

Big speech data analytics for contact centers - BISON

European Horizon 2020 project No. 645323

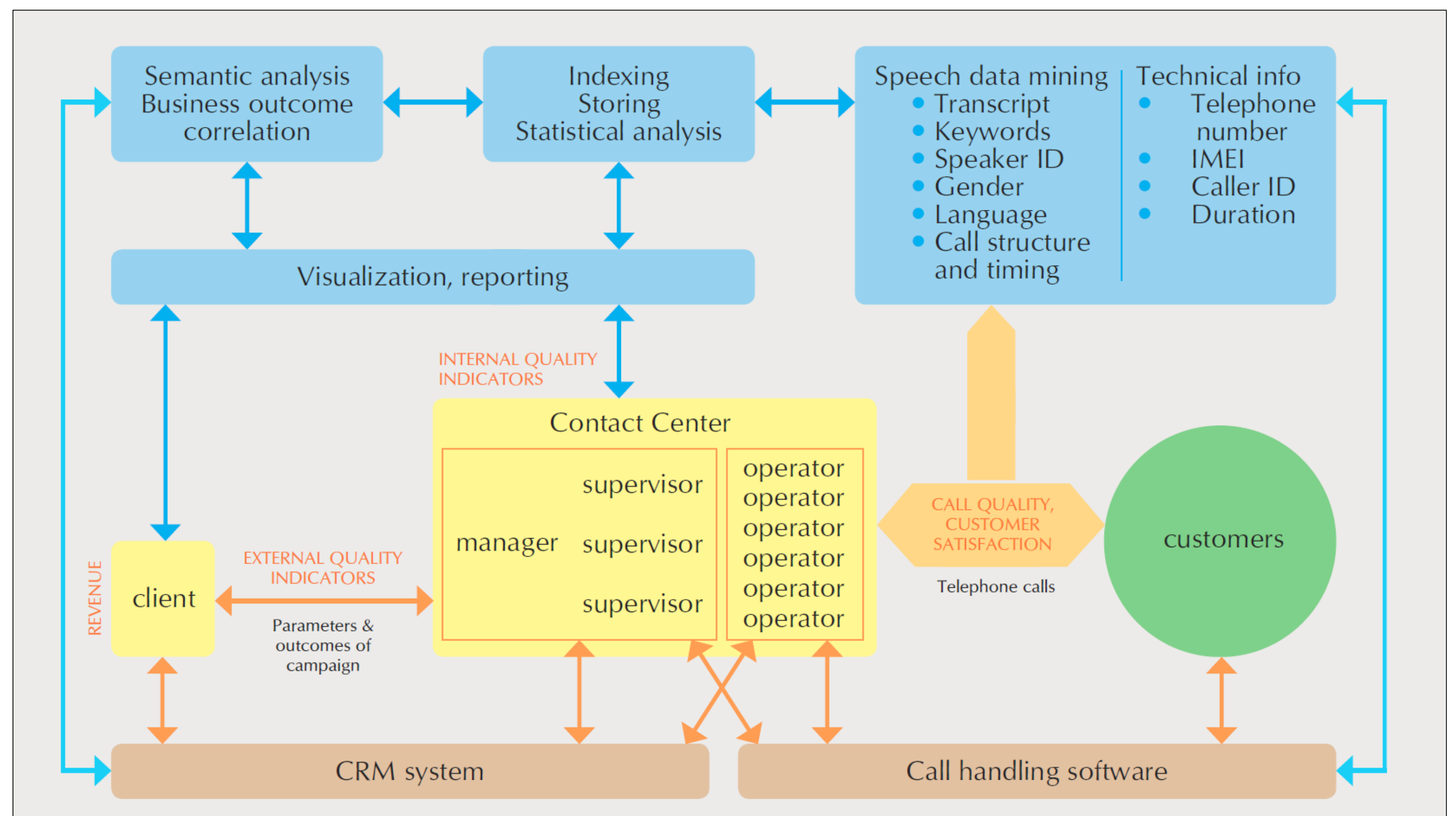
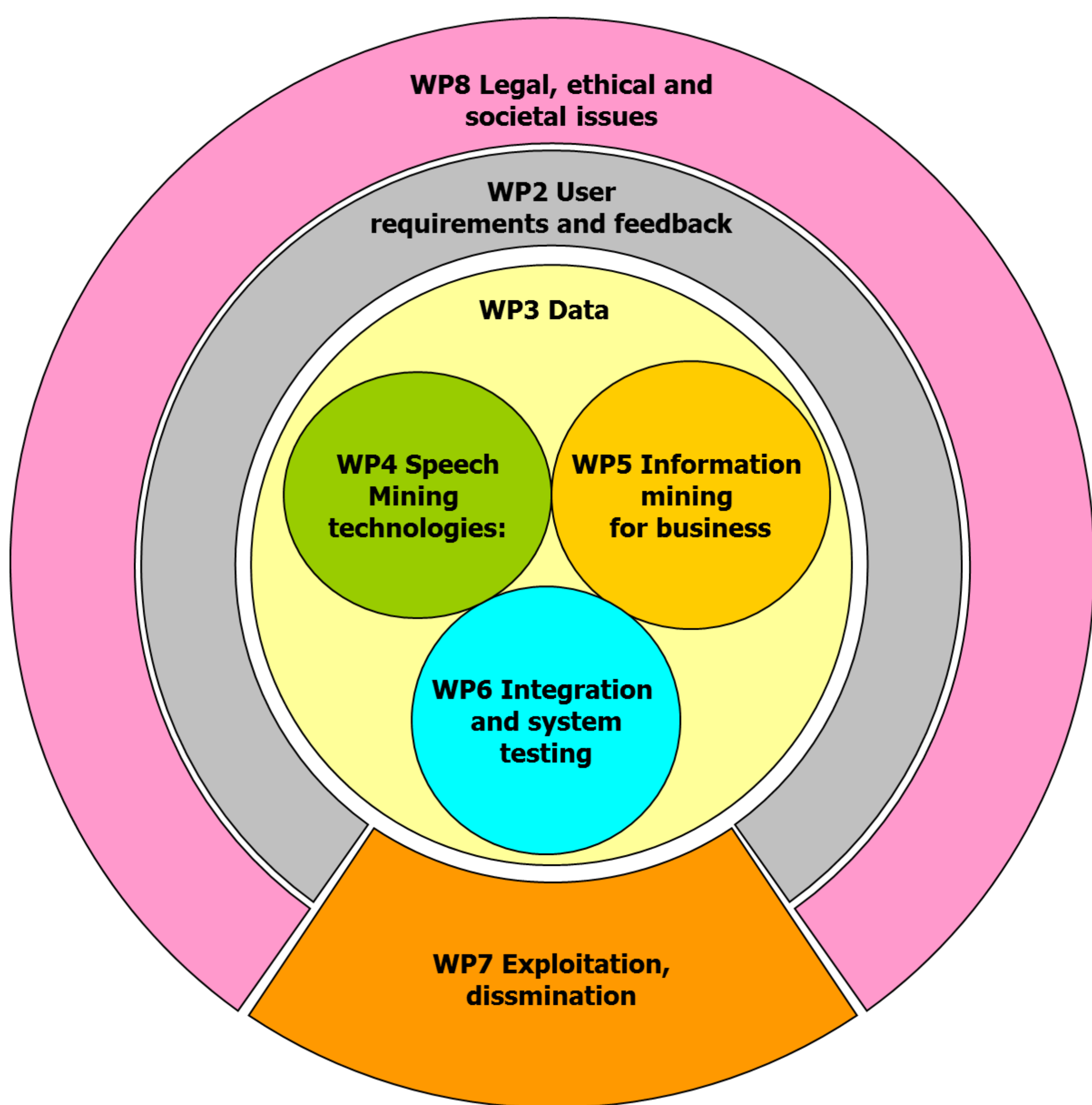


Rationale: The Contact Center (CC) industry involves more than 35,000 companies with 3.2 Million jobs in Europe; this represents 1% of its active population. The whole sector is extremely competitive, working with minimum business margins and stringent performance indicators. Agent-customer speech communication is crucial for CCs and a typical contact center with 1,000 agents, each doing 40 calls a day with an average call lasting for 3 minutes, generates 2,000 hours of audio every 24 hours. This represents a wealth of information for both CC operators and clients, however, only 1-3% of all calls are audited by supervisors nowadays, or analyzed by basic automatic keyword spotting with no direct link between such call analysis and business strategies

BISON's objective: create a multi-lingual, modular and highly versatile software system for big speech data analytics in contact centers.

BISON's components:

- basic speech data mining technologies
- transforming the basic data into information valuable for business strategies
- real-deployment of the systems by real CCs



BISON will help CC businesses for example in:

- Improving the selection of calls that need auditing by a supervisor
- Improving skills and reaction speed of the agents
- Tracking the agents across calls and campaigns
- Improving the quality and checking the effectiveness of training
- Increasing client retention
- Identifying client behavior and reacting to market shifts
- Having an immediate impact on CCs' financial efficiency, measured for example by improved agent efficiency, improved average call length and improved sales

BISON's software:

- **SPAS solution** <http://www.spas-solution.com/>
- **smallBison** - planned early in the project (M12), will provide an early version for real, though limited, deployment. smallBISON will contain full range of speech mining technologies in 9 languages and simple presentation of the results.
- **bigBison** - final output demonstrating full capabilities of the technology. The system will be fully integrated with one large CC hardware and software infrastructure and generation of real business outputs will be demonstrated on real data.

Contact center data to serve the R&D while respecting privacy and ethics

Speech data collected from CC partners in the consortium is crucial for developing more precise and adapted speech mining algorithms in multiple languages. As speech presents privacy-sensitive material, BISON follows clear guidelines concerning personal data and respects all European ethical and privacy principles -- these guide technical partners in designing and developing a law-abiding system from the very beginning. *In BISON, ethics and the respect of fundamental rights are not considered enemies of technology but a crucial component of its development.*



Key facts:

- Start: 1. 1. 2015, duration 36 months
 - 8 partners (6 companies, 2 Universities) from 5 countries
 - Funded by the EC under the Horizon 2020 programme, ICT 15 – 2014 “Big data and Open Data Innovation and take-up”
 - Total budget: 4.1M EUR, EC contribution: 3.1M EUR
 - 8 work-packages, 28 deliverables, 2 demonstrators
- <http://www.bison-project.eu/>



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