Track 8: Decision Support and Big Data

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Description

Intelligent decision support is known to be crucial in many business contexts, and it will both gain momentum and become increasingly challenging through the availability of very large data pools (big data). Sensor networks, social network activities, RFID deployment, Internet search histories and retail transactions are just a few examples of sources that are likely to generate Exabytes or even Zettabytes of data. The data are characterized by high levels of volume, velocity, variety and variability, and traditional analytics and techniques may easily fall short of storing, analyzing and processing these data and, even more so, using them in an intelligent way for decision making.

Key advantages of successfully managing big data and using them for decision making and business analytics include the improvement of overall efficiency, the improvement of speed and accuracy of decision making, the ability to forecast, the identification of business opportunities and a greater understanding of citizens’ and customers’ needs. Turning big data into business and social value will thus become one of the major challenges in the IS discipline. The close link between data and decisions is expected to avoid the processing of irrelevant or redundant information and thus help reduce information overload while ensuring that all relevant information is taken into account.

This track looks for new and innovative methodologies, techniques, theories, and systems that allow the exploitation of big data pools to support decision makers. We invite both quantitative and analytical contributions.

Topics of Interest

Possible topics include, but are not limited to:
- Data mining and machine learning in decision support contexts,
- Decision making, including optimization models and methodologies
- Uncertainty and risk management in decision support
- Iterative, sequential and interdependent decisions
- Social media analysis and crowd sourcing
- Collaborative and participatory decision making including social media applications
- Retail and customer analysis
- Logistics and supply chain analysis and supply chain risk management
- Internet data analysis
- Data quality
- Business value of big data
- Video analytics
- Geospatial analytics
- Cloud analytics and intelligence

**Sponsorship**

Authors of exceptional papers will be invited for submitting an expanded version to a fast-track special issue in the Springer journal *Annals of Information Systems*.

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