



Fundamentarea politicilor publice: De la date statistice la analize big data

Prof. Adrian Curaj

Seeds for the future



Vision „Romanian higher education in 2025“

Vision „Romanian Higher Education 2025“

The four scenarios

University of life and career



Knowledge constellation



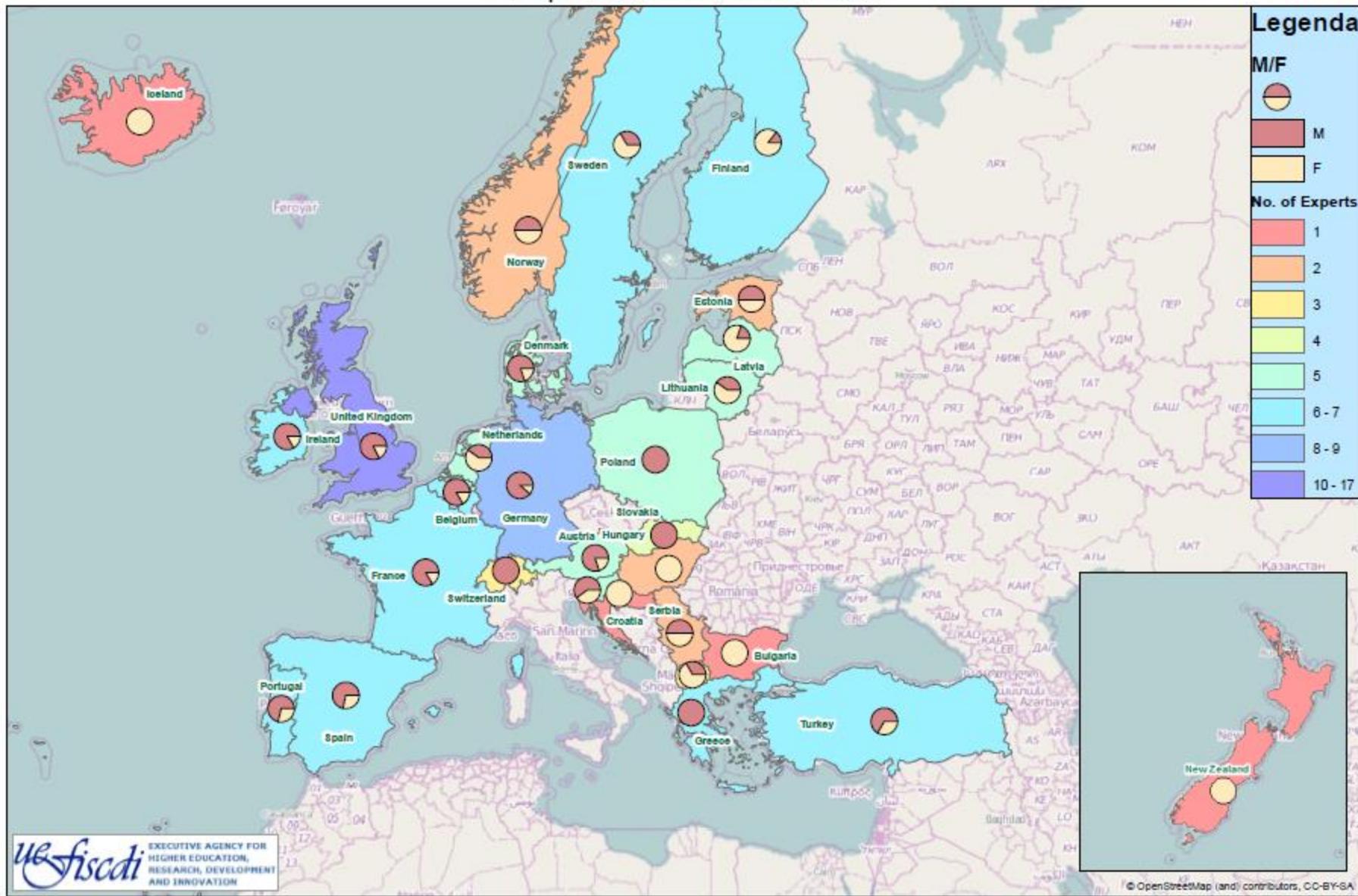
Athenaeum

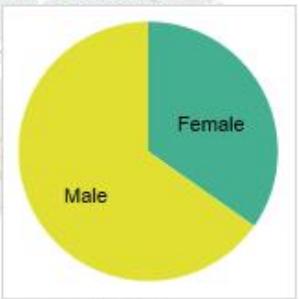


Blue ocean

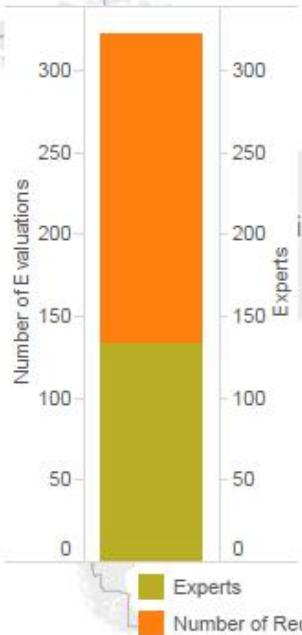


Distribution of number of experts per country Europe view and New Zealand





[MOUSEOVER] Filters the entire dashboard except the background map

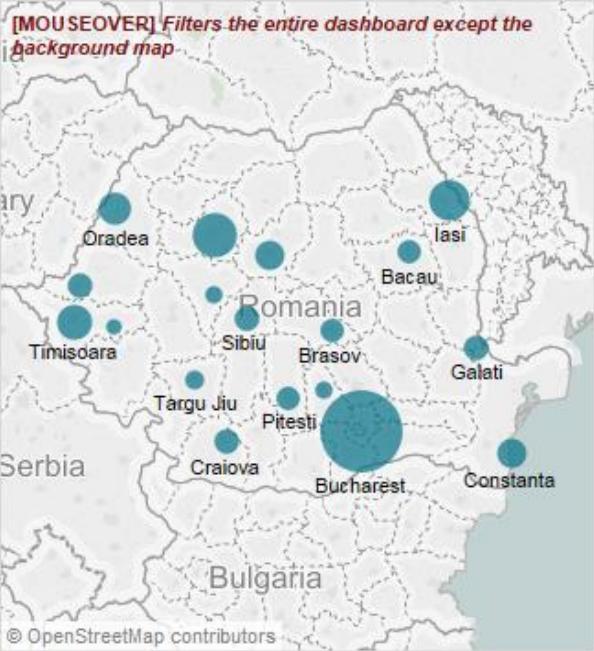


etMap contributors



[MOUSEOVER] Filters the entire dashboard except the background map

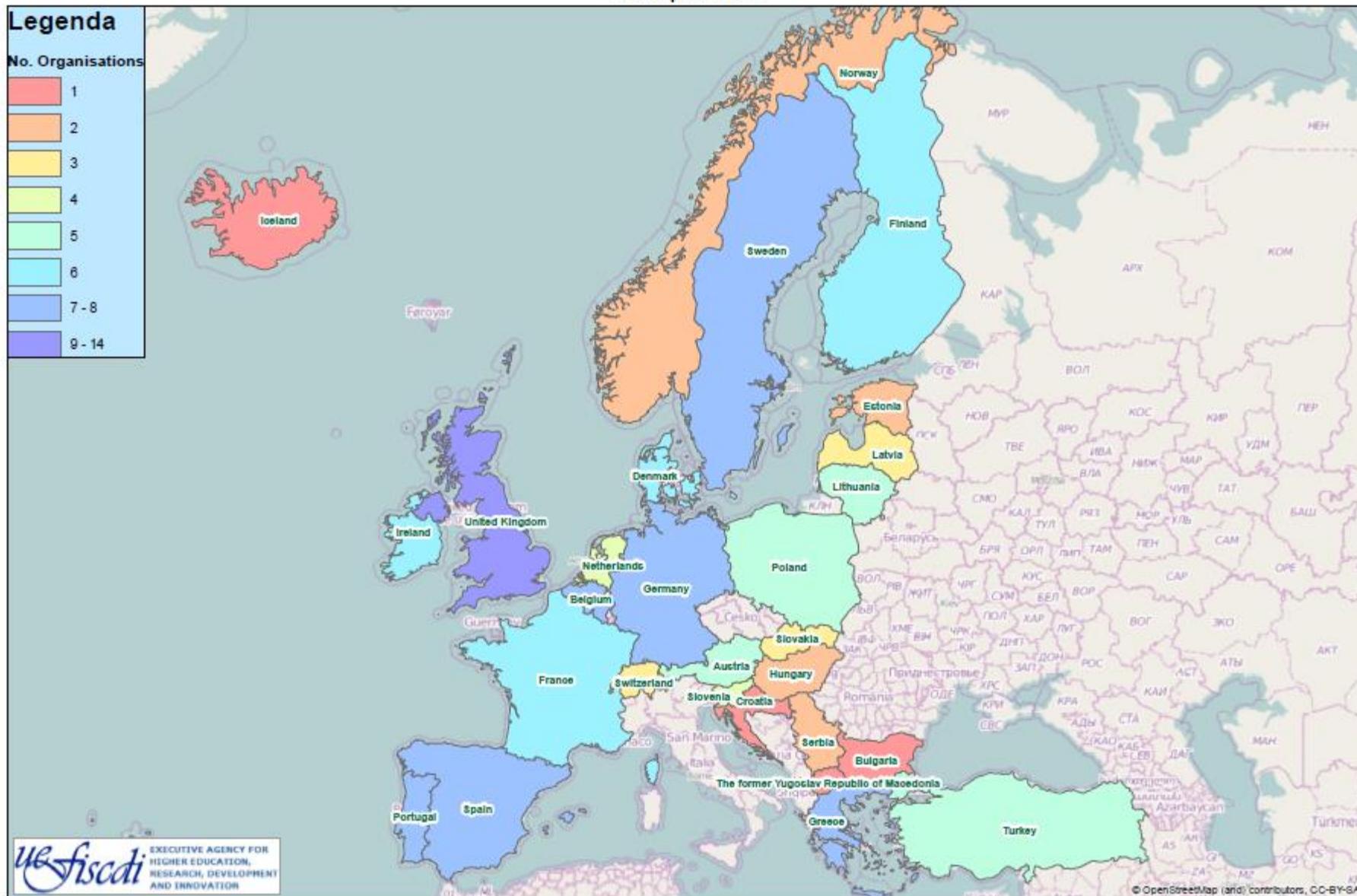
[MOUSEOVER] Filters the entire dashboard except the background map.

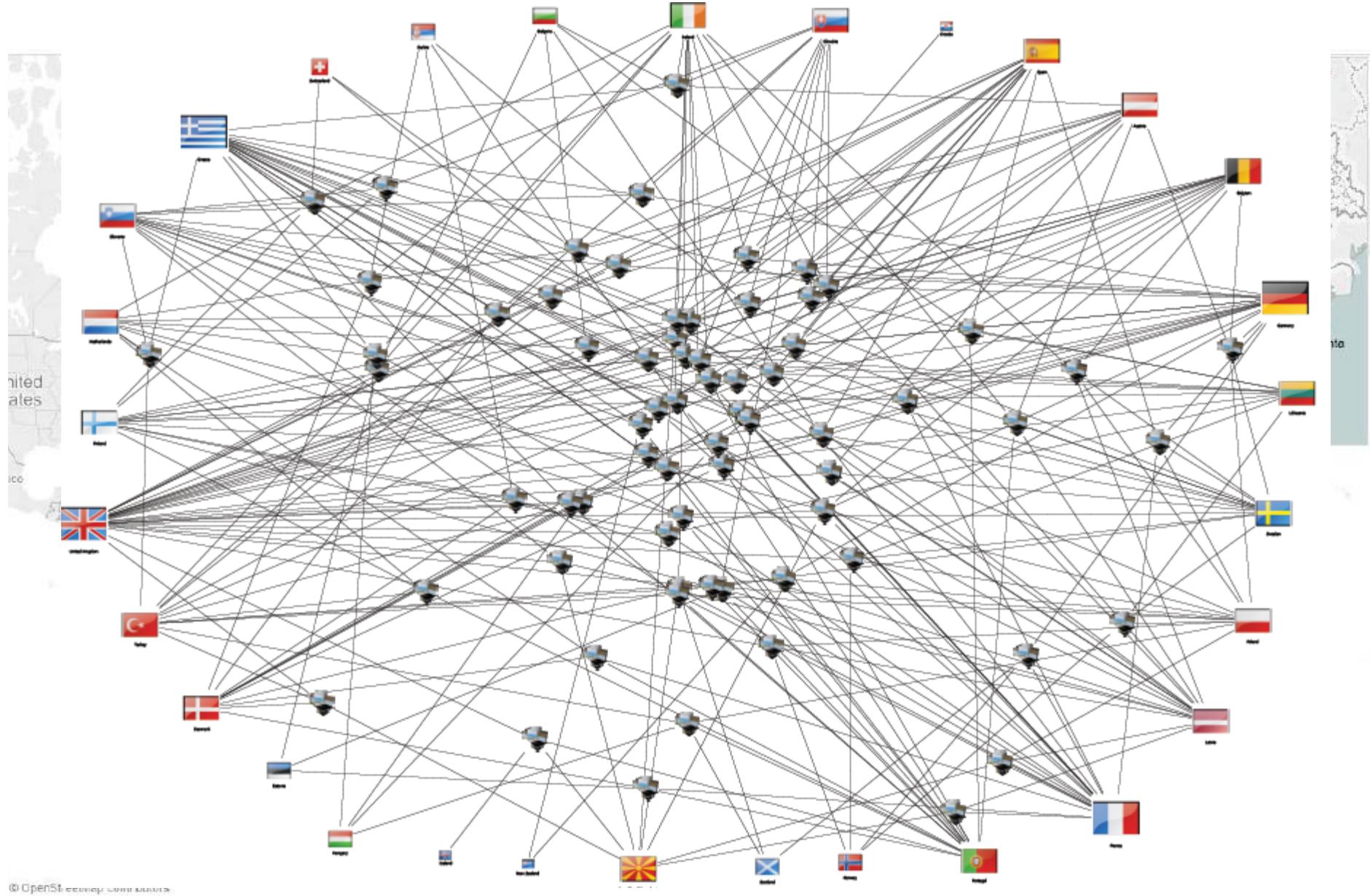


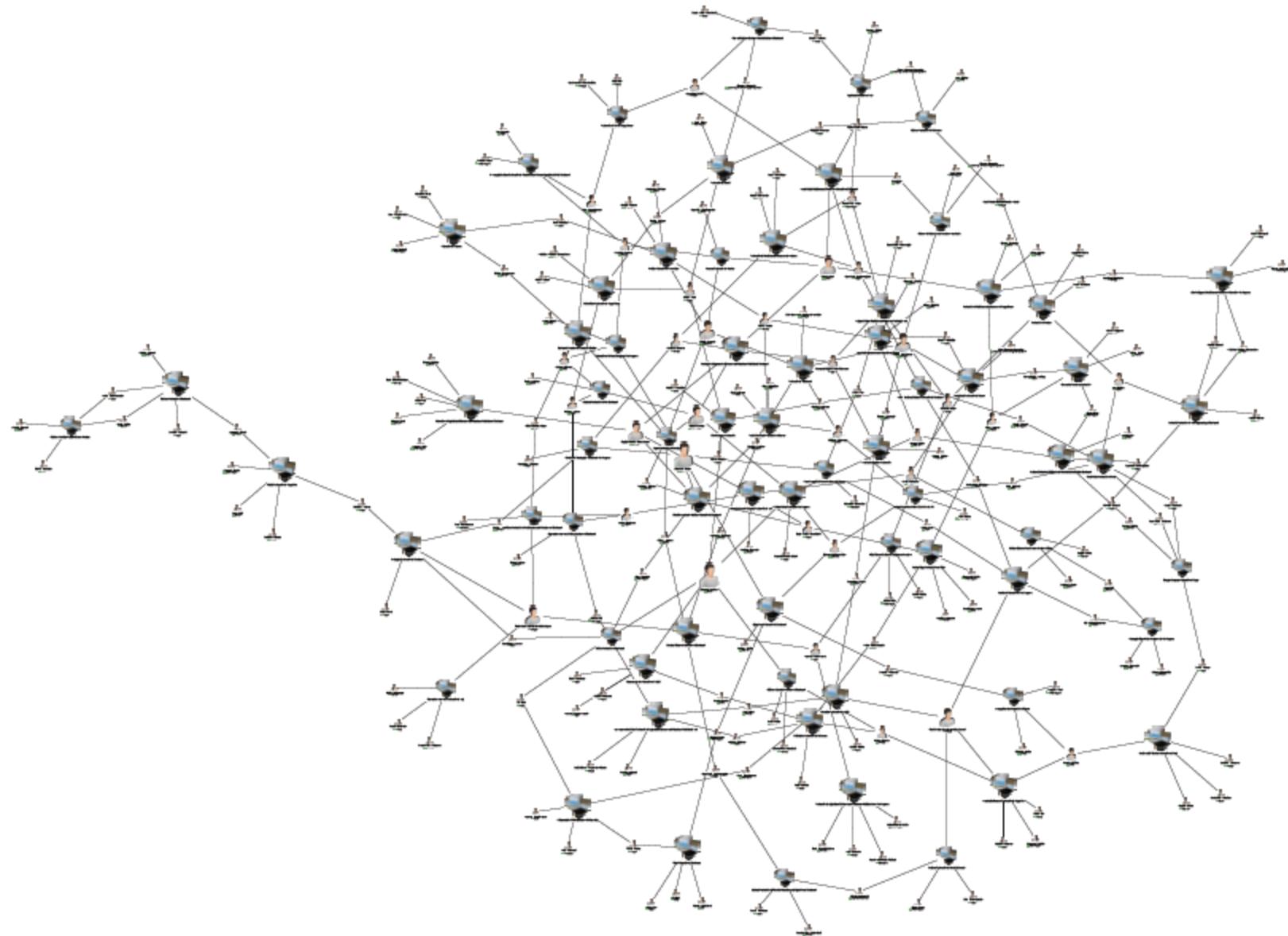
© OpenStreetMap contributors



Distribution of experts' organisations per country Europe view







In

The image shows a screenshot of the "STUDY IN ROMANIA" website. At the top left is the logo "STUDY IN ROMANIA" with a stylized blue and yellow geometric icon. To the right is a colorful illustration of a building with a red roof and yellow dome, set against a background of blue waves and a sun. A diagonal orange banner across the top right corner reads "Under construction". The main navigation menu includes links for "WHY ROMANIA?", "WHAT TO STUDY?", "ROMANIAN HE SYSTEM", and "LIVING AND WORKING". Below the menu is a large banner featuring silhouettes of people in front of a city skyline, with the text "Learning Living Working" overlaid. A sub-section of the banner says "Get to know the Romanian Higher Education System". Below the banner is a search bar with fields for "Degree", "Language of instruction", and "Study domain", followed by a "GO" button. Underneath the search bar are four large hexagonal icons: blue (document), yellow (bank), red (location pin), and green (ID card). At the bottom, there is a yellow news banner with the word "news" and a date "May 5 2015". To the right of the banner is a map of Romania with regions labeled in Russian: "Кобре", "Бакинско-Девелопментская область", "Бакинско-Девелопментская область", and "Мордовская область". Below the map are dropdown menus for "Degree" and "Language of instr".

ERRIS

www.erris.gov.ro/main/index.php?

 **ERRIS**
ENGAGE IN THE ROMANIAN
RESEARCH INFRASTRUCTURES
SYSTEM

 Register Login



Welcome to ERRIS

Registry of Romanian Research Infrastructures, the booking gate for research infrastructure services.

Find services, infrastructures, and equipment 

or

VIEW ALL INFRASTRUCTURES

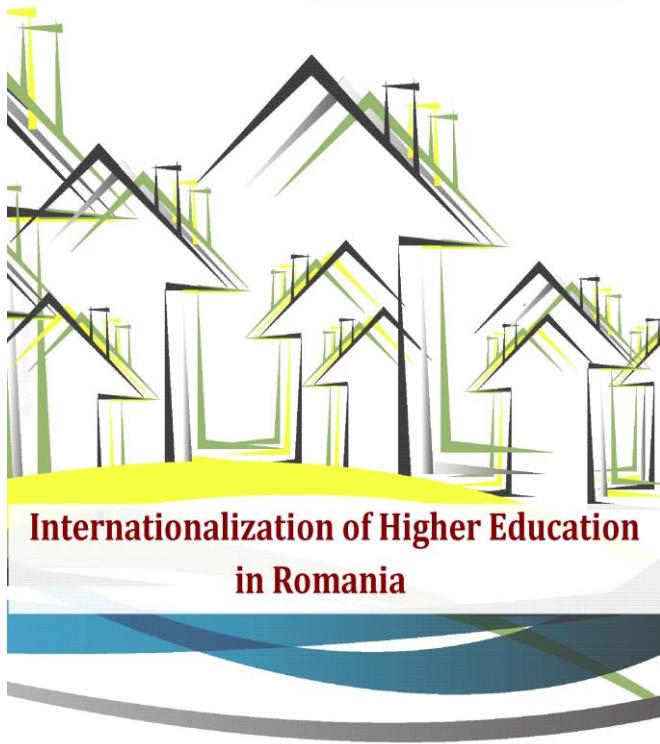

Browse the Research Infrastructures Map


Play the video to find out how ERRIS works.

Are you a service provider?

EN 9:20 AM 5/29/2015

Higher Education Policy Series
No.5



The image displays three book covers side-by-side, each with a vertical color gradient from red at the top to orange at the bottom.

- Higher Education Reforms in Romania**
Between the Bologna Process and National Challenges
Adrian Curaj - Ligia Deca
Eva Egon-Polak - Jamil Salmi Editors
- The European Higher Education Area**
Between critical reflections and future policies
Part I
Curaj - Matei - Pricopie
Salmi - Scott Eds.
- European Higher Education at the Crossroads**
Between the Bologna Process and National Reforms
Part 2
2012
Adrian Curaj - Peter Scott
Lazăr Vlașceanu - Lesley Wilson Editors

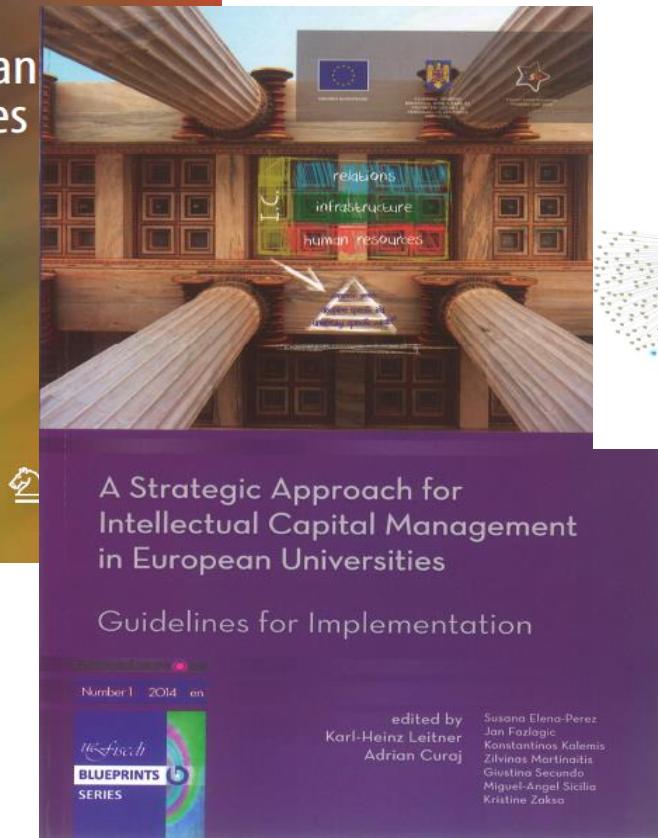
Logos for 'uefiscdi', 'Springer', and 'Springer Open' are visible at the bottom of the central and right book covers.

Adrian Curaj • Luke Georgiou
Jennifer Casingena Harper • Eva Egon-Polak *Editors*

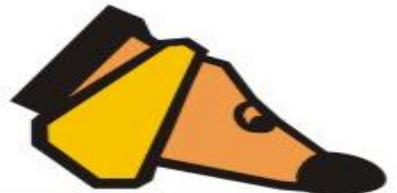
Mergers and Alliances in Higher Education: International Practice and Emerging Opportunities

2014

uefiscidi



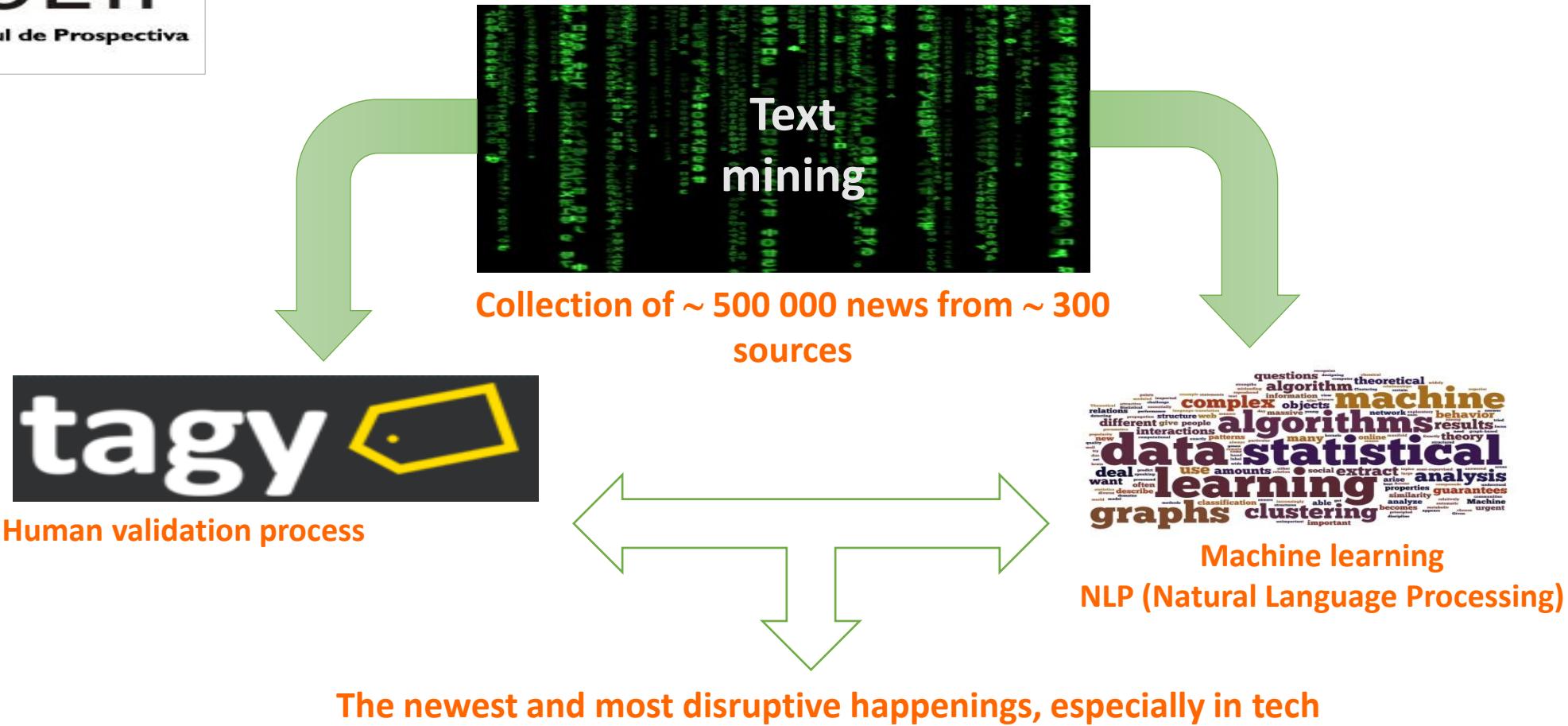
**Evidence base policy making
Policy Advice**



NOSEit

An initiative of Institutul de Prospectiva

A Horizon Scanning Mechanism



Semnale slabe si tendinte

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

Powered by UEFISCDI
in collaboration with **UNESCO Chair on Science and Innovation Policies**

An initiative of **Institutul de Prospectiva**

NOSEit

Community

Create Call to Action **Like** **Message** **...**

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

Like · Comment · Share

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.

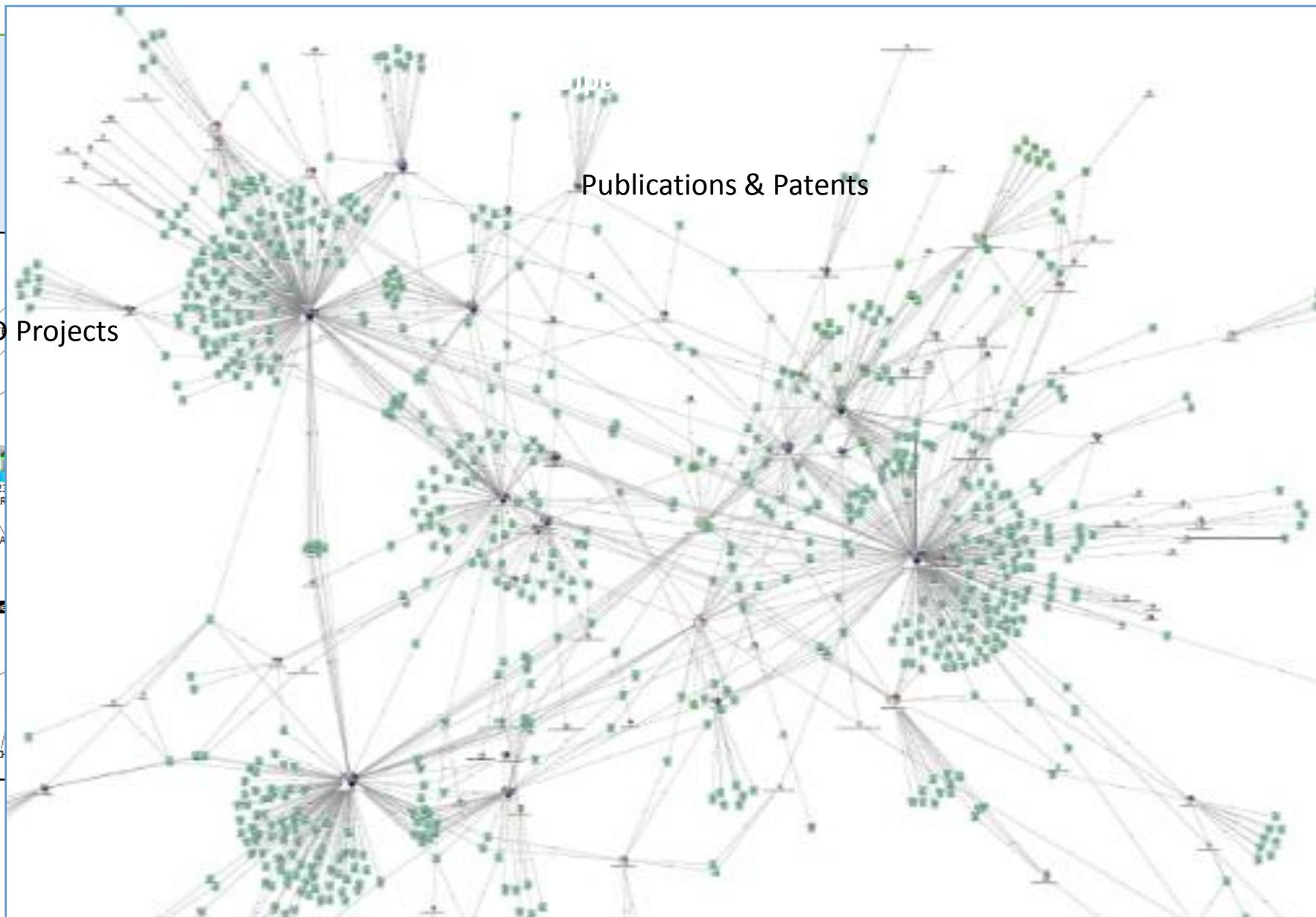
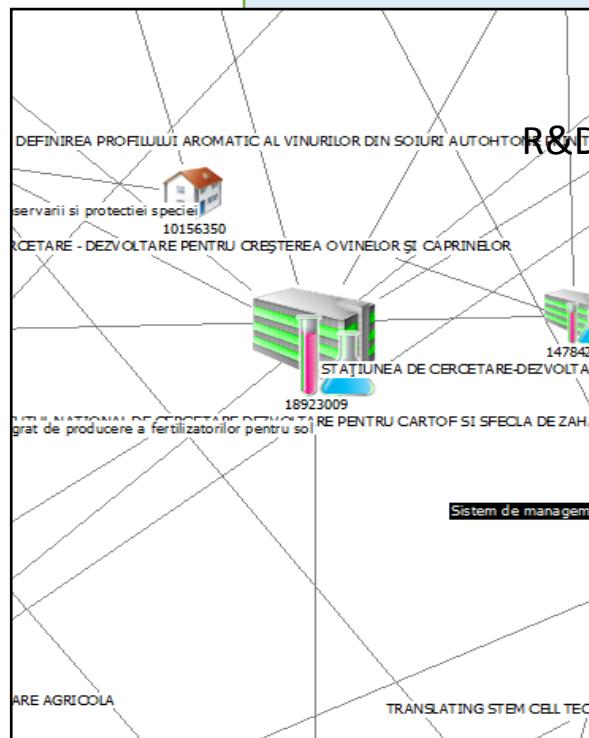
New Memristors Could Usher in Bionic Brains

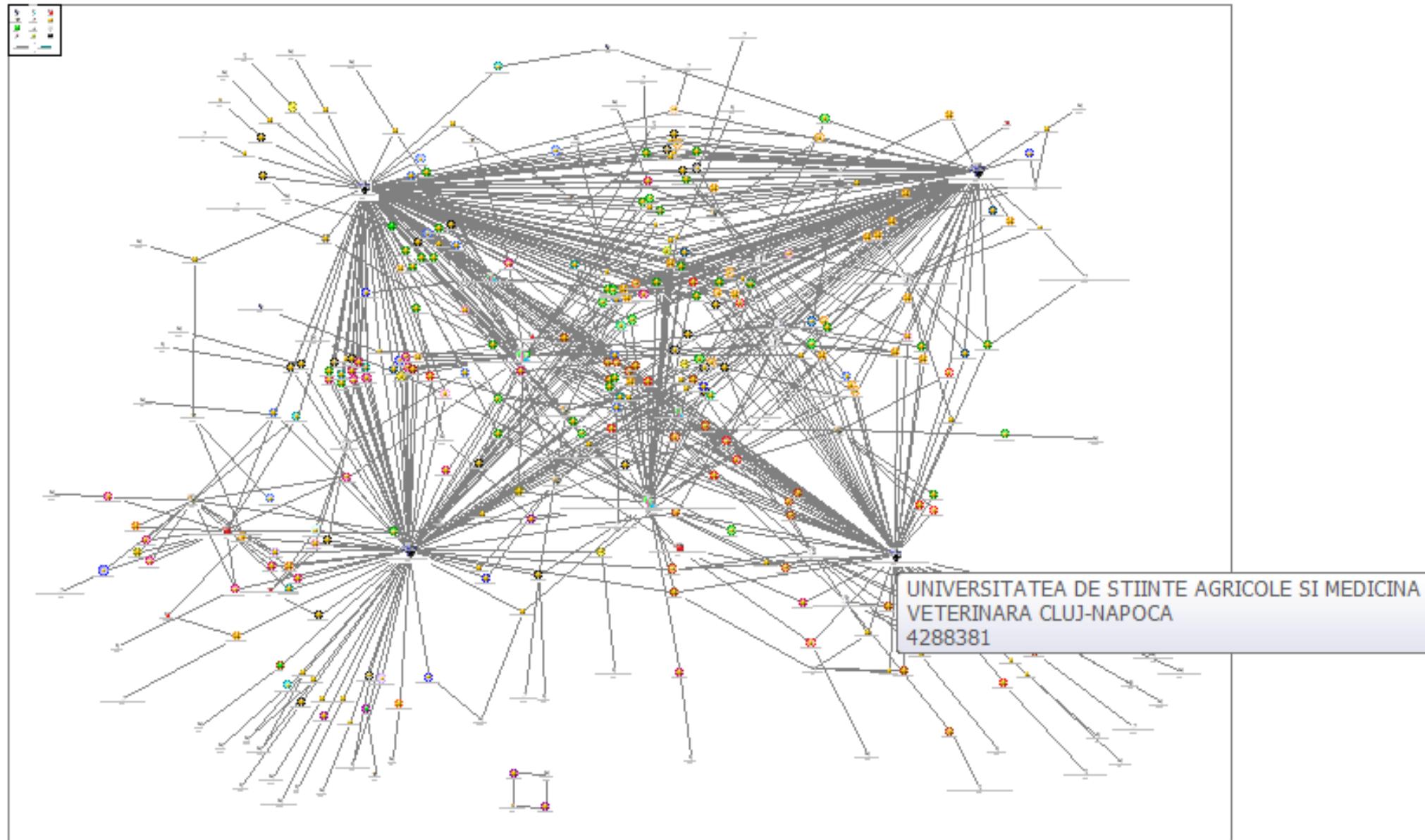
SPECTRUM.IEEE.ORG | BY DEXTER JOHNSON

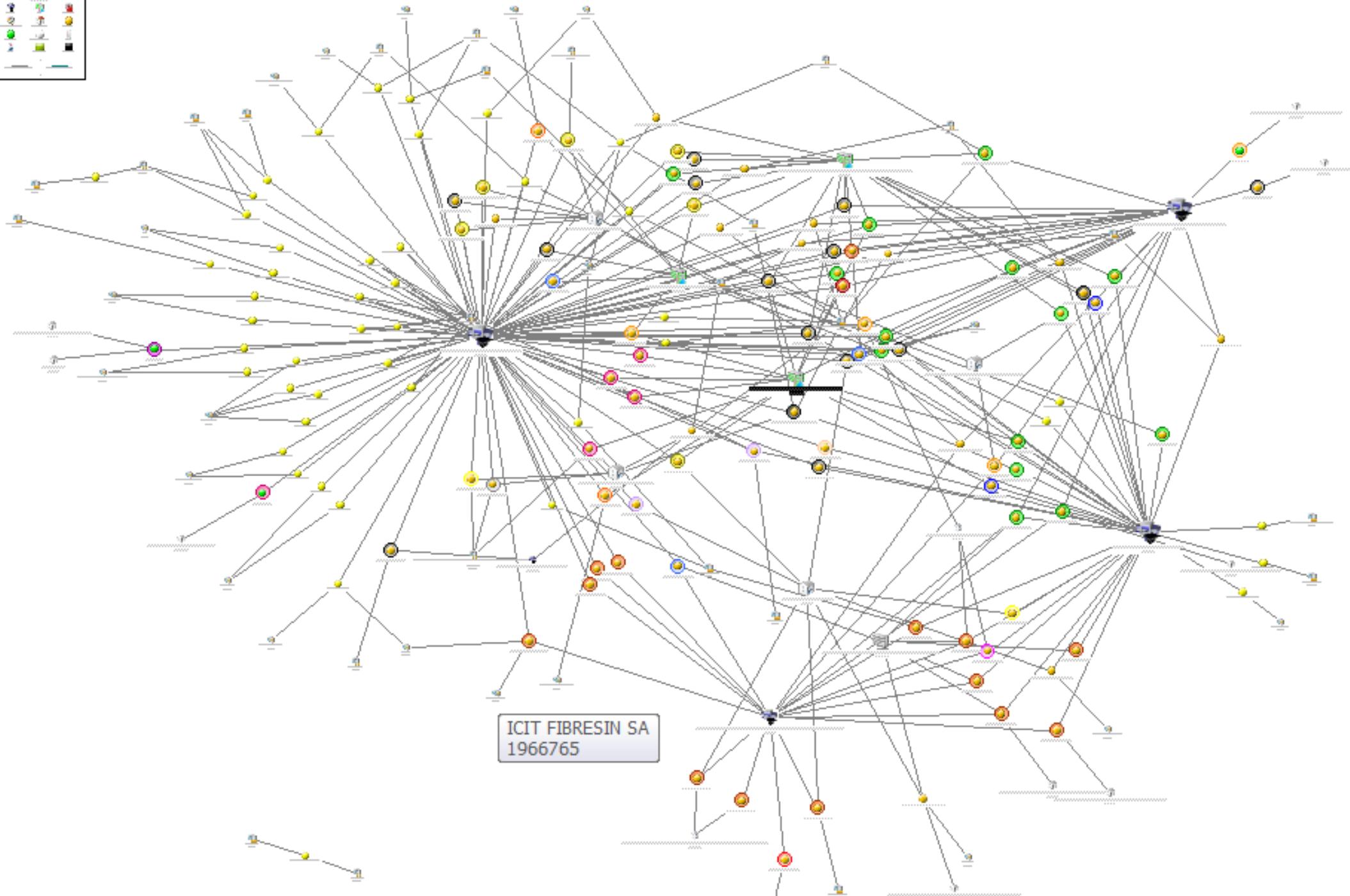
Like · Comment · Share

The Entrepreneurial Discovery Mechanism (EDM)

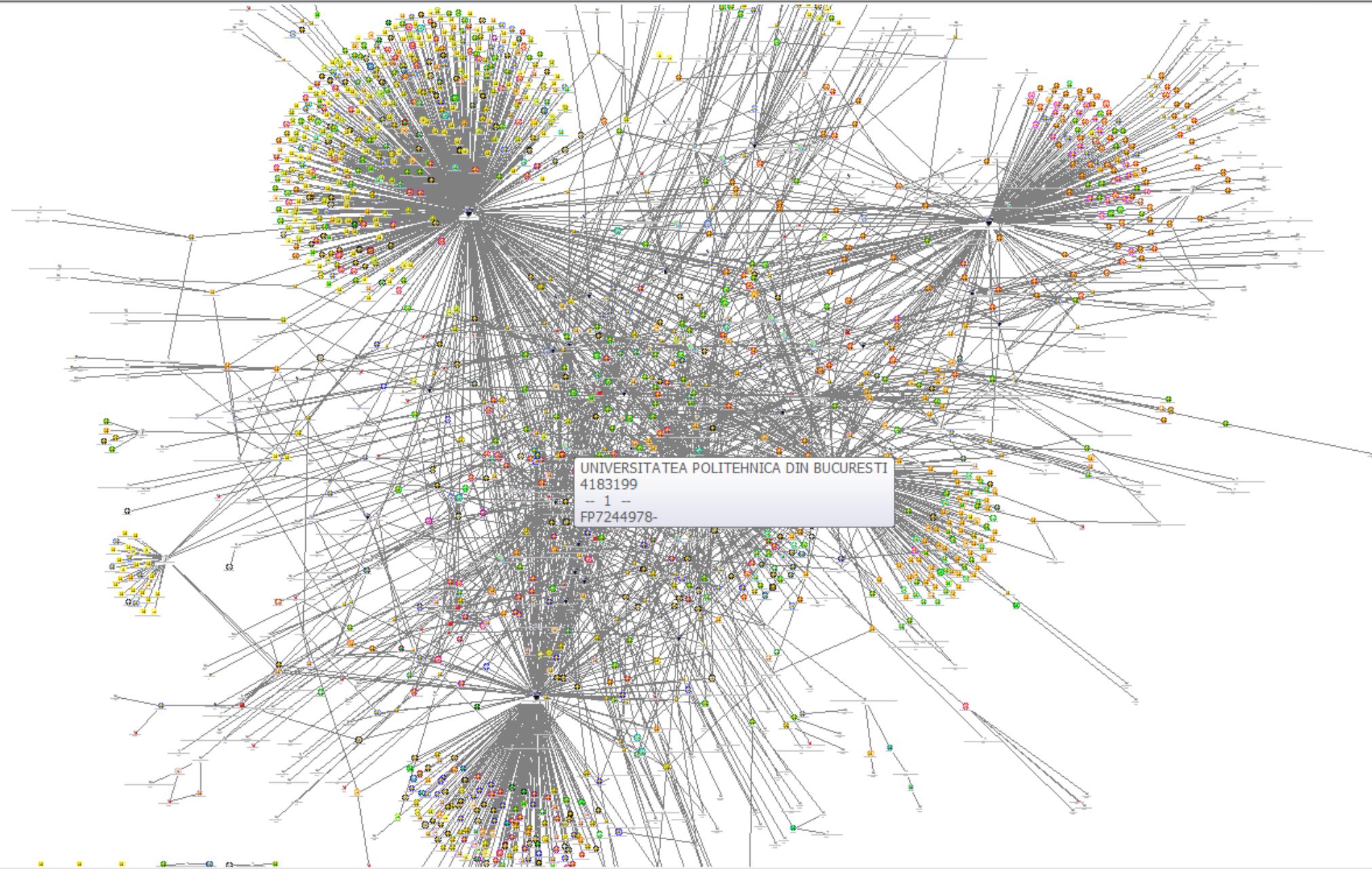
2. Mapp

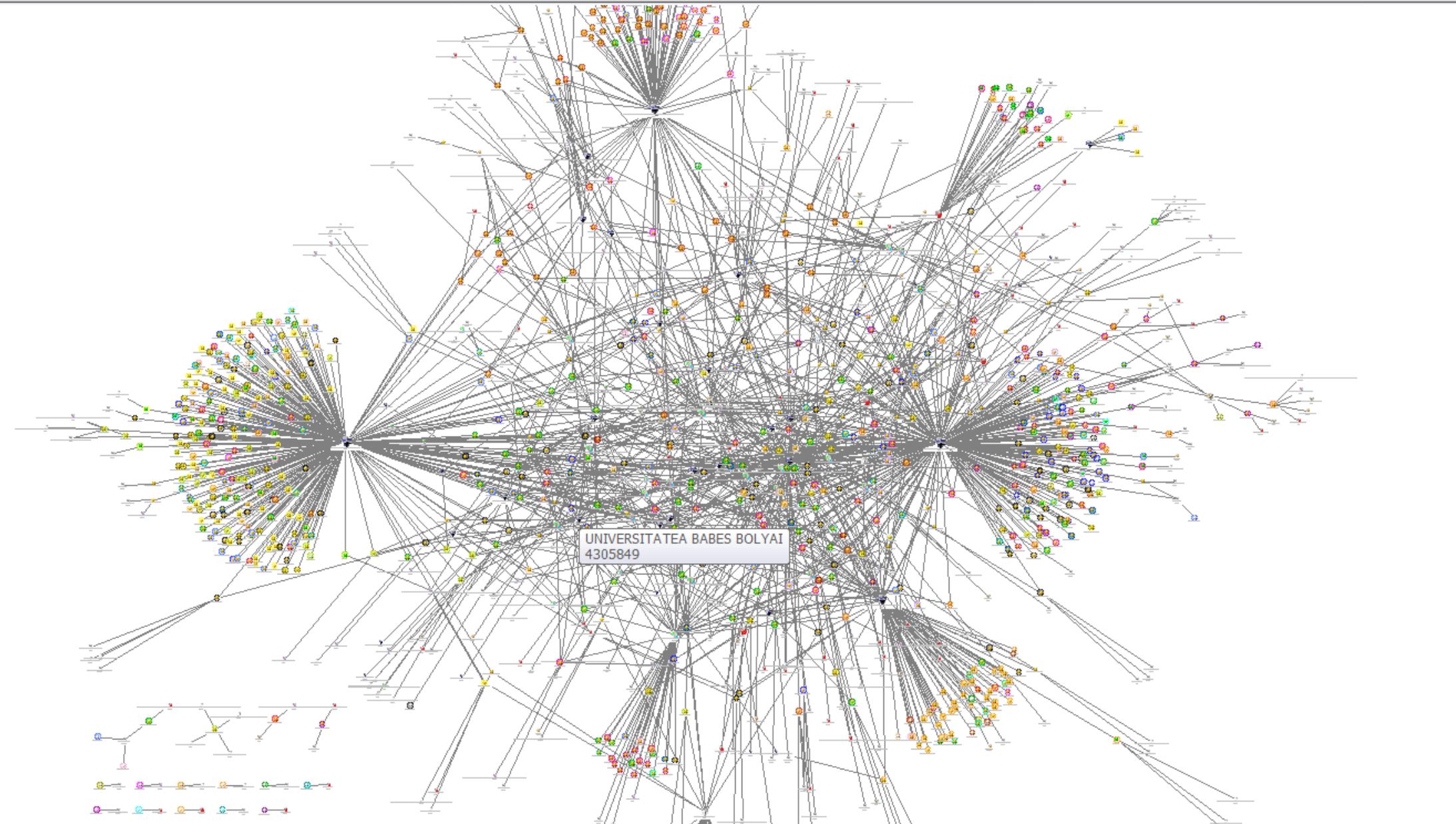






File Edit View Data Help

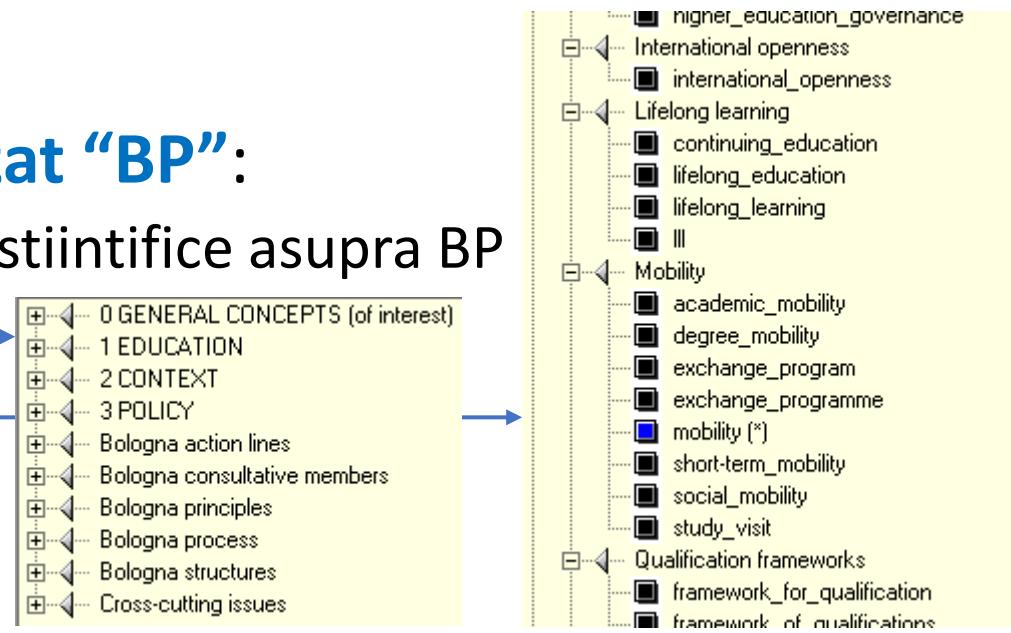




Exemplu de Big Data analytics: Tendintele Bologna (1) - analiza semantica a

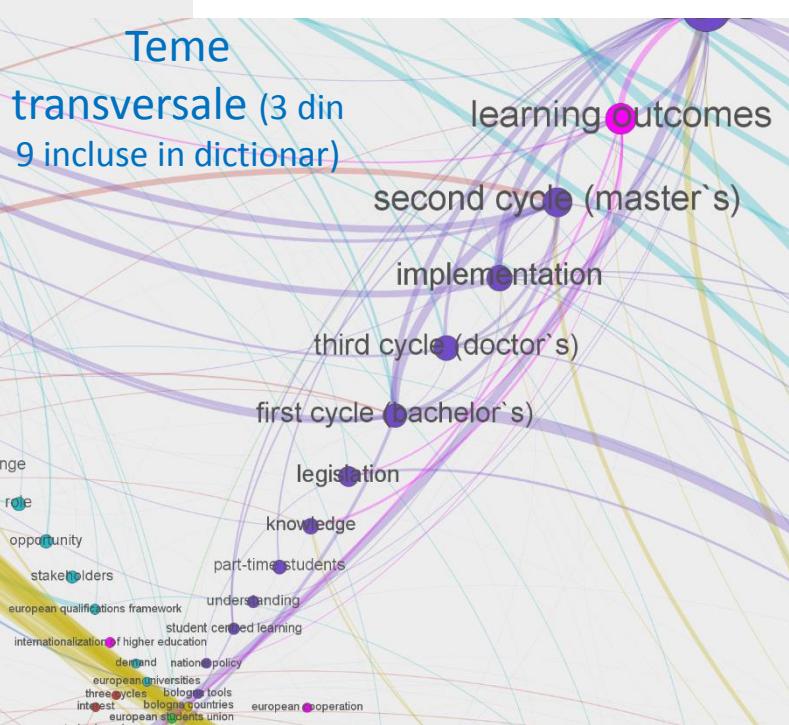
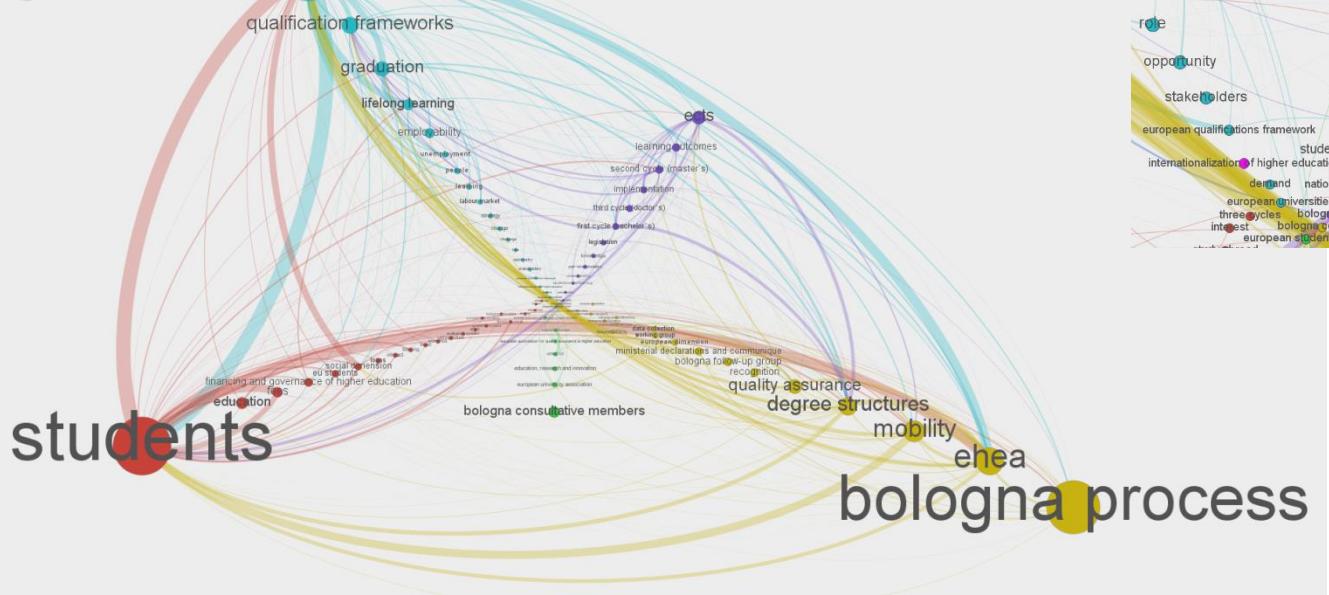


- **Metodologie integrativa** utilizand:
 - Pachetul software Tropes OwlEdge de **analiza semantica**
 - Software-ul Gephi de **analiza de retea**
- Pe baza unui **dictionar semantic customizat “BP”**:
 - Care reflecta textele celor mai citate articole stiintifice asupra BP
 - **146 de referinte** grupate in **10 categorii**
 - Cu un total de **453 cuvinte cheie**



Reteaua semantica a Raportului de Implementare BP 2012

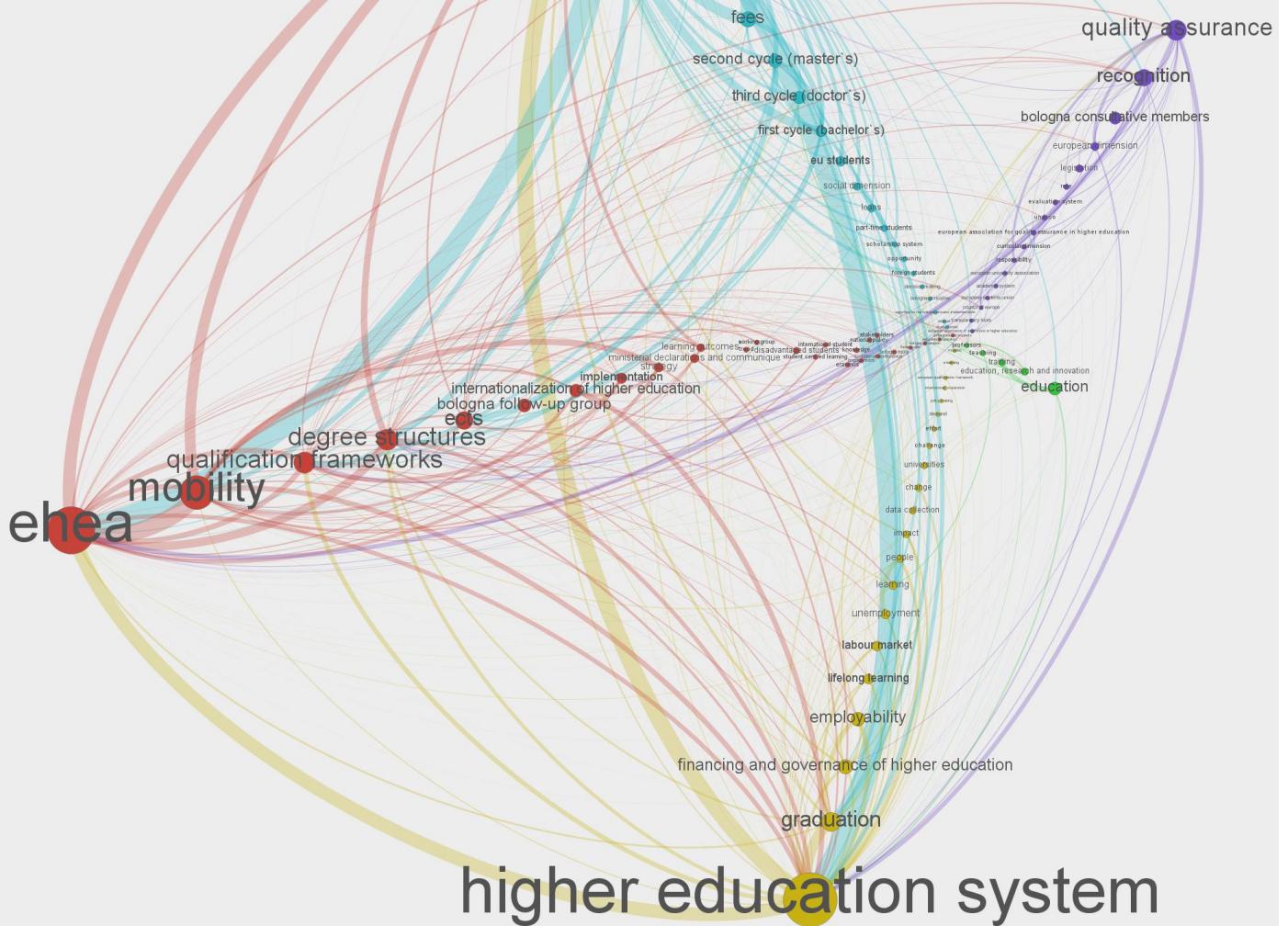
higher education system



- Culoarea indică “clase modulare”, i.e. clustere semantice de topici (care apar mai frecvent în aceeași propoziție);
- Culorile liniilor indică nodurile sursă;
- Există 5 topici principale, în ordinea frecvenței: *HE system, students, BP, ECTS, B consultative members*
- Din perspectiva relațiilor semantice, există o **focalizare puternică** pe *HE system, students, degree structures, qualification frameworks*
- **Temele transversale sunt slab reflectate:** *internationalization of HE si European cooperation* nu au relații semantice cu alte topici

Reteaua semantica a
Raportului de Implementare EHEA BP 2015

students bologna process

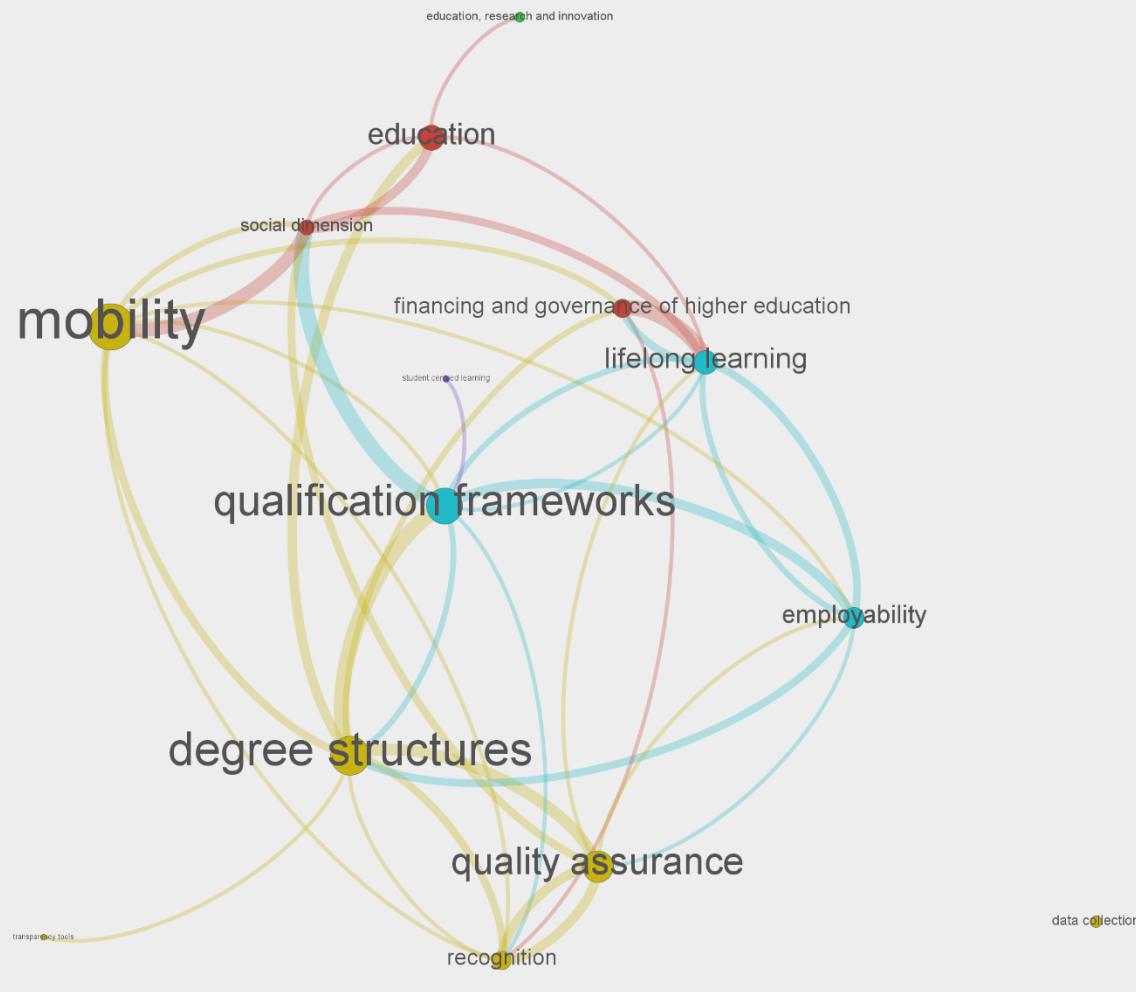


- Exista **5 topici principale**, in ordinea frecventei: *students, EHEA, HE system, quality assurance*
- Din perspectiva relatiilor semantice, exista o **focalizare puternica** pe *HE system, students, EHEA, degree structures, mobility*
- **Temele transversale sunt slab reflectate:** *European cooperation* nu are relatii semantice cu alte topici, iar *internationalization of HE* este cea mai dezbatuta tema (dintre cele 3)

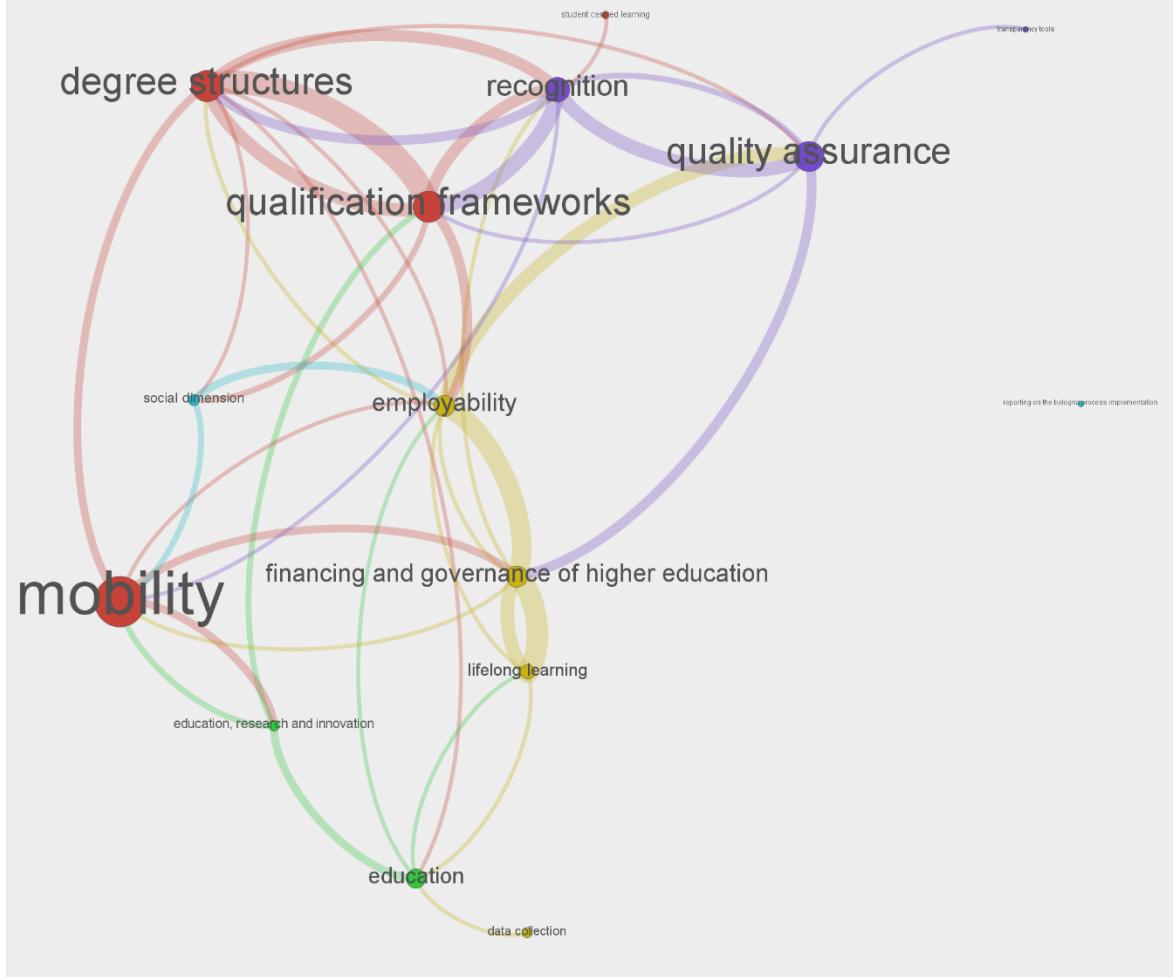
2015, in comparatie cu 2012:

- Discursul este **mai larg, insa si mai compact**
- Cu toate acestea, nu sunt **schimbari esentiale**
- **HE system and students raman topici principale de interes**
- **Un interes mai mare pentru EHEA si quality assurance**
- **Tema transversala emergenta – internationalization of HE**
- In acelasi timp, **niciun progres in privinta celoralte teme**

Liniile de Actiune ale BP in 2012



Liniile de Actiune ale BP in 2015



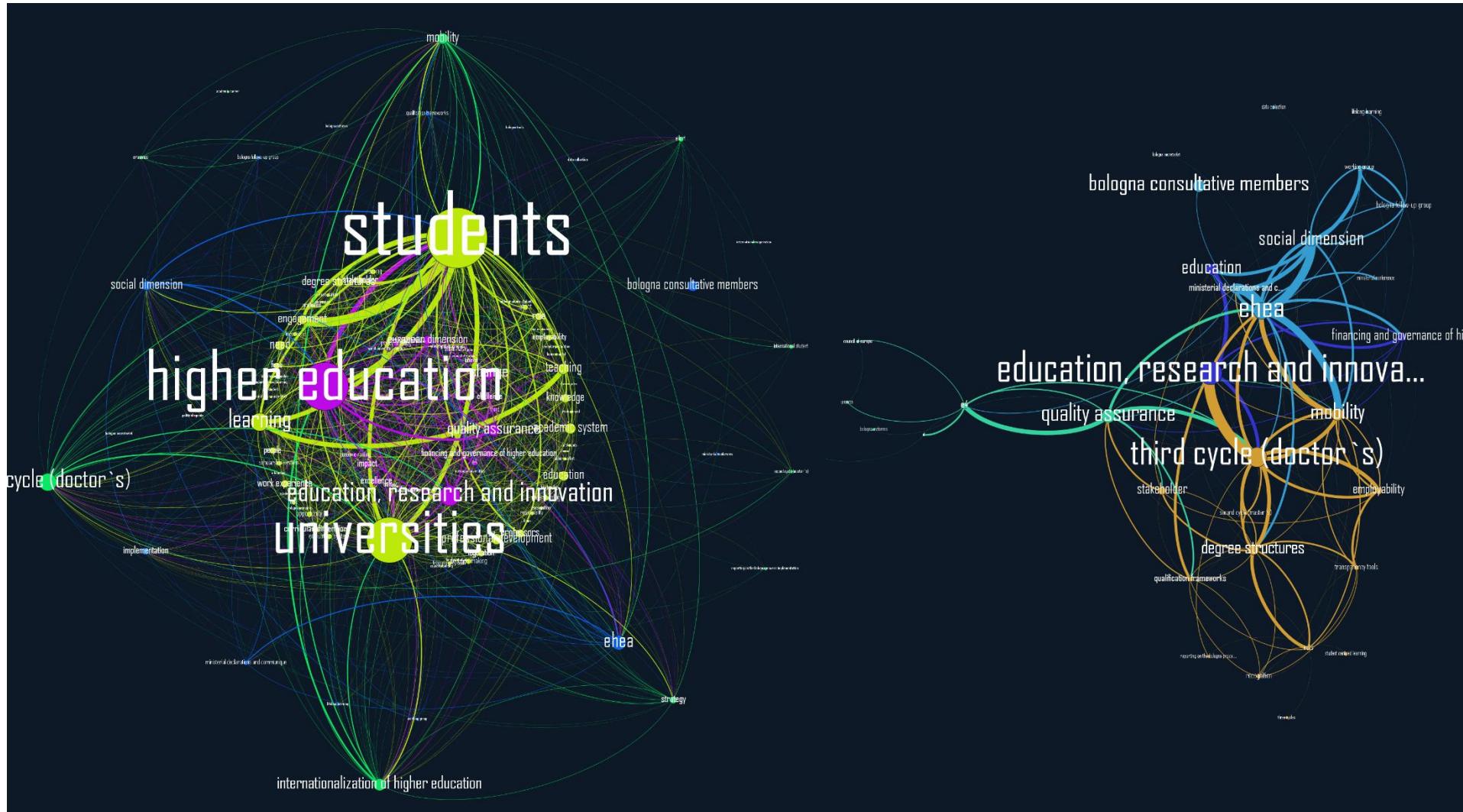
- Data collection, international openness (subject absent per se), reporting on the BP implementation, student-centred learning, transparency tools sunt in continuare teme marginale, in special in comparative cu alte linii de actiune (ex. mobility, qualification frameworks, degree structures, quality assurance)
- Schimbari majore: financing and governance of HE sunt teme puternic conectate cu employability; employability este puternic conectata cu qualification frameworks si nu atat de mult cu LLL

Tendinte in Procesul Bologna (2): O analiza semantica a cercetarii stiintifice asupra BP

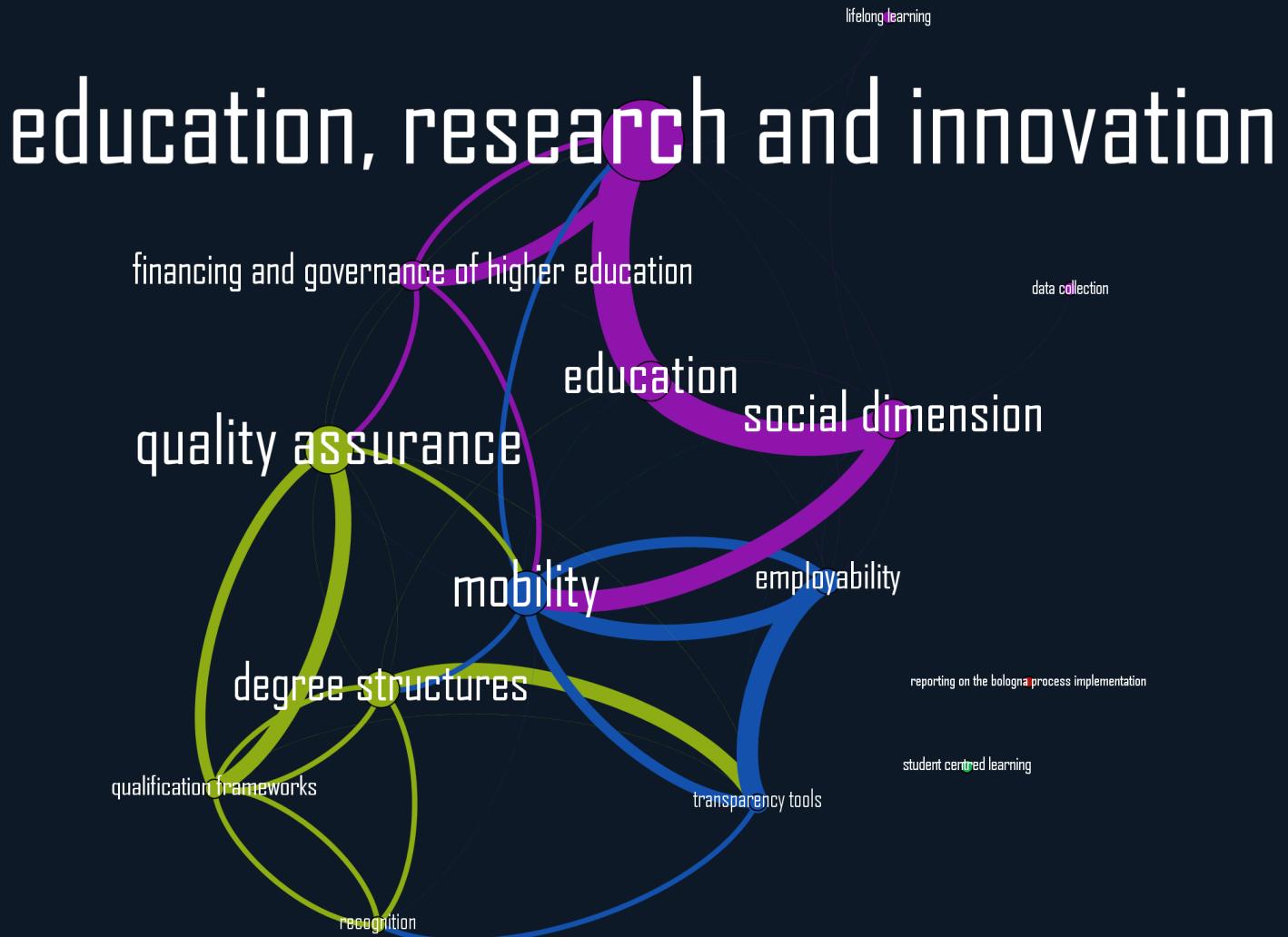


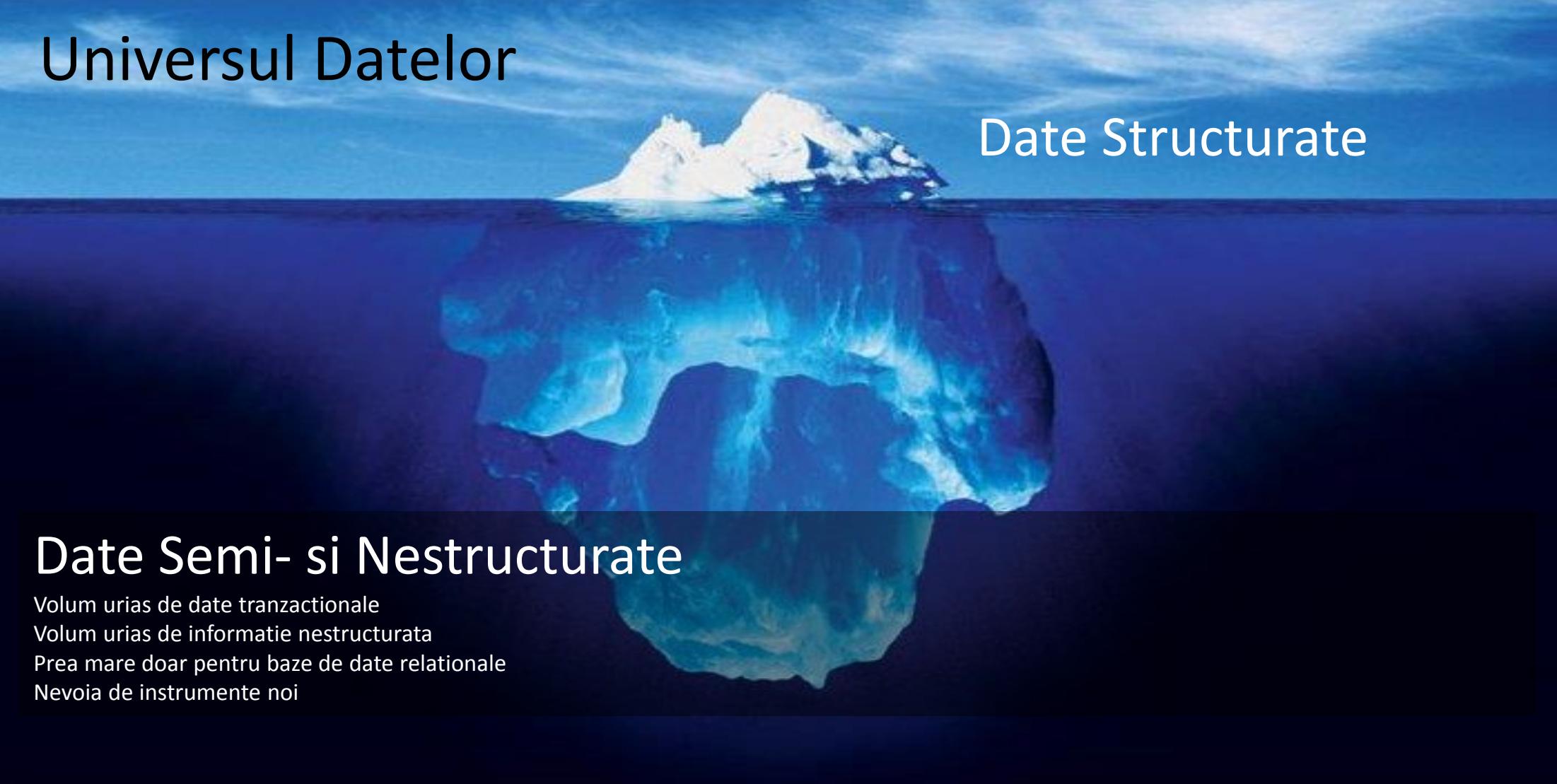
<http://fohe-bprc.forhe.ro/>

50 articole



Liniile de Actiune ale BP





Universul Datelor

Date Structurate

Date Semi- si Nestructurate

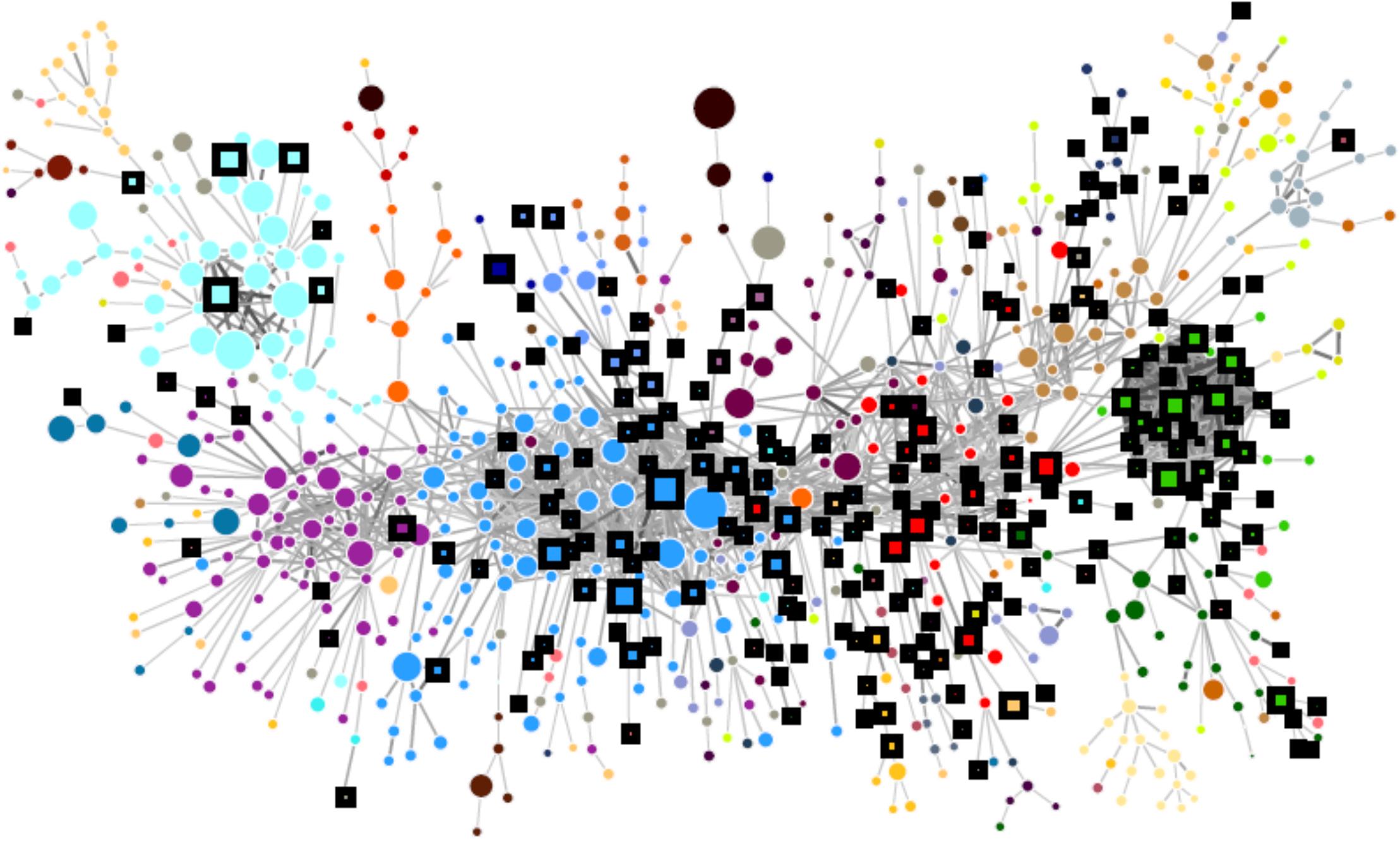
- Volum urias de date tranzactionale
- Volum urias de informatie nestructurata
- Prea mare doar pentru baze de date relationale
- Nevoia de instrumente noi

Exemplu de Big Data analytics: identificarea tendintelor din piata muncii

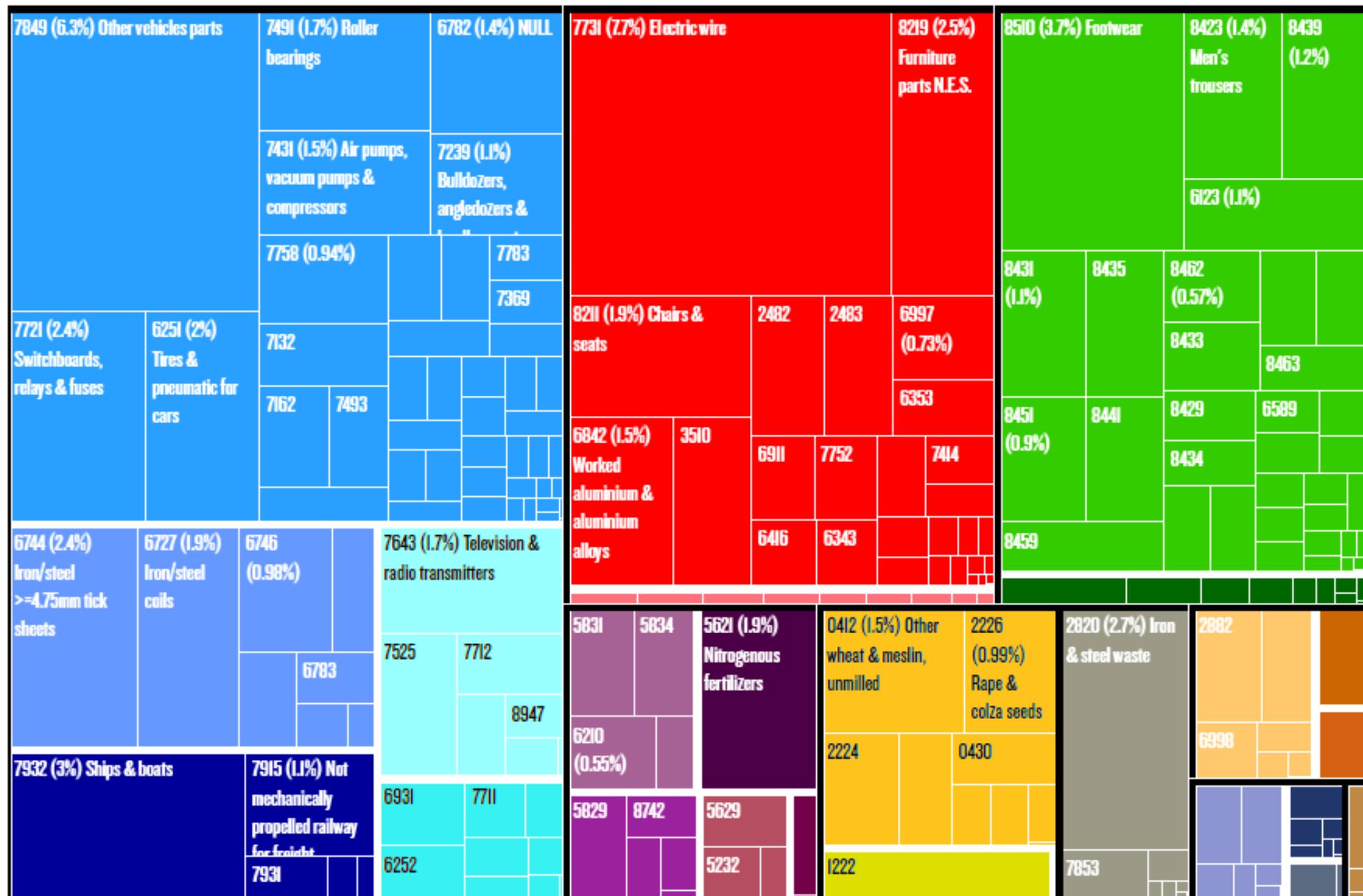
Deficit de competente, in UK:

- O treime din companiile cu peste 100 de angajati vor implementa solutii Big Data in urmatorii 5 ani
 - Numarul de specialisti va fi de 69,000 in 2020, iar numarul de utilizatori de 600,000.





ML



Change
Management





Think outside the box
Be a visionary and act!

Fii Vizionar si Actioneaza!