Industrial blockchain technology as a necessary and necessary requirement of credibility for Industry 5.0

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What Wwll you will hear about .. ?

About **the industrial blockchain**, the specifics of its technology, why we already need it.

On **the importance of the technological platform** for the competitiveness of Czech industry - **Elachain Blockchain Services (EBS)** and the need for its synergistic support by the Association of the Electrical Engineering Industry and the Confederation of Industry of the Czech Republic.

About the added value of **Industry 5.0** compared to Industry 4.0 and its ethical level.

About selected solutions on the EBS platform and other projects fulfilling the vision of Industry 5.0.

A fundamental feature of an industrial blockchain is **to ensure the permanent availability of information on a trusted record of the implemented process.**

Due to the technology used, the uniqueness of the record and the ability to permanently, uniquely and in a sequential sequence **unquestionably** capture each process is guaranteed. All this with affordable and effective technology.

This has a direct impact on the credibility of processes, their continuity, originality and originality. The output is transparency, responsibility for quality, high competitiveness and market purity - the goal of digitizing processes in society.

The Electrical Engineering Association (**ELA**) has met the requirements of ISO 9001: 2015, as an internationally recognized standard for **Quality Management Systems** (QMS).

Meeting this standard (especially from the point of view of the industry as the bearer of the real values of the company's performance) is a clear competitive advantage over other blockchain platforms based on different values and principles.

Industrial blockchain **directly supports and fulfills the Bat'a principle** of comparison with the best - it supports originality and responsibility for its work, ie elements of **worldliness and competitiveness**

The difference between Industry 4.0 and Industry 5.0 is that Industry 5.0 **integrates intelligent collaborative systems into infrastructure and industrial systems, emphasizing the competencies and development of human creativity and personality at all levels.** At the same time, data analytics, machine learning and artificial intelligence are being integrated into all infrastructures. **Blockchain technology is part of this process**.

It is also a physical connection of man with systems using advanced artificial intelligence, for example with the help of wearable electronics. The associated ethical and societal issues are already defined by the EU General Regulation, which protects and regulates the processing of personal data.

Industry 5.0 is a societal challenge that requires highly educated technicians, designers, and engineers capable of systems thinking and lifelong learning for sustainability and stability.

Industry 5.0 is also a challenge to higher education, which must integrate with industrial practice, which in turn will permanently support these schools and their study programs (social responsibility).

Blockchain technologies in Industry 5.0 can become an important evidentiary tool in recording events associated with social engineering processes applied to society through media or social networks.

Current solution representing the use of industrial blockchain in practice on the EBS platform (Ela Blockchain Services)

Industrial blockchain applied to the area of reliable verification of qualification documents - **Diplomachain** (NEXPRO Communications s.r.o)
https://diplomachain.cz

Průmyslový blockchain ve veřejné správě - připravované řešení spojené s produktem **GINIS** (GORDIC a.s.)
https://www.gordic.cz

Blockchain technology applied in robotics of industrial agriculture - the aim is to have an unquestionable and permanent capture of the process of anomalies in verifying the health of high-capacity greenhouses and harvest prediction - **BERABOT** (TAČR project, Farma Bezdínek, NWT a.s., Tomas Bata University in Zlín)

From the point of view of ICT, advanced artificial intelligence, image analysis, machine learning are used in the project)

https://berabot.com

License identification and verification system (eg for IoT) with an "infinite" set of unique licenses "and constant energy intensity, carbon neutrality (source here).

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