# Business Intelligence, Analytics and Cognitive Technologies for Industry- Specific Applications Minitrack

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The major idea of this minitrack is to investigate different cases where BI, analytics and cognitive technologies can be applied to address industry needs. We will discuss reports that improve our understanding of how these technologies accelerate digital transformation across industries. We are interested in getting answers to the question "Where today's cognitive technologies can be applied in an industry specific manner to benchmark and to improve industry standard performance, and grow more opportunities for value creation?" This year we will be mostly focusing on applications in manufacturing and healthcare with emphasis of real-life cases that solve current and future customer needs.

Opening Presentation "Towards leveraging end-of-life tools as an asset: Value co-creation based on deep learning in the machining industry" deals with products that reached their end-of-life. Authors argue that it has extra value for producers and consumers besides its recycling value. Considering worn cutting tools case authors present deep learning-based computer vision system for automatic classification of tools regarding flank wear and chipping. Obtained results illustrate potential of deep learning-based approach in fostering value-cocreation between manufacturers and consumers. Then authors discuss a new research agenda to address general problem of end-of-life tools as an asset focusing on business impact and usability.

The next presentation "Multicriteria Decision Analysis and Conversational Agents for children with autism" analyses various existing conversational agents that has emerged as a new means of communication and social skills training for children with autism spectrum disorders. In this paper authors develop a methodological framework based on Multicriteria Decision Analysis (MCDA) to identify the most effective, conversational agent for this target group. Authors show how to apply MCDA to decision making process related to conversational agents for person with autism. This methodology can be used for much broader range of technologies for person with impairments like ASD. Obtained results

suggest, that Embodied Conversational Agent is most appropriate conversational technology to interact with children with ASD.

We hope you will enjoy the papers and their presentation at the conference, and we thank the authors for submitting excellent results of their work.

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