



DA.RE.

DATA SCIENCE PATHWAYS  
TO RE-IMAGINE EDUCATION



SEnDIng

SEnDIng Final  
Conference

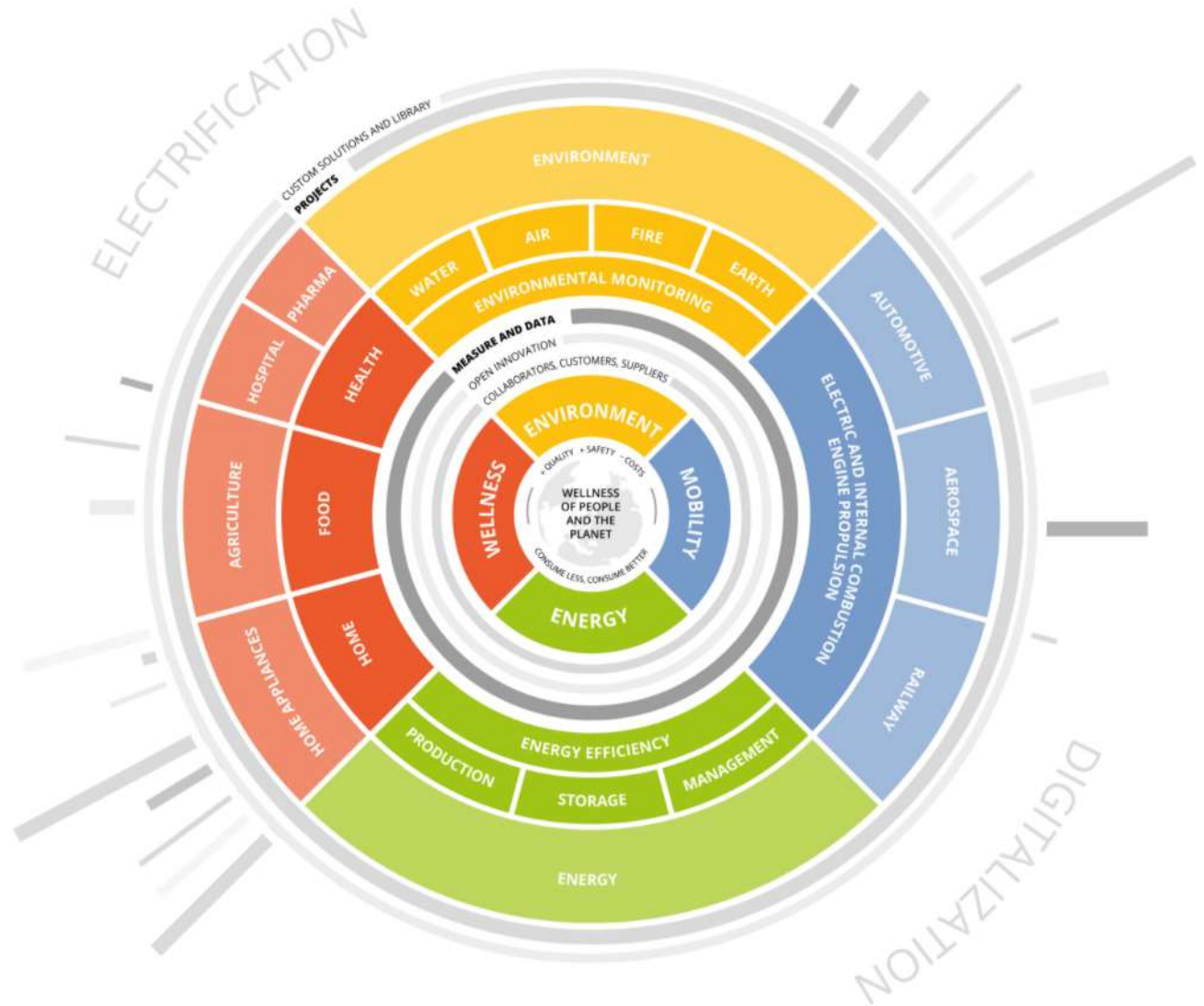
Bridging education  
and business needs



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# The genesis of the project

**LOCCIONI**



# Managing the future of a competence-based company integrating people and technology





# Managing the future of a competence-based company integrating people and technology





# Da.Re. Data science pathways to Re-imagine education

Erasmus + initiative

supporting  
development of a new curriculum for data science  
and  
recommendations on how it can be applied across Europe in  
the short and long terms





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11 Partners

5 countries

More than 400.000 € of funds

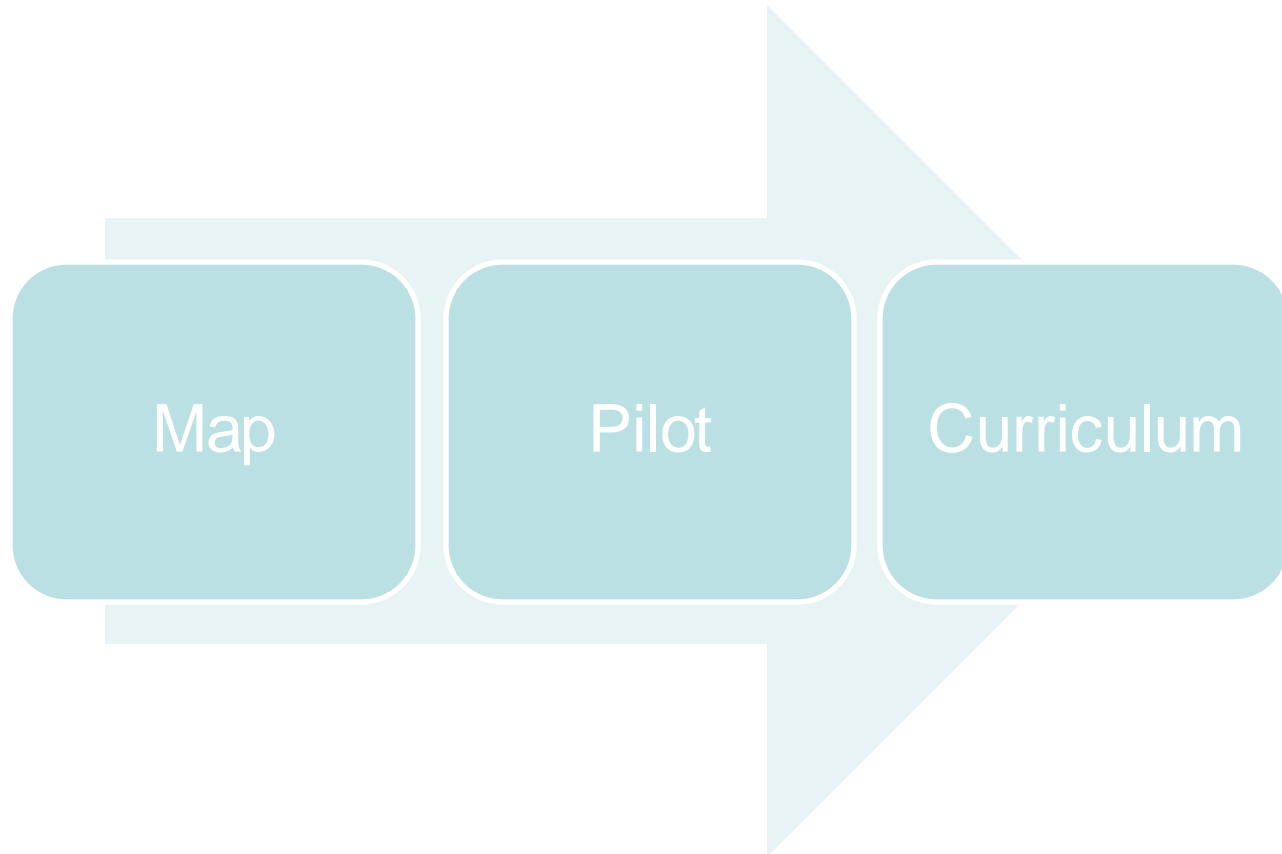
36 months





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# The Pathway to re-imagine education

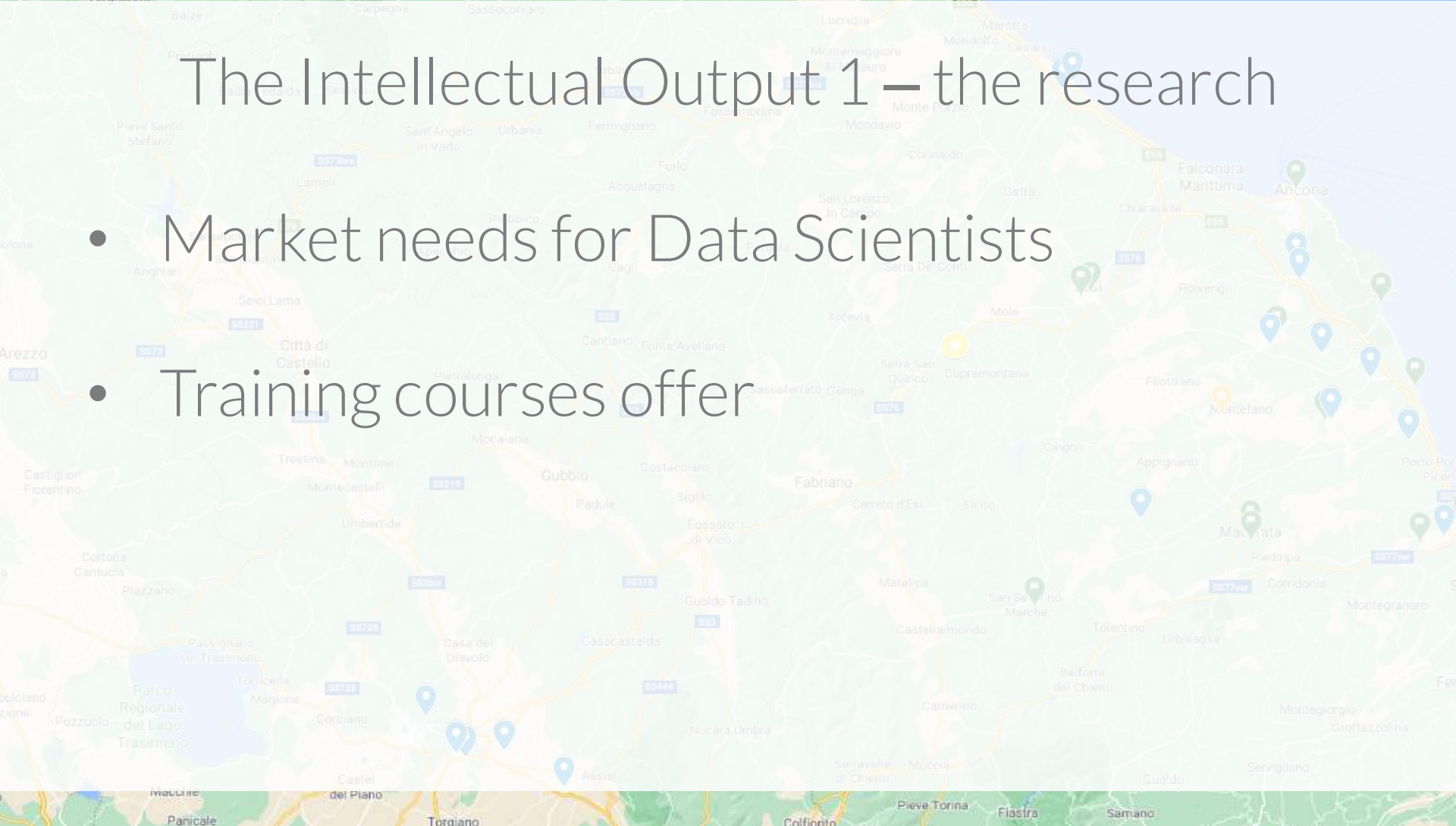






# The Intellectual Output 1 – the research

- Market needs for Data Scientists
- Training courses offer

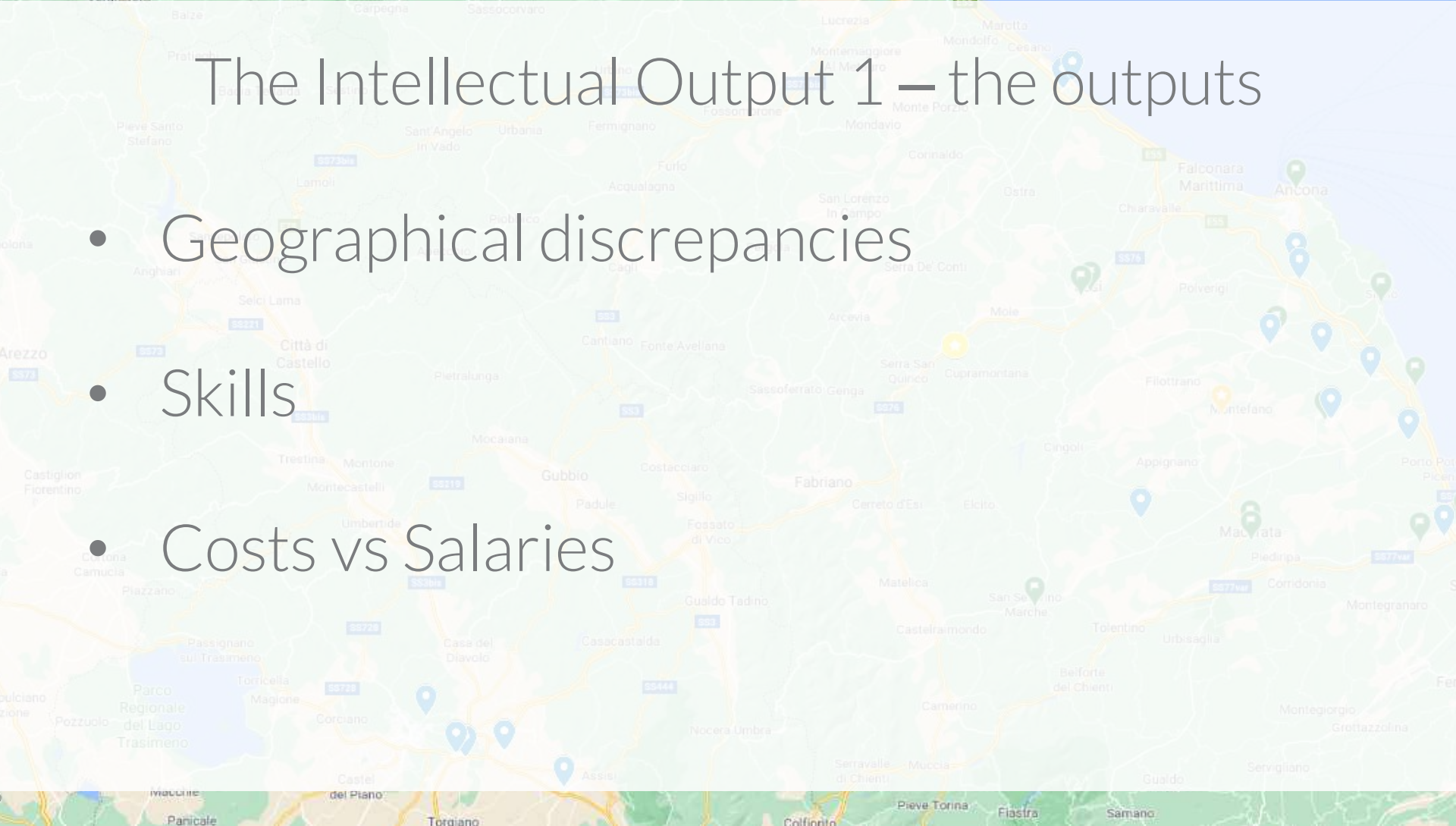






# The Intellectual Output 1 – the outputs

- Geographical discrepancies
- Skills
- Costs vs Salaries



# The Intellectual Output 1 – the conclusions

Our research identified a **gap** in the provision of data science education that is not satisfied by the universities or boot camps, namely for what we have called the **bridge person**, someone who combines knowledge of an organisation's business with sufficient knowledge and understanding of data science to 'bridge' **between nontechnical people in the business with highly skilled data scientists able to add value to the business.**

## The Intellectual Output 2 – the Pilot Course

- 150 hours
- Theory and Practice
- Online and offline learning
- International and horizontal level



# Training the Bridge Person

## FUNDAMENTALS of DATA SCIENCE and APPLICATIONS

● Basic Concepts

● Data Preparation

● Data Analysis

● Data Visualization

● **Applications**

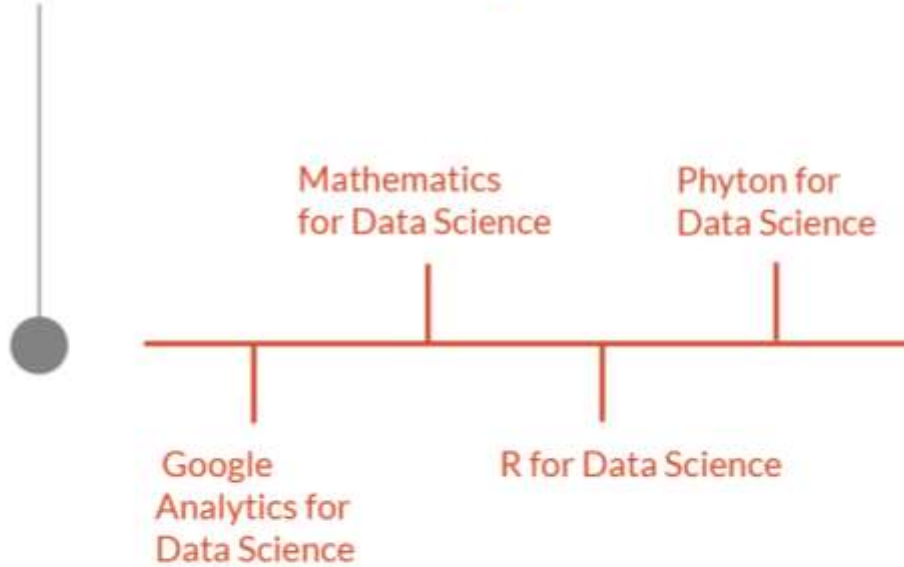




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# Basic Concepts





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# Data preparation



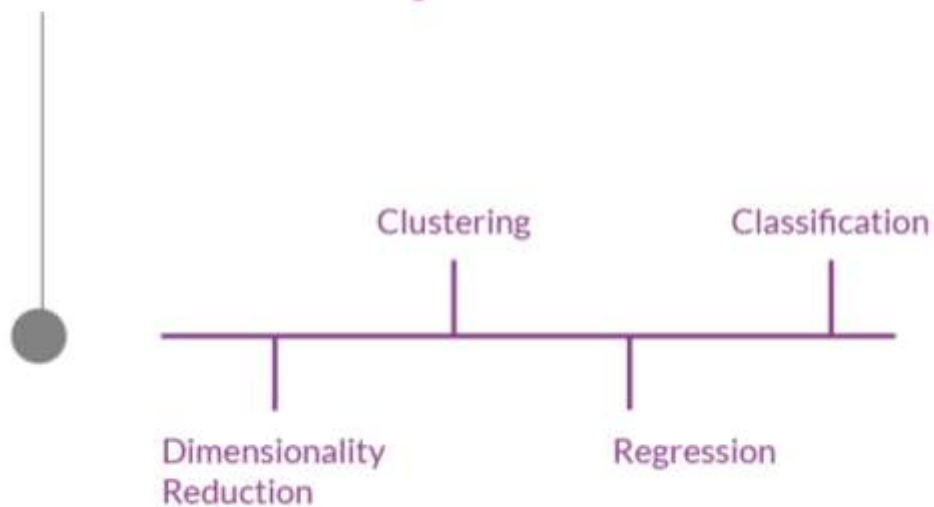




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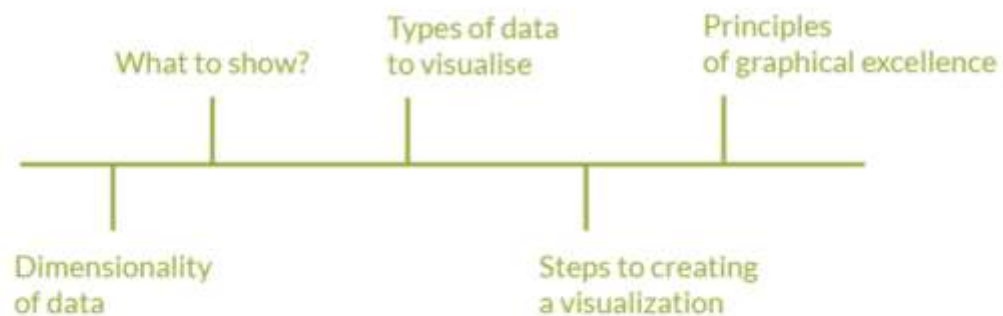
# Data Analysis





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## Data Visualization





## Applications

1. Web Analytics applied to your own website
2. Time series analysis for biomedical analytics
3. The Energy Signature of the Loccioni Leaf Community
4. The Stationarity Analysis of the Loccioni Pressure Multiplier



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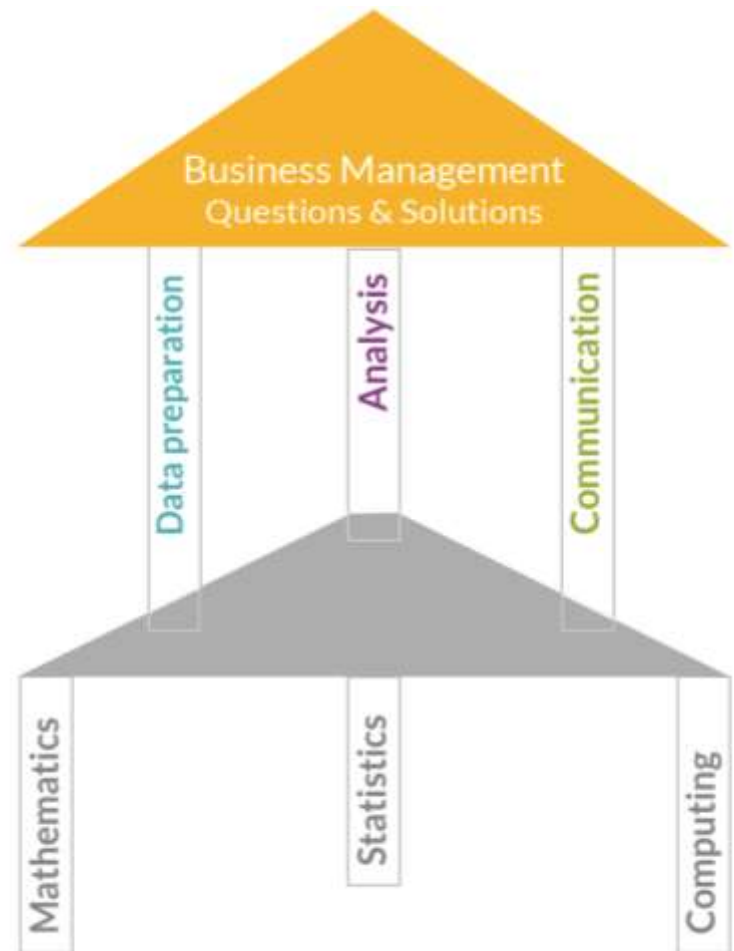


Are we waiting for training the future data scientists and hire them?

The Da.Re. Handbook

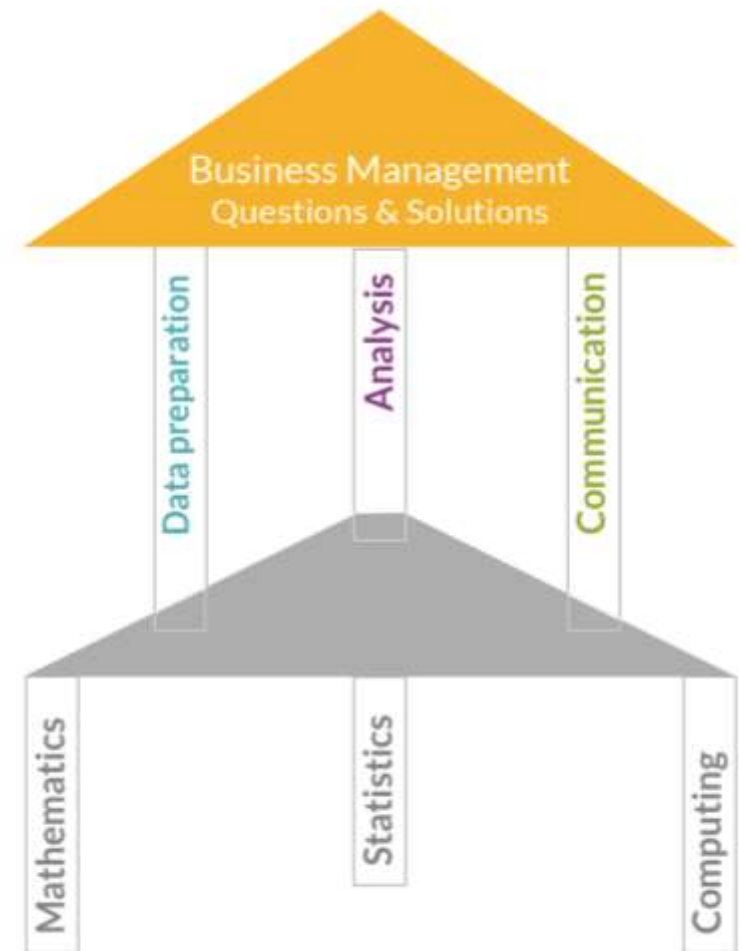
## The Intellectual Output 3 – the Curriculum

- Cross-sectoral
- International
- Multi-targeted
- Accessible



# The Intellectual Output 3 – the Curriculum

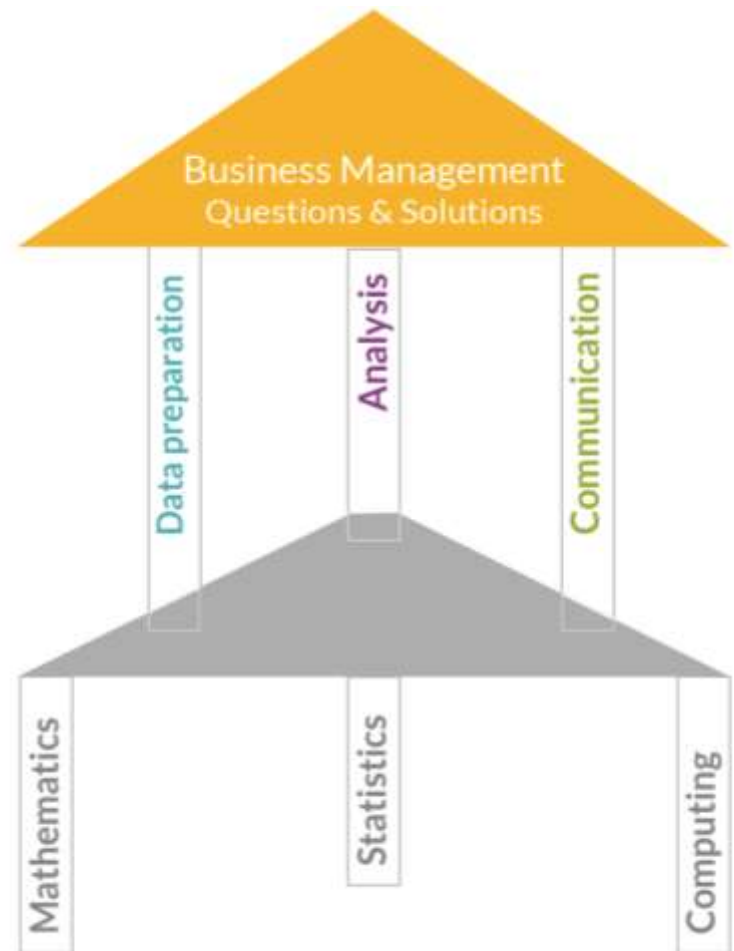
- Norms & Standards
  - EU Lev. 7 chosen
- Competencies
  - To be chosen
  - To be exchanged
- Learning Outcomes
- Future opportunities





# The Intellectual Output 3 – the Curriculum

We started from the top to analyse the whole architecture of Data Science, looking for the ways for re-imagining education. To manage real life issues and create value using data.





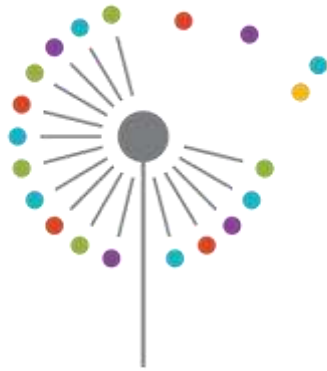
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## Lessons learnt

- Start with “why”
- Work horizontally
- Keep it simple...not too much!
  - Format of the courses
  - Costs
  - Long terms results



*This project has been funded with support from the European Commission. This communication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein. Contract no. 2016-1-IT02-KA203-024645 - KA2 HEI*



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Thank You!

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VSL