

EURAGRI



Workshop Paris,



19 March 2016

Big data in Agriculture Consequences for research and research organizations



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The assumptions

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Big data in agri-food is an increasing reality




Will lead to new managements, new services, new organizations




Will have major consequences on research and research organizations




The program








New era of research induced by Big data
P Neveu: The data, their features and processes




Towards an e-infrastructure in agriculture?
D Castelli: An example of marine e-infrastructure



Implementation in the strategic agenda of research institutes
G Boyle: A foresight project in Teagasc

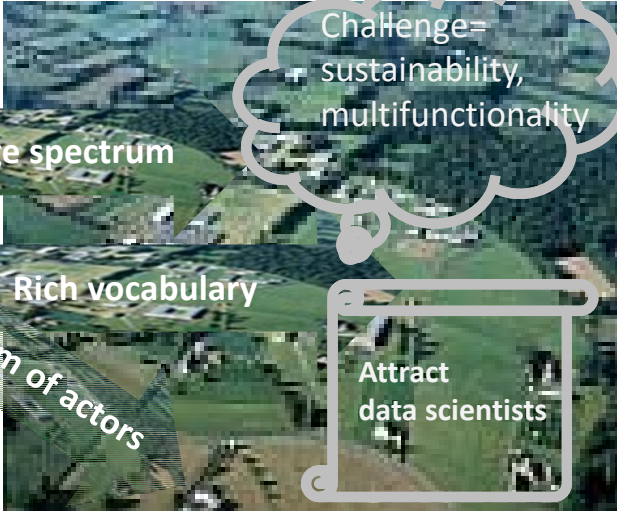



Data.... big



Big = the Vs

- Volume
- **Variety**
- Velocity
- Veracity
- **validity, vocabulary, vulnerability, volatility**



Large spectrum

Rich vocabulary

System of actors

Challenge = sustainability, multifunctionality

Attract data scientists



Data really big and then



Ideas

- *Analyzing data patterns and their associations helps to reintegrate farmers into the project*
- *Screening the co-evolution of the concepts and vocabulary may reveal orientations.*

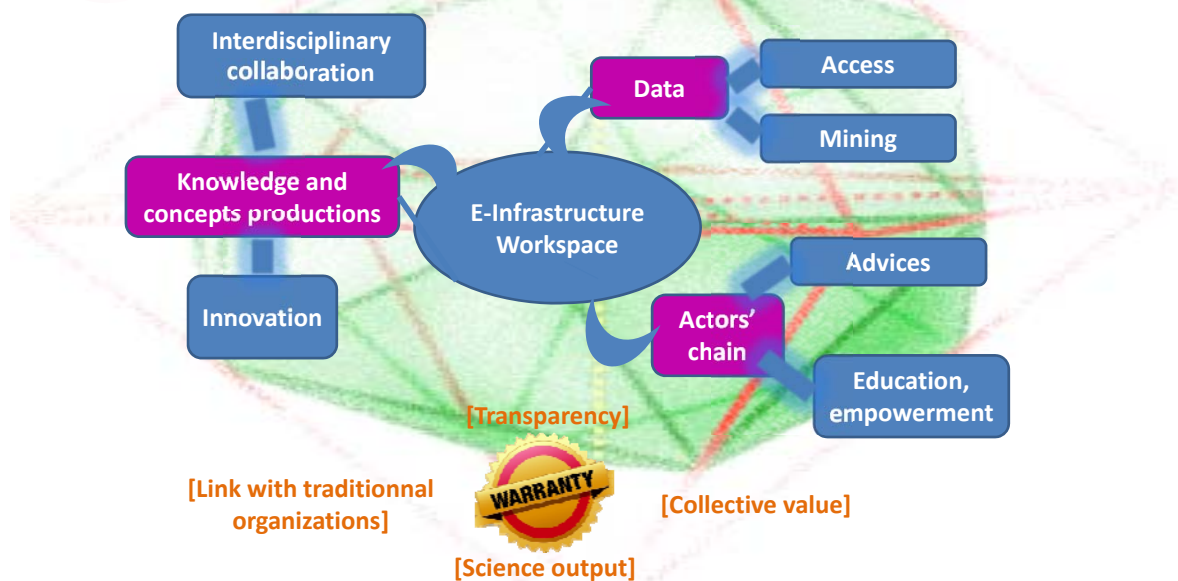
Recommendations

- *Build prospects with strategy*
- *Attention to the costs of data treatment and warehousing, which may remain obscure or unconsidered*
- *Transform the question of data property into: how can we infer the future value of the data? How do we foresee the increase of business value with the data?*

Any comment, ideas, experience, concern, contribution.....



e-INFRASTRUCTURE α@ω





From infra to suprastructure



Point of attention

- *Sustainability of such e-infrastructures is not clear and is generally marginally considered in their business model*

Consideration

- *Beside data management, actionable insights to democratize decision making*
- *Work with prediction rather than with intuition and guess*

Any comment, ideas, experience, concern, contribution.....




The [research-strategy] couple



Orientations

- Focus on applications in line with the main mission of the organization and look for enhancing sustainability
- Develop a strategic partnership mixing traditional and new partners
- Favor (open)-innovation while warranting the feedback to the traditional organizations, the quality of the scientific output and the public and private valuation
- Facilitate community building and emergence of new skills related to big data, and reinforce education and training, from research side (data science) to users' side (farmers and industries).

Big data in Agriculture Consequences for research and research organization



Reality?

- Of course
- agriculture has assets

Will lead to new services?

- Yes
- Infrastructures relate data, actors and knowledge production

Will change organizations?

- Yes
- Between data and decision making, there is a concept space

Big data: from in to with



Expand the recommendations

Attest and disseminate



Do with...




e-book

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