Artificial Intelligence: Change in Business Models, Workforce and Legal Aspects

ABSTRACT

A 1942 short story by *Isaac Asimov* titled "*Runaround*" has narrated 3 laws that describe how a robot must behave towards people. This short story was written at a time when Al's development began. *Asimov's* science fiction scenario has not come true until today. Nevertheless, Al has arrived in our society. Not so much in the form of robots, but rather in the form of software.

Driven by the price erosion of storage space, the disproportionate increase in computing speed of processors as well as the global networking of servers and other computing units, AI has made its breakthrough and will sustainably change our lives over the coming decades. AI applications are already diverse today, with up to four abilities depending on the application: perception, learning, natural language processing, and reasoning. Based on these characteristics, an AI system is capable of self-development and autonomous decision-making.

In business, the application of AI will provide far-reaching opportunities for strategic differentiation across all industries. There will be new products and services. Likewise, new sales channels will emerge, and the point of sale will shift in many cases. All that will change whole industries.

The world of work is also undergoing major changes. Existing jobs are replaced or modified, others arise. Work processes and work organization become more decentralized and more international. Competency profiles will change, especially regarding leadership roles.

Ultimately, there are many legal issues to clarify. How do we as a society deal with it, when decisions taken by AI discriminate or the affected person is harmed? Will we be able to stick to our privacy principles in a world of AI? How do we regulate labor law in an increasingly decentralized, internationalized world of work? How do we fix security issues when an AI system has caused damage? And finally, authorities may find it increasingly difficult to enforce existing principles of data protection, competition law, and corporate taxation.