

## *Mecanism de scanare a semnalelor slabe & tendintelor*

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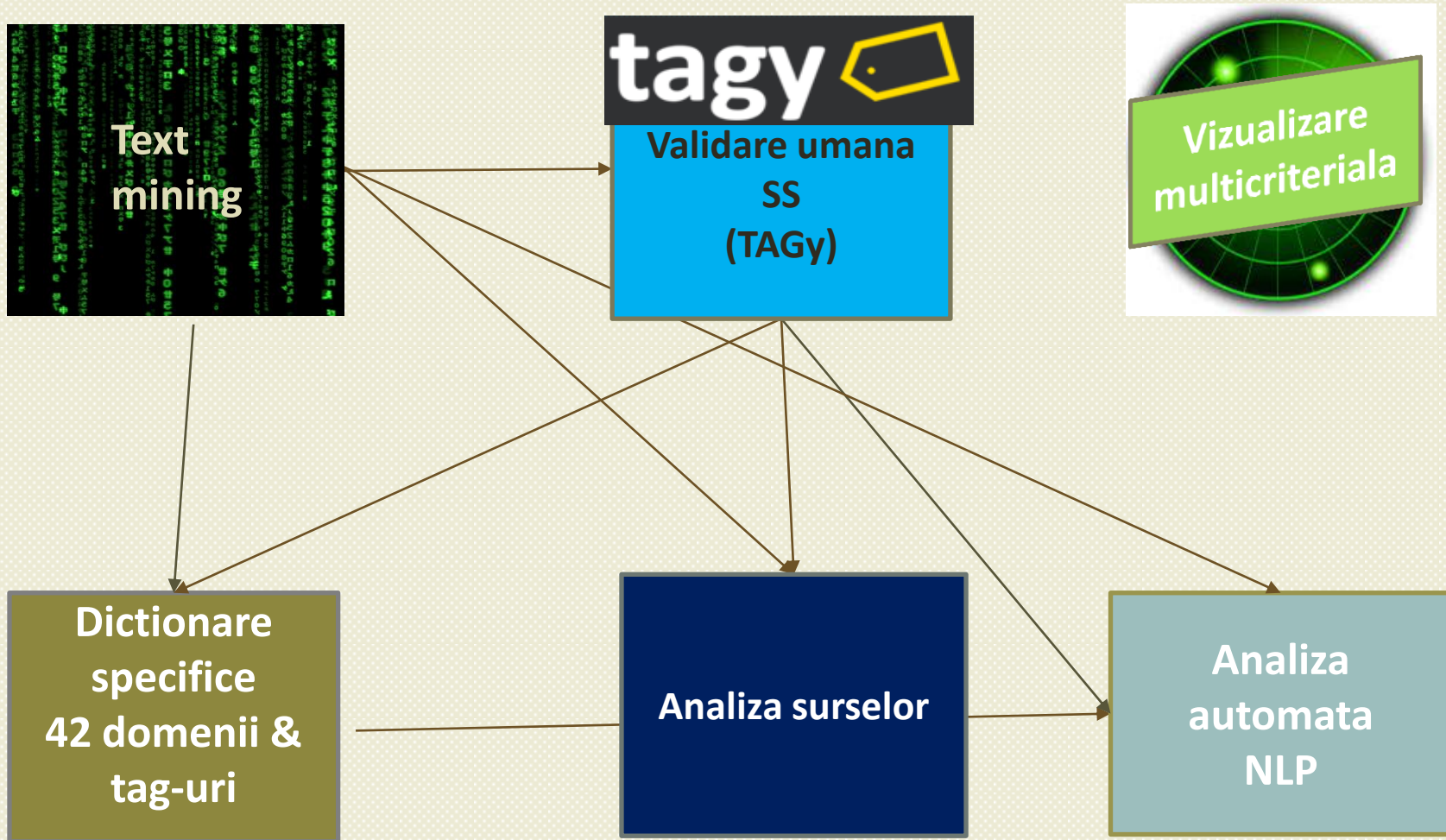
Expert extern: Octavian Popescu

# NOSEit – la ce e util un astfel de mecanism?

- Orientare strategica (mediul privat/public)
  - <http://bit.ly/1IGIMXp>
- Politici bazate pe evidente (evidente – evolutii probabile ale unor fenomene emergente)
- Consultari multi-actor/stakeholder

# Radar tendinte tehnologice

## componente majore



# NOSEit –Componente majore

- Platforma Radar Repository (Corpusuri de stiri)
- Procesul de validare umana(gaming - TAGy) – detectarea de “semnale slabe”
- Modul analiza automata (Natural Language Processing)
- Platforma de vizualizare Repe-R
- Pagina de Facebook NOSEit

# Repository

O baza de date ce contine ~ 600 000 de stiri din aprox 300 surse online.

20 000 stiri adaugate lunar (*phys.org, nature.com, bbc.com, biosciencetechnology.com, etc.*)

- Preluare automata a stirilor din RSS feed
- Eliminarea duplicatelor (software intern + Plagiarism software)
- Calitatea surselor in termeni de SS => top 30 de platforme de stiri
- Filtre multiple:
  - Sursa
  - Data (zi/luna/an)
  - Tags (SS, domenii)
  - Selectie stiri TAGy

# Repository


radarrepository.uefiscdi.ro/Forms/ListOfNews.aspx

Radar Repository Home Administrare > Lista de stiri Bun venit, admin [Delogare]

## Lista de stiri

FILTRARE

Text:

Platforma:  

Data in:

Rein:

000 A:

asmar 10:

asmar 103:

asmar 105:

asmar 109:

insidehighered.com

huffingtonpost.com

inside3dprinting.com

earthtechling.com

businessweek.com

articles.chicagotribune.com

environmentalleader.com

eu-smartcities.eu

itechfuture.com

japandailynews.com

insidehpc.com

blogs.wsj.com

lifescience.net

lifescienceinvestingnews.com

economist.com

asmarterplanet.com

greenwisebusiness.co.uk

campustechnology.com

insidehighered.com

Numar intre:  -









Cod Titlu

Filtreaza Clear

## Filtering

## Tags

## Links

Tags	Link	ACTIUNE
ICT - Internet of Things	<a href="http://asmarterplanet.com/blog/2015/02/keeping-pace-rapid-rate-big-data-innovation.html">http://asmarterplanet.com/blog/2015/02/keeping-pace-rapid-rate-big-data-innovation.html</a>	 
ICT - Internet of Things	<a href="http://asmarterplanet.com/blog/2012/09/innovation-or-investments-what-can-transform-the-cities-in-india.html">http://asmarterplanet.com/blog/2012/09/innovation-or-investments-what-can-transform-the-cities-in-india.html</a>	 
ICT - Internet of Things	<a href="http://asmarterplanet.com/blog/2012/05/innovation-in-motion-enhancing-the-fan-experience-at-the-us-open.html">http://asmarterplanet.com/blog/2012/05/innovation-in-motion-enhancing-the-fan-experience-at-the-us-open.html</a>	 
ICT - Internet of Things	<a href="http://asmarterplanet.com/blog/2014/07/can-tech-innovation-help-end-cancer.html">http://asmarterplanet.com/blog/2014/07/can-tech-innovation-help-end-cancer.html</a>	 

## Platforms

# Repository

**Source info**

Platforma: ajnabili.com  
Nr. ordine: 1  
Link Redar: <http://ajnabili.com/tech/should-you-buy-a-nook-color.html>  
Data Radar: 2011-12-28  
Link original:  
Data sursa:  
Tags import: LIFE SCIENCES / BIOTECH  
Fisier: ajnabili.com 2011 00001 [Descarca fisier]

**Short text**

**Text scourt:**  
Technology has changed the way we do just about everything including how we read books. With an eReader you can read almost any book you want anytime anywhere. No more traveling all the way to the bookstore to pick up a copy. No more trying to find extra space on your shelves to store all [...]

**More info**

**Full text**

**TEXT INTEGRAL**

Technology has changed the way we do just about everything including how we read books. With an eReader you can read almost any book you want anytime anywhere. No more traveling all the way to the bookstore to pick up a copy. No more trying to find extra space on your shelves to store all those books you just can't get rid of. No more weighing down your backpack or luggage with reading material. No more paper cuts. EReaders are similar in design to tablet computers but they're less expensive lighter and don't do much else other than their main purpose & allow you to read books. In the beginning of eReaders you could only read books in black and white. In most cases people aren't bothered by the lack of color even if they could imagine the benefits of it because they spend the majority of their time reading simple black text. Traditional eReaders are simplistic. The Nook Color changed things when it was introduced as a color eReader. But if you're going to purchase an eReader do you really need anything more than simple? In other words should you buy a Nook Color? Color vs. Black and White The benefits of color for an eReader are plentiful. It totally enhances the way you can view your magazine subscriptions photographs illustrations children's books and more. The Nook Color makes the reading experience of these types of materials much more enjoyable than other eReaders. Traditional eReaders however use e-ink technology which is a unique technology developed to make reading with it extremely similar to reading actual books. Color e-ink technology does not yet exist for consumers in the US. Therefore the Nook Color is backlit and does not use the same technology as black and white eReaders. The backlighting is good because it makes it possible to read in the dark. However it can strain your eyes or cause headaches after long-term viewing similar to a computer monitor. This doesn't happen with the e-ink used for black and white eReaders. You'll have to weigh the balance & is the ability to view color more important or necessary for you than the ability to read for hours and hours with no eye strain? If so you should purchase a Nook Color. If not you shouldn't. More Functions An additional benefit of the Nook Color is the ability to run thousands of Nook apps. There are apps for just about everything you could need without the overwhelming selection of Apple or Android apps. It also plays music. If you want your eReader to do a lot more than just read books the Nook Color might be for you, however the Nook Color is still limited in what it can accomplish and if you have a tablet already there's probably no real need for the additional functions other than entertainment. There is also no 3G available so if you don't have access to Wi-Fi you can't use most of those additional

# REPE-R

Interfata web de vizualizare a stirilor si incadrare pe domenii

## Software-uri utilizate pentru input:

- **Tropes** – software analiza semantica - folosit pentru dezvoltarea dictionarelor pe domenii
- **Zoom** – extensia Tropes, export de stiri in urma indexarii stirilor pe baza unui dictionar
- **OwlEdge** – software de analiza semantica, care poate realiza exporturi xml pe baza dictionarelor realizate in Tropes si poate oferi si alte tipuri de informatii/analize pe baza textelor si a dictionarului.
- **Plagiarism Detector (PD)** = software de detectie a plagiatului/similaritatii. Oferă rapoarte html cu surse aditionale pentru stiri/SS: max 10 surse cu min 50% similaritate pt fiecare stire/ss
- **xPIg** =Raport xls cu sursele indentificare prin PD + date asociate lor.
- **exportBulk** – transforma stirile din excel format txt



# REPE-R

UDiDrive :: Visualizari :: Ontologie ::

UDiDrive  
Visualizari  
Ontologie  
Terms and Conditions  
Contact  
**Administrare**

Elipsa Stanga Background Elipsa Dreapta  
Ramura Stanga Resetaza Culoarea Ramura Dreapta  
franta Stanga Calculeaza intersecția Franta Dreapta

not  
medical procedure  
space tendinte  
space generale space colaterale  
Bec-3  
Aria Centrala

Functionalitati:  
• butoane: controleaza culorile elementelor  
• mouse scroll: zoom in/out  
• click stanga (hold): drag

Document

- Nearly two years after the conclusion of its space shuttle program left Americans wondering what would become of the spacefaring dreams of decades past NASA has sought the advice of health and ethics experts for protecting astronauts on its next generation...
- ScienceDaily\_2014\_17805.txt
- Three-dimensional printers are transforming the business medical and consumer landscape by creating a vast variety of objects including airplane parts football cleats lamps jewelry and even artificial human bones. Now astronomers Carol Christian and Antonel...

Panou Stanga

Panou Deapta

Buton de export a rezultatelor in baza unor filtrari initiale.

Administrare

- Zona pentru formule si diverse queries
- Selectie dictionare/import dictionare (daca vrem sa vedem doar tendinte de ex)
- Filtre pentru: vizualizare grafica (culori care sa diferentieze diverse topicuri), ordonare/sortare lista, adaugare frecvente.

# Mecanismul de validare umana

**Ce ?** Clasificarea si incadrarea stirilor in categoria SS sau NS (7 categorii de SS, NS, discard);

**Cine?** 20 studenti masteranzi(specializari diverse)

- recrutati pe baza abilitatilor de intelegere a textelor in limba engleza;
- organizati in echipe de cate 2 dar care isi schimba compozitia la fiecare flux de lucru;

**Cum?** Interactiunea se realizeaza online, fiecare actionand atat in calitate de Extractor(E) cat si de Checker(C);

# Mecanismul de validare

## Cum se intampla?

### Etapele validarii:

1. E: extrage ideea de baza din textul integral, apoi incadreaza textul ca SS/NS/discard;
2. C: voteaza textul ca SS sau NS; Daca votul C este identic cu E runda se incheie; daca nu se intampla asa, C poate accepta categoria E sau isi poate pastra opinia prin argumentare;
3. E: Fie accepta argumentul C si alternativa propusa de el sau isi mentine votul original furnizand un ultim argument pentru decizia sa si astfel runda se incheie;
4. Din total SS → Top SS (~ 30/ luna)

# Extragere continut si clasificare

## Extractor - Extragere continut si clasificare ( Finalizata )

### - China Combat Smog with Artificial Rain [\[Link\]](#)

China plans to open the heavens to bring back its blue skies. According to local news reports, a document released by the China Meteorological Administration says that from 2015, local weather authorities will be allowed to use cloud seeding to create rain and clear the country's notorious smog. It's part of the government's plan to invest 1.7 trillion yuan (\$277 billion) in tackling air pollution. But will it work? Programmes to generate artificial rain have been running since the 1950s. In recent years, the controversial technique has gained some credibility. "There is indeed something to be said in favour of cloud seeding, provided it is very targeted," says Roger Stone, a climate scientist from the University of Southern Queensland in Toowoomba, Australia. China has used cloud seeding before on a sporadic basis, for example, to ensure clear skies for the opening ceremony of the Beijing Olympics. The technique the Chinese use involves firing rockets carrying a payload of silver iodide particles into the clouds. Ice crystals then form from super-cooled liquid water in the clouds, using the particles as nucleation points. The crystals fall as rain or snow depending on the temperature below. The idea is that the artificial precipitation should clear the smog below. There are other methods that deploy different chemicals designed to work in warmer clouds, but the "glaciogenic" method the Chinese use is considered the most effective, says Steven Siems from Monash University in Melbourne, Australia. However, he doubts cloud seeding will be effective in smoggy conditions. This is because smog is made of particulates of soot and dust, which should already have acted as ice nuclei. If it hasn't rained already, Siems reasons, then adding more particulates in the shape of silver iodide won't help. Satellite data suggest China doesn't have the right atmospheric conditions for cloud seeding, Siems says. "I can pretty much confidently say they don't." And he adds that the skies over China already contain a lot of ice nuclei from factory pollution and dust from the Gobi desert.

### Textul extras:

pollution. But will it work? Programmes to generate artificial rain have been running since the 1950s. In recent years, the controversial technique has gained some credibility. "There is indeed something to be said in favour of cloud seeding, provided it is very targeted," says Roger Stone, a climate scientist from the University of Southern Queensland in Toowoomba, Australia. China has used cloud seeding before on a sporadic basis, for example, to ensure clear skies for the opening ceremony of the Beijing Olympics. The technique the Chinese use involves firing rockets carrying a payload of silver iodide particles into the clouds. Ice crystals then form from super-cooled liquid water in the clouds, using the particles as nucleation points. Th

## Taxonomie

### Categorii alese de dvs.:

- Innovation in Services
- Trend shift
- Behavioral Change
- Major actor move
- Discovery
- Studies
- Wildcard
- NS
- Categorie noua de test
- Technology

### Categorii alese de checker:

- Innovation in Services
- Trend shift
- Behavioral Change
- Major actor move
- Discovery
- Studies
- Wildcard
- NS
- Categorie noua de test
- Technology

Inchide

# Statistici

## Statistici pe liste de stiri

Statistici pe liste de stiri

Lista de stiri: **Lista import 1** Status: **- Oricare -**

- Lista import 1
- Lista 2
- Lista 3
- Lista 4
- Lista 3 Test Multiplicat
- Lista 8\_15 decembrie2014
- Lista 5 Test
- lista 6\_2400
- lista 23dec\_5 ian 2015
- Lista 7\_11 Ianuarie 2015
- Lista 12\_18 ianuarie 2015
- Lista 19\_25 ianuarie 2015
- Lista 26.01\_01.02.2015
- Lista 2\_8 Februarie 2015
- Lista 3\_8 Februarie 2015
- Lista 9-15 Februarie 2015
- Lista 16-22 Februarie 2015
- Lista 23 Februarie-1 Martie 2015
- Lista 2\_8 Martie 2015
- Lista 9\_15 Martie 2015
- Lista 16\_22 Martie 2015
- Lista 23\_29.03.2015

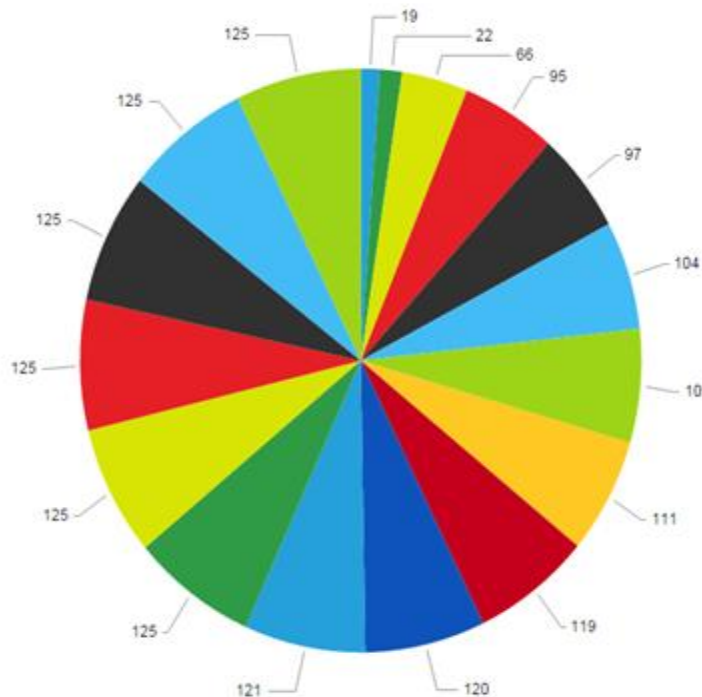
Trebuie extrase  
In lucru la checker  
In lucru la extractor (reverificare)  
Finalizate

## Statistici pe liste de stiri

Statistici pe liste de stiri

Lista de stiri: **Lista 23\_29.03.2015** Status: **Trebuie extrase** Afiseaza statisticile

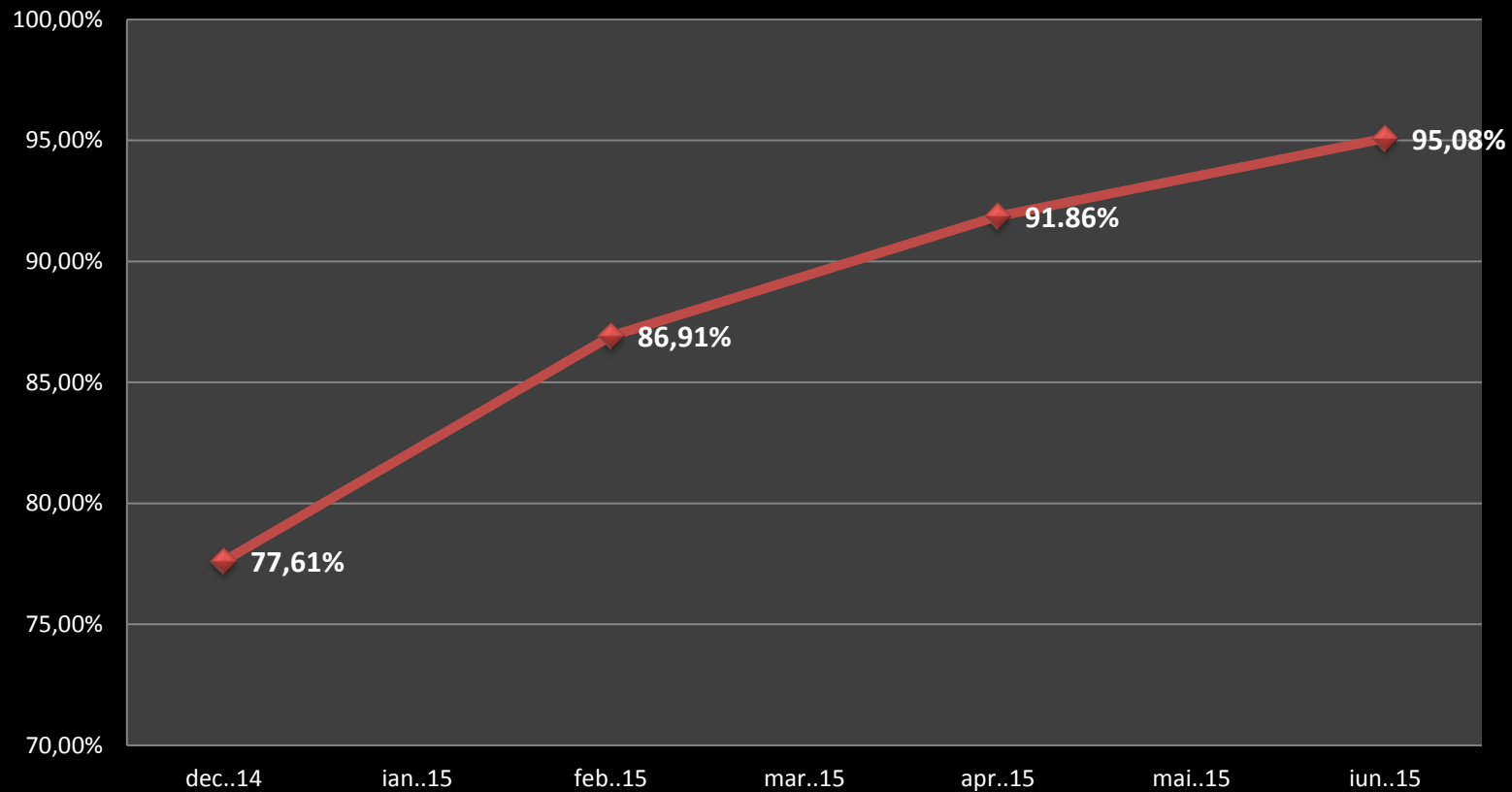
Lista extractori care mai au stiri de extras



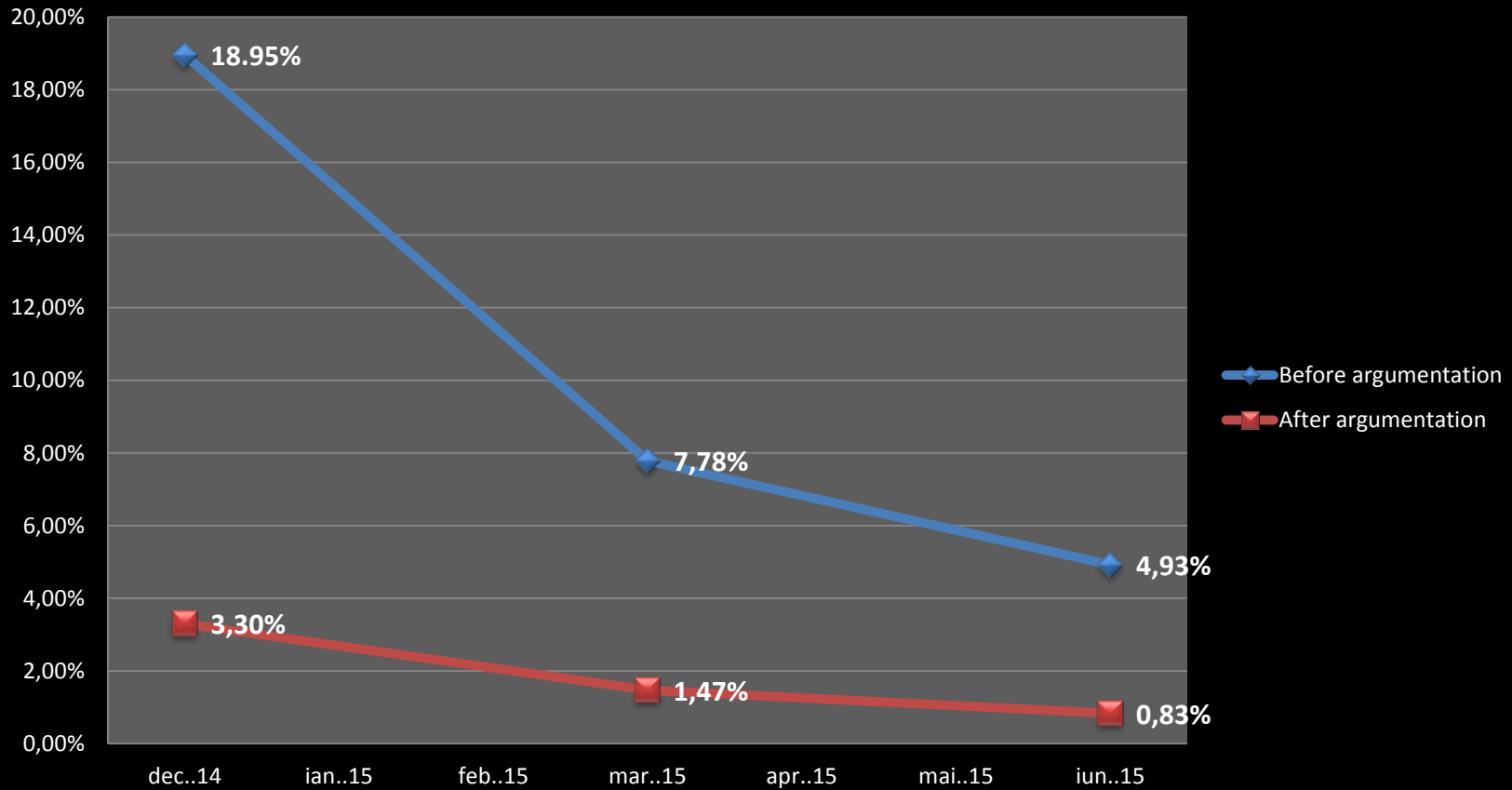
# Evolutia consensului

Predictii bune= Atat E cat si C voteaza identic de la inceput

## Evolutia predictiilor bune



## Reducerea divergentei in timp



# Rezultate: ~ 6200 SS.

Dec 2014 – Noiembrie 2015	Nr. stiri	SS	NS + Discarded	SS %
Seturi de stiri 1-4	6800	1364	5436	20.06%
Seturi de stiri 5-6	4000	402	3598	10.05%
Seturi de stiri 7-13	15875	617	15258	3.89%
<b>Total</b>	<b>26675</b>	<b>2383</b>	<b>24292</b>	<b>8.93%</b>
Seturi de stiri 14-27	43045	1454	41591	3.37%
Seturi de stiri 27-47	79997	2347	77650	3%
<b>Total</b>	<b>149717</b>	<b>6184</b>	<b>143533</b>	<b>4.1%</b>

- <http://tabsoft.co/1NcfFT0>
- <http://bit.ly/1SHg0k5>

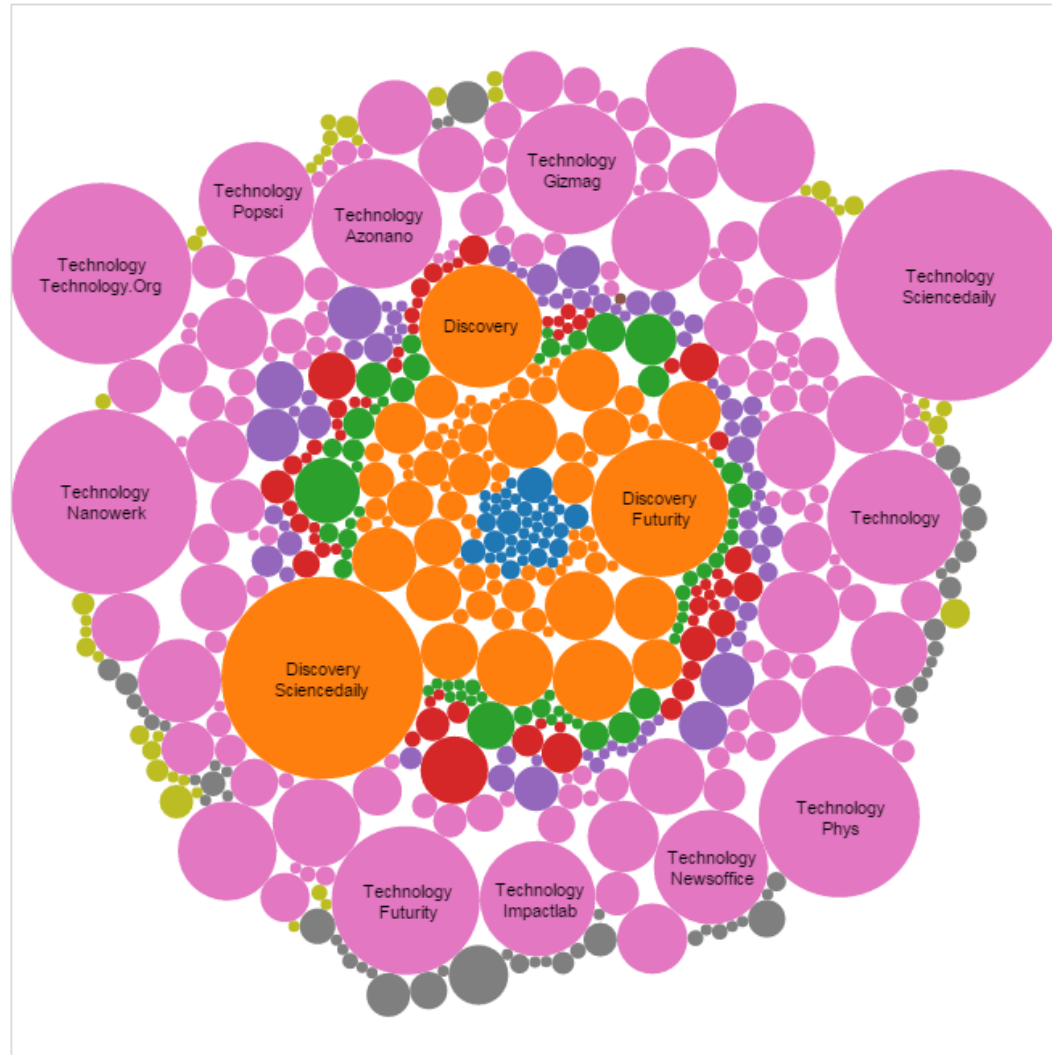




# Distributia semnalelor slabe pe taxonomia din TAGy

## Vot Ss

- Behavioral Change
- Discovery
- Incadrare multipla
- Innovation in Services
- Major actor move
- Similar
- Technology
- Trend shift
- Wildcard



# Modul NLP - Natural language processing

Utilizarea unor algoritmi de inteligența artificială:

- SVM - tehnica Support Vector Machine permite ca, pornind de la un set de texte exemplu dintr-un domeniu (ex. foraj marin), să selecteze din corpusul de știri pe cele care se încadrează în acest domeniu (știrile sunt ordonate în funcție de probabilitatea de încadrare).
- LDA - Latent Dirichlet Allocation e metoda de procesare a limbajului care permite clasificarea semantică a unui corpus mare de știri într-un număr de clusteruri la alegerea analistului uman;
- Algoritmi de machine learning care permit învățarea unor modele/patternuri semantice din textele validate ca SS și detectarea lor în alte texte, cu anumită probabilitate

# <https://www.facebook.com/NOSEit>

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NOSEit

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NOSEit  
Community

Create Call to Action Like Message

Timeline About Photos Likes More

NOSEit 21 May at 14:41 · 🌐

#gamifyingneuroscience  
More and more people from all over the world can contribute to neuroscience research by mapping connections of billions of neurons through a 3D game.



EyeWire Is Making Neuroscience Research Cool Again

SOCIAL.TECHCRUNCH.COM

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NOSEit 15 May at 14:45 · 🌐

Instagram for doctors - it's high time for crowdsourcing diagnoses.




Instagram for doctors

THEGUARDIAN.COM | BY SAMUEL GIBBS

Like · Comment · Share

NOSEit 25 May at 16:25 · 🌐

Nanoscale memory devices store and process information in the very same way the brain does. This could enable replicating the human brain outside of the human body.



New Memristors Could Usher in Bionic Brains

SPECTRUM.IEEE.ORG | BY DEXTER JOHNSON

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