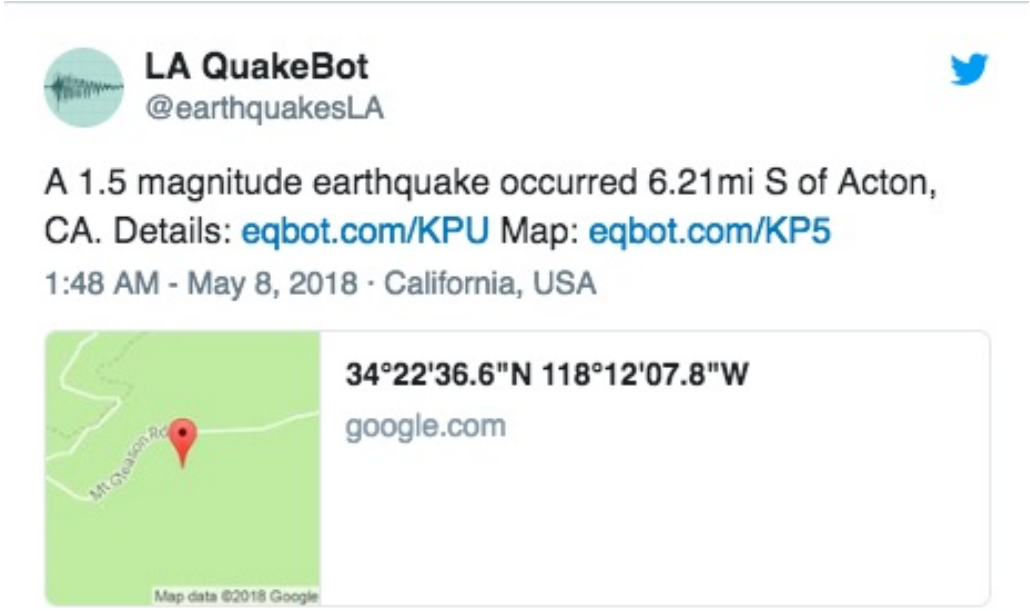
- 10x increase of content produced in business news.
- Free up journalists time to do more multi-format journalism

Source: Automated Insights/ AP

Natural Language Generation

Quakebot from the Los Angeles Times creates an earthquake report within seconds of the event:

“A ____ magnitude earthquake occurred ____ mi ___ of _____, ____.”

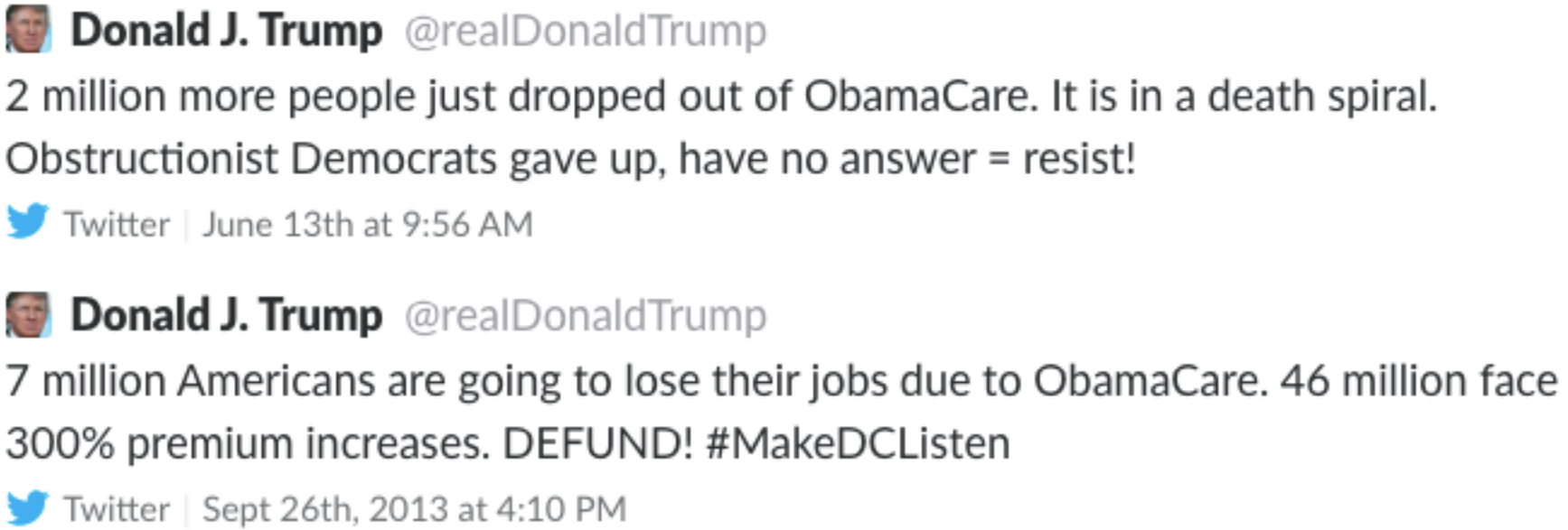


Knowledge Extraction from News Articles

Source: IBM Watson

Pattern Recognition

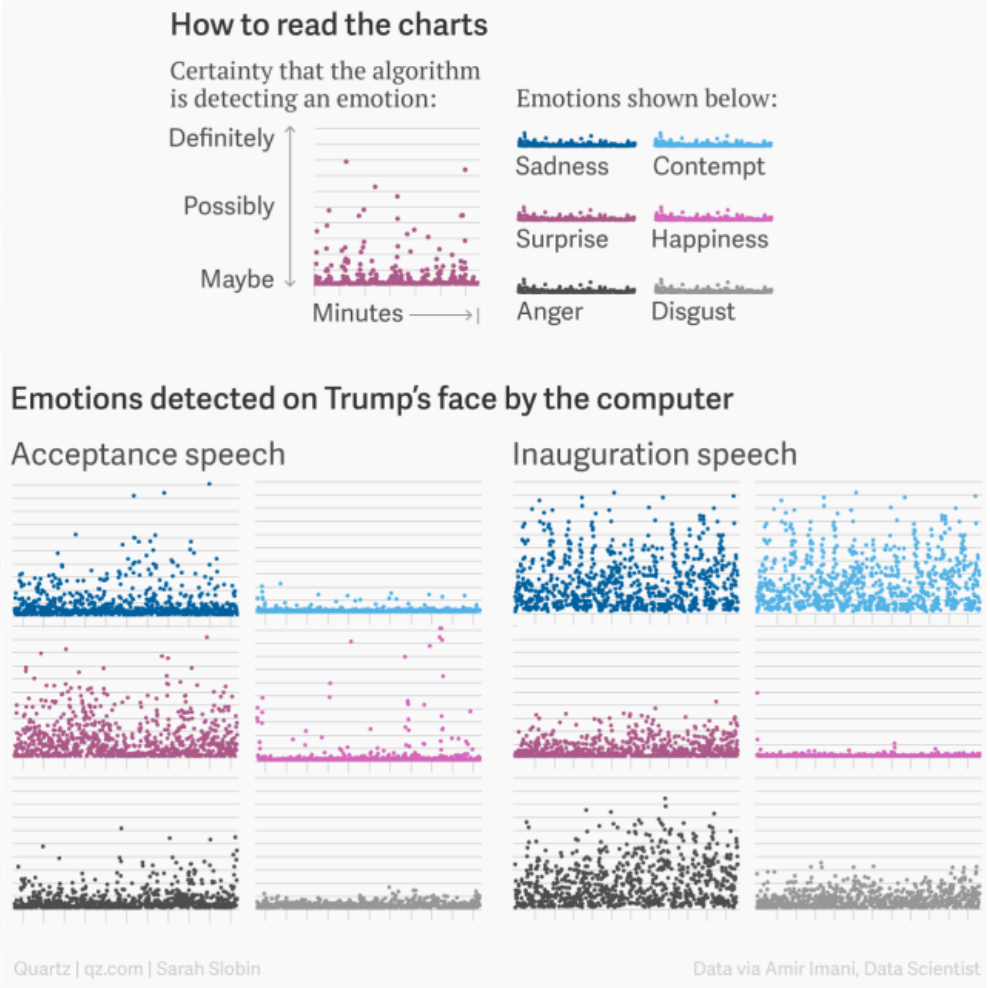
Quartz is using AI to analyze Trump's tweets for similarities and contradictions



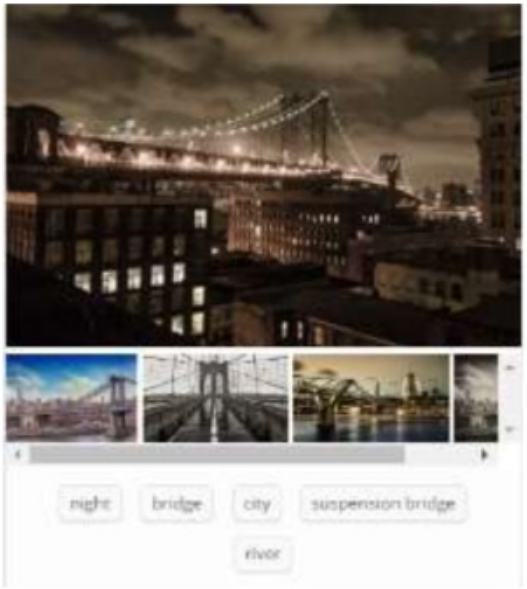
Source: Quartz

Emotional Analysis

Quartz used AI to analyze Trump's facial expressions during acceptance and inaugural speeches.



Content Recognition, Tagging, Similar Concepts



Source: ClarifAI

Optimized Content Discovery

- Toutiau is a Chinese aggregation app that works with thousands of publications to select stories for individual readers based on AI analysis of user activity.

Speech to Text

Recordly captures audio and creates instant transcriptions

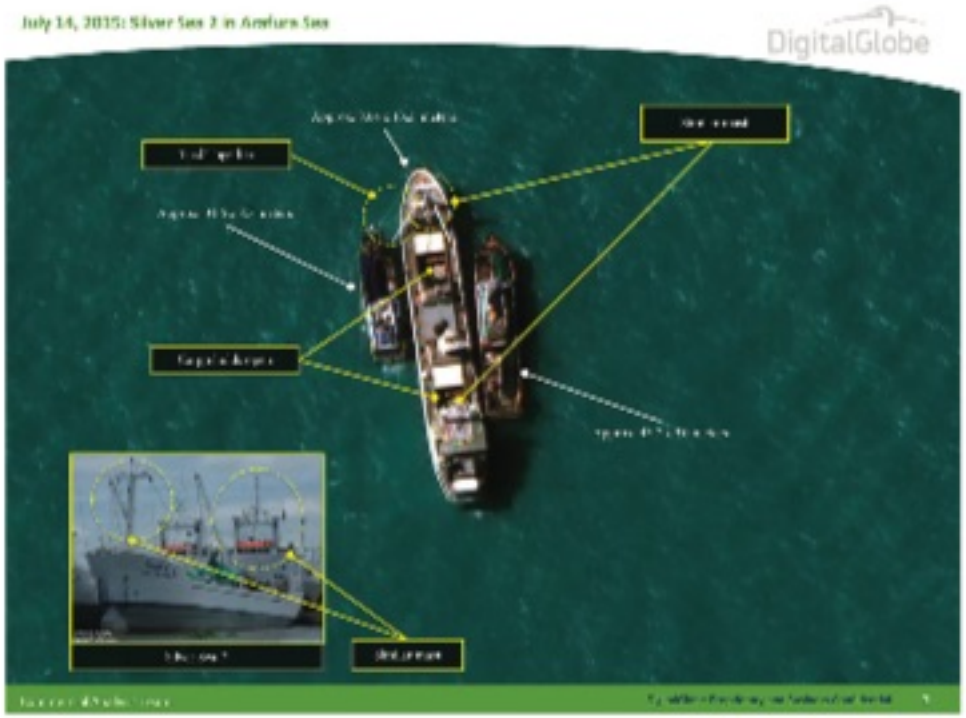
Text to Video

Wibbitz creates a video from an article or blog post in less than five minutes

A Popular Science blog post was converted into a video using Wibbitz.

Computer Vision

Computer vision can help editors quickly classify and organize a vast corpus of images and video, speed the editing process and enable journalists to source evidence for investigative pieces.



Rewards of AI in Journalism

AI can enable journalists to:

- Identify trends, insights and actionable insights from multiple source
- See things the naked eye cannot
- Turn data and spoken word into text
- Turn text into audio and video
- Understand sentiment
- Analyze scenes for objects, faces, text, colors, etc.
- Save time and money, keep pace with growing scale and scope of news cycle

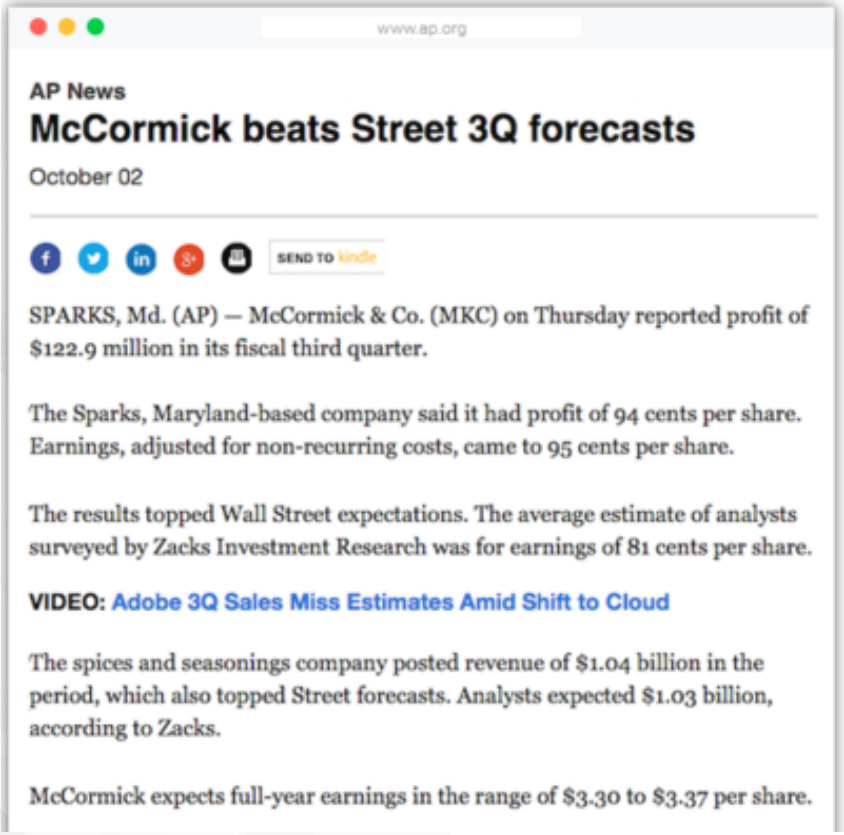
POLITICIANS

The Power Players

Automated Article Generation

The Associated Press uses Wordsmith to transform raw earnings data into thousands of publishable stories, covering hundreds more quarterly earnings stories than previous manual efforts.

- 4,400 quarterly recaps produced
- 12X increase over manual efforts



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AP News

McCormick beats Street 3Q forecasts

October 02

SEND TO kindle

SPARKS, Md. (AP) — McCormick & Co. (MKC) on Thursday reported profit of $122.9 million in its fiscal third quarter.

The Sparks, Maryland-based company said it had profit of 94 cents per share. Earnings, adjusted for non-recurring costs, came to 95 cents per share.

The results topped Wall Street expectations. The average estimate of analysts surveyed by Zacks Investment Research was for earnings of 81 cents per share.

VIDEO: Adobe 3Q Sales Miss Estimates Amid Shift to Cloud

The spices and seasonings company posted revenue of $1.04 billion in the period, which also topped Street forecasts. Analysts expected $1.03 billion, according to Zacks.

McCormick expects full-year earnings in the range of $3.30 to $3.37 per share.

Risk of AI in Journalism

- Unchecked algorithmic news generation
- Potential for workflow disruption
- Skill set gap
- Algorithms are prone to human bias
- Bad data = bad story

THANK YOU!

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