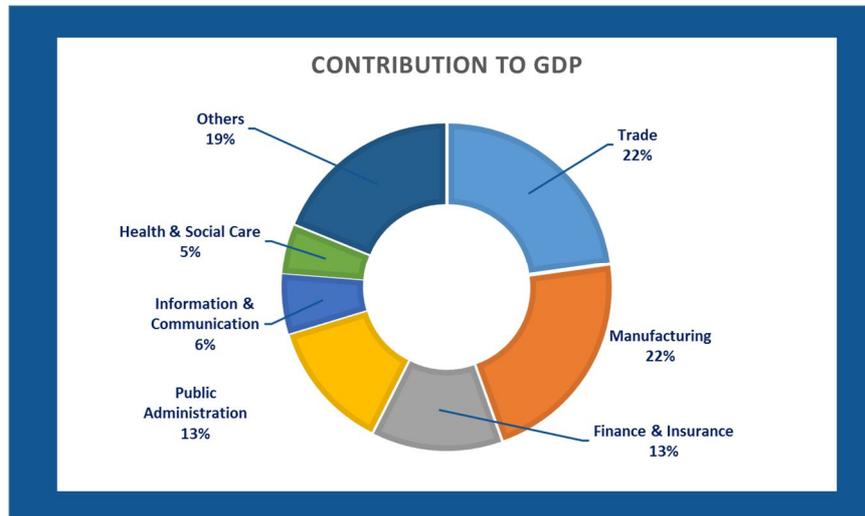




## Big data as a significant contribution to the European economy

“Overall, by 2020, big & open data can improve the European GDP by 1.9%, an equivalent of one full year of economic growth in the EU”<sup>1</sup>. The increased adoption of Big Data will have positive impact on employment and is expected to result in 3.75 million jobs in the EU by 2017<sup>2</sup>.



**Figure 1:** Economic potential of big and open data

Large companies and SMEs in Europe are clearly seeing the fundamental potential of Big Data for disruptive change in markets and business models, and are beginning to explore the opportunities. IDC confirms that the Big Data adoption in Europe is accelerating<sup>3</sup>. According to IDC<sup>4</sup>, 30% of West European companies will adopt Big Data by the end of 2015. For the other 70% of business actors, it is crucial to provide new tools and assets to propel them into the data-driven economy. Big Data Value represents an extremely strategic and profitable opportunity for Europe. In order to reduce the gap with other countries and regions and to drive innovation and competitiveness, it is necessary to foster the development and wide-scale adoption of Big Data Value technologies, successful use cases and data-driven business models.

## SRIA

The Strategic Research and Innovation Agenda (SRIA) defines the overall goals, main technical and non-technical priorities, for the Big Data Value Public Private Partnership (PPP). The SRIA has been elaborated between the European Commission and the partnership of European Big Data stakeholders including the Big Data Value Association.

The strategic and specific goals, which together shall ensure Europe’s leading role in the data-driven world, are supported in the SRIA by key specific technical and non-technical priorities. Five technical priority areas have been identified for research and innovation:

- Deep analysis, to improve data understanding
- Optimised architectures for analytics of data-at-rest and data-in-motion
- Mechanisms for managing privacy and anonymisation
- Advanced visualization and user experience
- Data management engineering

<sup>1</sup> “Big and open data in Europe - A growth engine or a missed opportunity?”, Sonia Buchholtz, Maciej Bukowski, Aleksander Śniegocki (Warsaw Institute for Economic Studies), report commissioned by demosEUROPA, 2014.

<sup>2</sup> Big Data Value calculation based on <http://www.eskillslandscape.eu/ict-workforce-in-europe/> (also re footnote ‘7’)

<sup>3</sup> “The European Data Market”, Gabriella Cattaneo, IDC, presentation given at the NESSI summit in Brussels on 27 May 2014, available online at: [http://www.nessi-europe.eu/?Page=nessi\\_summit\\_2014](http://www.nessi-europe.eu/?Page=nessi_summit_2014)

<sup>4</sup> IDC European Vertical Markets Survey, October 2013



### Implementation

The implementation strategy for addressing the goals of the PPP involves four mechanisms: **i-Spaces, Lighthouse projects, technical projects, and cooperation and coordination projects.**

- **Innovation Spaces (i-Spaces):** These will be the hubs for bringing technology and application developments together. They will act as incubators for new businesses and for the development of skills, competence and best practices.
- **Lighthouse projects:** These will help raise awareness about the opportunities offered by Big Data and the value of data-driven applications for different sectors. Lighthouse projects are large-scale data-driven innovation demonstration projects show-casing the benefits of Big Data Value and aiming at higher visibility, awareness and impact of BDV.
- **Technical projects:** These will take up specific Big Data issues addressing targeted aspects of the technical priorities.
- **Cooperation and coordination projects:** These projects will foster international cooperation for efficient information exchange and coordination of activities.



Figure 2: cPPP I-Space

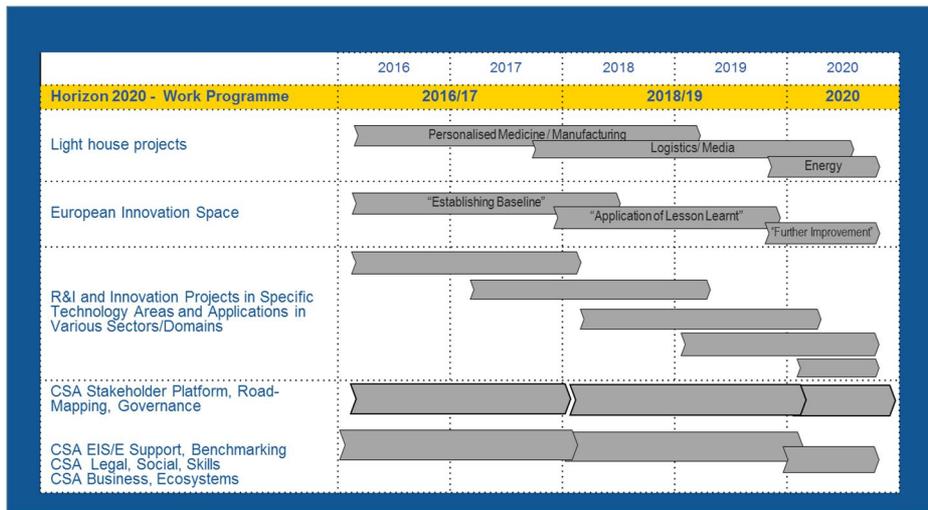


Figure 3: Timeline of activities (with lighthouse projects candidates)

Further activities will involve the SRIA Update process, which will include participation of the wider BDV community and the BDV Stakeholder Platform. The BDV Stakeholder Platform constitutes a permanent forum for industry, user and research entities to express their views, expectations and requirements. They will be captured in a continuous manner, thereby establishing a series of long-term SRIAs.

### Impact

The expected impact of the cPPP should be visible in the great enhancement that Big Data analysis techniques will provide to all decision-making processes. The general effects of Data PPP will include effective service provision, extensive experience and skills acquisition and new business models and optimisation. Significant impact is expected in the following areas: **Big Data Value technologies** will be a key contributor to solutions on current major societal challenges, in areas such as health, demographic change, climate change, transport, energy, and cities. **Availability of public government information and open data** will influence educational and cultural services. **Big Data technology will improve insight** on individual and society behaviour. **Collaboration:** Big Data Value will help to improve collaboration by providing access to various data sources such as media content, traffic flow, etc.