

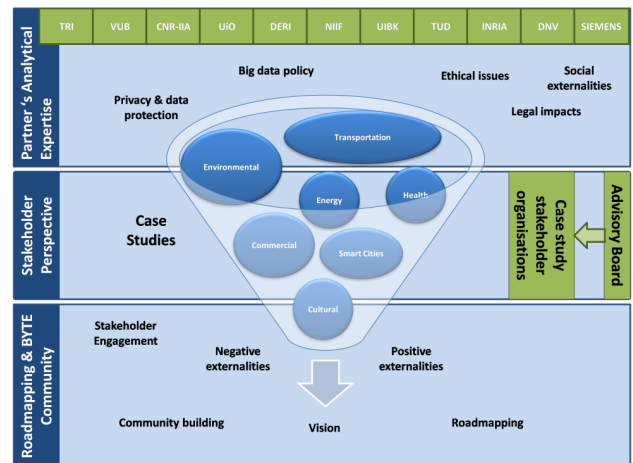


The Big data roadmap and cross-disciplinary community for addressing societal Externalities

BYTE aims to assist European science and industry to gain a greater share of the big data market by 2020. In order to do so, BYTE will identify measures that will help big data users to capture and amplify the positive externalities associated with big data (e.g., efficiency, innovation, data sharing, etc.) in a manner that enables them to diminish the associated negative externalities (e.g., privacy, data protection, discrimination, etc.). Examples of such externalities include:

Economic	Legal	Social & Ethical	Political
<ul style="list-style-type: none"> • Boost to the economy • Innovation • Increase efficiency • Smaller actors left behind • Shrink economies 	<ul style="list-style-type: none"> • Privacy • Data protection • Data ownership • Copyright • Risks associated with inclusion & exclusion 	<ul style="list-style-type: none"> • Transparency • Discrimination • Methodological difficulties • Spurious relationships • Consumer manipulation 	<ul style="list-style-type: none"> • Reliance on US services • Services have become utilities • Legal issues become trade issues

BYTE will conduct primary and secondary research on a series of seven big data case studies in the following sectors: environmental data, commercial data, utilities/smart cities, cultural data, energy, health and transport. By using these case studies, BYTE will be able to examine how big data is actually being used for a range of purposes, what externalities are in evidence and what strategies are being used to capture or diminish these externalities.



KEY OUTPUTS

- ⇒ Report on societal externalities associated with big data
- ⇒ Vision for big data in Europe
- ⇒ Policy roadmap
- ⇒ Research roadmap
- ⇒ Build the big data community

BYTE will use these case studies and its advisory board to create a vision and roadmap for big data in Europe. The roadmap will be broken down into:

- Necessary policy steps to achieve a greater share of the big data market, and
- Necessary research steps to achieve a greater share of the big data market

BYTE will also build a big data community to implement the roadmap and build on the gains achieved in the project.

The final result of BYTE will be a healthier, more effective big data economy in Europe that addresses the needs and concerns of science, industry, policy-makers and citizens as well as a steering group to build on those gains and drive the big data economy forward.



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