

## IMPACT OF ARTTIFICIAL INTELIGENCE IN VARIOUS SECTORS

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### Abstract

*Social media platforms increasingly use powerful artificial intelligence (AI) that are fed by the vast flows of digital content that may be used to analyze user behavior, mental state, and physical context. With Industry 4.0, this becomes a reality because it drives innovation and introduces new technologies on such a massive scale that it will affect our whole society. 3d-printing, sensors, and block chain are a few of the original words we need to adopt into our vocabulary. All these technologies will have a significant impact on the way we work and consume soon. . Our institutional analysis does however point to the potential for negotiating trustworthy AI safeguards at a point where the collective needs of relevant data supply stakeholders can be contractually aligned contractually with AI innovation in a targeted and responsive fashion. In this way, future social media platforms may be able to maintain trust in their use of AI by committing to no datafication without representation.*

**Key words:** Artificial intelligence, Social media, Block chain, society.

### Introduction

Social media platforms increasingly use powerful artificial intelligence (AI) that are fed by the vast flows of digital content that may be used to analyze user behavior, mental state, and physical context. New forms of AI-generated content and AI-driven virtual agents present new forms of risks in social media use, the harm of which will be difficult to predict. Delivering trustworthy social media will therefore be increasingly predicated on effectively governing the trustworthiness of its AI components. In this article, we examine different approaches to the governance AI and the Big Data processing that drives it being explored. We identify a potential over-reliance on individual rights at the expense of consideration of collective rights. In response, we propose a collective approach to AI data governance grounded in a legal proposal for universal, non-exclusive data ownership right. We use the Institutional Analysis and Development (IAD) framework to explore the relative costs and benefits on stakeholders in two use cases, one focused on digital content consumers the other focused on digital content knowledge workers. Following an analysis that looks at self-regulation and industry-state co-regulation, we propose governance through shared data ownership. In this way, future social media platforms may be able to maintain trust in their use of AI by committing to no ratification without representation. Industry 4.0 changes the industry as we know it since the industrial revolution. Imagine having personalized products and services, perfectly fitted just for you, at your fingertips. With Industry 4.0, this becomes a reality because it drives innovation and introduces new technologies on such a massive scale that it will affect our whole society. 3d-printing, sensors, and block chain are a few of the original words we need to adopt into our vocabulary. All these technologies will have a significant impact on the way we work and consume soon.

### In what ways will industry 4.0 change our society?

Sensors and machine-to-machine networks are not new to industries. What will change is the way they interact. For instance, data is still in silos, but Brainwork and paperwork are still substantial, and processes are often dependent on specific individuals.

**Customise Everything In Detail:** New manufacturing processes will make it possible to customize products on a whole new level:

“We will see a massive increase in customised solutions. You will be able to customise and configure products to your needs on a detailed level, including everything from cars to personalised medicine.”

**Less shipping and increased supply:** 3d-printing on an industrial scale means less transportation and increased supply: “We are already working with companies that don’t ship but build spare parts across the globe.

**A shift in jobs:** Industry 4.0, especially when coupled with machine learning and artificial intelligence, will substantially change conditions for workers: “Many jobs will disappear while we will gain a lot of new jobs, and many repetitive tasks will shift from manual labour to automation. It will have a big impact.”

### Robotics vs. China

Manufacturing will change, and this will affect industries on a global scale, and the labour advantages China currently have will be less critical due to automation and time-to-market: “Many high-cost countries are scared about robotics, but already have hundreds of these robots in their industries, which will increase into the thousands. But it is important to make this shift carefully. Much manufacturing will move back from China and closer to the consumers.”

### How will block chain impact society

Block chain technology is not only disrupting banking and finance, but it also has the potential to impact many industries and community as a whole. For instance, this technology can enable a car to provide for itself during its lifecycle.

### Impact Of Industry 4.0 On Business

“In the manufacturing process, a digital wallet, based on block chain technology, can be installed in the car. This wallet works by logging all transactions made involving the vehicle, including maintenance, modifications, charging or filling up gas, naming a few. It makes it possible to predetermine the total cost of ownership and calculate return on investment for the car on a very detailed level, says Matthias Roes. But what will happen to the companies that are not taking part in this shift? Industry 4.0, also known as the Fourth Industrial Revolution, refers to the integration of advanced technologies such as artificial intelligence, the Internet of Things (IoT), and automation into manufacturing and other industries. This integration is expected to lead to significant changes and improvements in the way businesses operate.

### Some of the potential impacts of Industry 4.0 on business include:

Increased efficiency and productivity: The use of advanced technologies can help streamline and automate many business processes, leading to increased efficiency and productivity. Improved decision-making: The use of data analytics and machine learning can help businesses make more informed decisions by providing real-time insights and predictions.

Enhanced customer experience: Industry 4.0 technologies can be used to personalize and improve the customer experience, for example by using IoT devices to track and optimize delivery routes or using chatbots to provide quick and convenient customer service. New business models and revenue streams: Industry 4.0 technologies can enable businesses to create new products and services and explore new revenue streams, such as by offering subscription-based or pay-per-use models. Overall, Industry 4.0 has the potential to bring about significant changes and improvements in the way businesses operate, and

companies that are able to effectively leverage these technologies are likely to have a competitive advantage.

### **Impact Of Industry 4.0 On Education**

Modern technological advancements like Sensors, IOT (Internet of Things) and smart automation have influenced the present education system in several ways. Today's education systems highly focused towards the digital flat form through virtual communication systems. In India, still there are some problems with the internet protocol or communication systems, lack of skilled persons, poor economic culture, etc. These are the issues present in the Indian education system. Industry Revolution 4.0 will definitely create a big impact on the Indian education system that will transform the future of advanced technology through visual method. The present system is not much beneficial to the students of Indian nation still students are following the olden method of education that is memorizing the concepts. In future, such type of conventional education pattern will not be going to help students. Today Digital method of education has brought many comfort and flexibilities to the students. This has increased the remote based learning through mobiles and laptops with increased bandwidth, but still in India from technology point of view, people from rural villages facing lot of connectivity issues and bandwidth problems during the past few months in the pandemic crisis. Before going for any change or transformation in the education process, first we have to fix the mind for preparedness, which is common for all individuals.

Then the next challenge is the preparedness for updating the skill in learning the new embedded technologies and then at last economic challenge is the vital thing, which is to be taken with more importance. Creativity is the main aspect in industrial revolution 4.0. Only trained and skilled peoples can be able to control the innovation and process mechanism in education system. According to Education 4.0, students need to be trained not by conventional teaching. This is the aim of remote based education system. Both Education 4.0 & Industry 4.0 must be aligned together in order to create job opportunities in more demand. The future education system will be more transparent in nature, in which all the information will be stored in the form of cloud. So, the user can able to access the information from the cloud data according to their wish.

Education 4.0 improves the freedom of learning and also freedom to innovate, think and implement by proving promising results in any fields. So, both students and educationalists have equal responsibility to sharpen the world by bringing quick changes through major advancements in the field. Education 4.0 brings many job opportunities to students in line with latest technological tools like Machine learning, Deep learning and Data science, etc. Education 4.0 will bring the change in the curriculum design and pedagogical methods practiced in teaching and learning process. Education 4.0 will have increased advantage in digital skills and Science, Technology, Engineering & Mathematics. As stated by Lloyds Bank in 2019 nearly 22% of the people in UK are lacking in digital proficiency that is considered to be more essential in order to do the day-to-day professional activities.

Also, in future it was estimated that AI (Artificial Intelligence) will have a profound role to play in the field of higher education and also to what extent the all universities will be converted to have smart campus in improving the teaching and learning quality. Education 4.0 requires a new strategy to prepare human resources in order to compete in the digital technology. The fourth Industrial revolution has shown impact in many several ways specifically in education sectors. The influence of industry 4.0 concept has brought more advanced transformations both in National and International level.



. Education 4.0 does not require a teacher to teach the concepts in education institutions, instead remote based learning system is followed. The new paradigm shift in Education 4.0 – Digital era will motivate to have a greater number of online courses for the students to enhance their skills through virtual mode of education. Similarly, teachers will also develop the core competencies towards teaching and learning through various ICT tools for simplified method of teaching and learning process. Even though education 4.0 has many advantages, at the same time readiness to accept for change is said to be one of the main challenges in the modern system. So, Education 4.0 must set its objectives in line with the goals of Industry 4.0 so that both educational institutions and Industries can work together for the betterment of student's future.

### **Impact Of Industry 4.0 On Government**

Introduction to the Public Sector - Discover what the Public Sector is and the vital role it plays in shaping is. Learn about the different roles of the Government and Public Sector; including providing transportation, healthcare, building and maintenance of infrastructure such as roads, providing electricity and water. Introduction to Challenges of the Public Sector - Explore the challenges faced by the Public Sector such as the lack of traceability and accountability within the sector, ensuring that public facilities and infrastructure such as transportation, healthcare, water and electricity are up to the industry expected standards.

Opportunities for Innovation in the Public Sector - Discover the opportunities for innovation in the Public Sector including better increase transparency, increased accountability, increased efficient utilization of resources and proactive decision-making, increased engagement with the Public. Introduction to Cyber Physical Systems (CPS) - Discover what Industry 4.0 is, what the Industry 4.0 Environment is and the different kinds of Internets such as the Internet-of-Things (IoT), Industrial-Internet-of-Things (IIoT), Internet-of-Services (IoS) and the Internet-of-Everything (IoE).

The Impact of Industry 4.0 on Governments and the Public Sector - Discover how Industry 4.0 is impacting and transforming the Governments and the Public Sector including interactive decision-making, better transparency, better accountability and a much more efficient governance framework. - Roadmap for increasing Productivity in Governments and the Public Sector - Discover a few key points to create a Roadmap for increasing the Productivity in Governments and the Public Sector in the Industry 4.0 era.

### **Conclusion**

Data are the fuel on which the effectiveness of AI is based, and as we see most pointedly in social media, the societal impact of any AI application grows in step with the relevance and volume of data available. The stakeholders that supply the data for an AI system, for example, the people and businesses using social media platforms, are often those most impacted by that AI. Implementing trustworthy AI requirements at the point of data supply may therefore reflect stakeholder needs more accurately, respond to emergent harms more rapidly and scale better with the number and data density of data supplying stakeholders involved, compared with enacting governance rules after the data are acquired and the AI starts impacting people's lives, which is the norm for co-regulation and self-regulation. Our institutional analysis does however point to the potential for negotiating trustworthy AI safeguards at a point where the collective needs of relevant data supply stakeholders can be contractually aligned contractually with AI innovation in a targeted and responsive fashion. In this way, future social media platforms may be able to maintain trust in their use of AI by committing to no datafication without representation.