
Artificial Intelligence Will Be Able To Change Lifestyles And Financial Literacy Towards The Era Of Society 5.0

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Abstract

This article makes predictions about the future of AI and its development, which is getting faster and faster, and whether AI can change a person's lifestyle and financial literacy in the future towards society 5.0. The evolution of mankind has been dominated by industrial revolutions, one after another, which have changed the face of the modern world. The fifth industrial revolution is dawning on the world in unexpected ways as we rely more and more on Industry 4.0 technologies, including artificial intelligence (AI), big data (BD), the Internet of Things (IoT), digital platforms, augmented and virtual reality, and 3D printing. AI can change style, and AI can also change financial literacy by using advanced AI technology. The approach used in this research is qualitative, while the type of research used is library research. In the past, in an information society, the common practice was to collect information via the network and have it analyzed by humans. In Society 5.0, however, people, things, and systems are all connected in cyberspace, and optimal results obtained by AI exceeding the capabilities of humans are fed back to physical space. This process brings new value to industry and society in ways not previously possible.

Keywords: *Artificial Intelligence, Lifestyle, Financial Literacy, Society 5.0*

INTRODUCTION

Heraclitus, a Greek philosopher, said "change is the only constant in life." It's no secret that artificial intelligence is drastically changing the world as we know it. Artificial intelligence (AI) is a term that refers to the ability of computers or machines to learn and perform tasks that normally require human intelligence. Although AI has been around for centuries in one form or another, it is only recently that AI technology has grown to the point that it is becoming a part of our everyday lives. There are many applications for artificial intelligence, from personal

assistants like Siri and Alexa to self-driving cars and beyond. As AI technology continues to evolve, we are likely to see even more impressive and life-changing applications in the years to come.

Major industrial shifts throughout history have been driven by natural disasters or outbreaks of infectious diseases that threaten public health security (Madhav N., 2017). The evolution of mankind has been dominated by industrial revolutions, one after another, which have changed the face of the modern world. The fifth industrial revolution is dawning on the world in unexpected ways as we rely more and more on Industry 4.0 technologies, including artificial intelligence (AI), big data (BD), the Internet of Things (IoT), digital platforms, augmented and virtual reality, and 3D printing (Chang MC; 2020). Society 5.0, which is known as a super-intelligent society, may be the last bridge between machines and humans (Hanif MI; 2020).

Among Society 5.0 technologies, the most important are AI, robotics, 3D printing, and digital platforms. BD and AI have changed the face of blue-collar work (Vieira A. 2018). The current generation is gearing up for a more personalized future due to the recent adoption of AI algorithms. "Artificial Intelligence (AI)" is a pair of words that excites both the AI enthusiast and expert community. The concept of man-made machines or living things capable of thinking, learning, and making decisions on their own is so amazing that it has been in popular culture for decades (Ahmad Rizvan Hasan, 2022). Current IA developments target merging human capabilities with self-learning artificial intelligence. At some point, these developments will reach moral and ethical limits before technological ones. Therefore, an ethical framework must be established to define how AI should be used to prepare the next generation of AI. Justice is dynamic and a social construction and cannot be trusted for automation (Ntoutsis, E.; 2020).

The existence of human intelligence allows us to imagine the concept of artificial intelligence (AI) in the 1950s as the possibility of programming computers to behave intelligently (Turing, A.M., 1950; Buchanan, 2006). Through their ability to learn, humans increase the effectiveness and efficiency of automated work processes. While technological innovations resulting from the third industrial revolution (computing and the internet) provided AI with the necessary foundation to start its rapid development, big data and related analytics have enabled humans to extend their level of intelligence even further. Today, AI is considered one of the key inventions of the fourth industrial revolution (Jeon, J., 2017). While Winston defines AI as "the study of ideas that enable computers to be intelligent" (Dean: 1995, Winston: 1984), More recently, AI was defined as "a broad discipline with the aim of creating intelligent machines, as opposed to the natural intelligence exhibited by humans and animals" (Benaich: 2019).

Technological developments in the last two decades build on the work of previous decades, in which humanity has achieved technological advancements, laying the groundwork for the future development of machines and algorithms that may, for the first time in human history, create their own consciousness. In the new era of technology, new petabytes of information are produced by people every

second, and the emergence of big data has created unique opportunities and challenges for humanity (Hassani, 2014). Scientists try to extract useful information from growing amounts of data. Thinkers such as Peter Drucker (Hardy: 2009) and Alvin Toffler (Subramanian: 2016) describe our current era as the information age or knowledge economy. It was Douglas Engelbert who first discovered the importance of computer technology in bootstrapping human creativity and abilities (Engelbart, 1964).

The contemporary world is strongly characterized by digital technology in its most diverse forms, contexts, and uses. In this "new" world, digitization, both virtual and permanently online, is becoming, for the majority of the world's population, normality, which corresponds to current and future expectations with growing impact, without forgetting those who are excluded from this reality (the digital divide). (Serpa & Ferreira, 2019; Hitachi-UTokyo Laboratory (H-UTokyo Lab.), 2020; Santos & Serpa, 2017, 2020). According to Saraceni (2020), this reality "demonstrates an unequal distribution of skills needed to benefit from the use of digital tools" (p. 66).

Now we are moving from the industrial revolution 4.0 to a much more modern era, namely what is referred to as the era of society 5.0. Where Society 5.0 is one idea that seeks to foster and be responsible for this digitally shaped society, but also to some extent shape this digital reality, by "proposing to advance the potential of the individual-technology relationship in driving technological improvement and quality of life for everyone through a super intelligent society" (Serpa & Ferreira, 2018). As an early ideological political concept, Society 5.0 makes it possible to develop various analyses of the process of forming a society in which digital is increasingly present to serve the sustainable social and economic development of a super-intelligent society.

Then how can these changes and phenomena affect not only changing times but also changes in one's lifestyle and financial management in today's modern era? We see the definition of lifestyle according to William Lazer (1963, p. 130), who defines lifestyle as "a way of life that is typical or characteristic in the aggregate and broadest sense of the whole society or its segments." As can be concluded from this definition, starting in the 1960s, experts focused on consumer characteristics and ways of life to better classify segments. It was at this point that psychographic studies emerged in the marketing discipline as an answer to the need for in-depth market segment insight (Engel et al., 1990; Witzling & Shaw, 2018).

In addition, experts also argue about how to place "lifestyle" on the path of consumer decisions to buy (Migueis et al., 2012). Kaze & Skapars (2011) put forward a hierarchical construction that places lifestyle as a determinant of attitudes and is fed by social values. From this, we can see that lifestyle is a determining factor for changes in attitudes and social values that occur in this world. If lifestyle changes, then does financial literacy also change according to the development of the era? Accordingly, substantial evidence disproves that financially literate individuals exhibit more risk-tolerant behavior and invest in more risky assets than individuals with lower financial literacy (e.g., Bannier and Neubert, 2016; Dimmock et al., 2016; Van Rooij et al., 2011). Individuals who are financially

literate also have more financial assets in general (Feng et al., 2019). Considering the benefits of this behavior, many efforts have been made to increase consumer financial literacy, such as through high school and work programs. However, it is unclear whether educational programs actually influence risk-taking and financial behavior. Hung and Yoong (2013), for example, found that unsolicited advice had no effect on investment behavior, whereas individuals who actively asked for advice ultimately changed behavior. Although financial literacy is relatively low. Their findings suggest that building financial literacy can affect outcomes, but also that other factors (in their study that were not observed), such as inherent motivation, can have a significant effect.

This article makes predictions about the future of AI and its development which is getting faster and faster, and whether AI can change a person's lifestyle and financial literacy in the future towards society 5.0.

METHOD

This research is a prediction research model of a literature study on actual problems that exist in today's society. The approach used in this study is qualitative, while the type of research used is library research (Bakker & Zubair, 1994). The object of this research is to determine if artificial intelligence will be able to change lifestyles and financial literacy in the era of society 5.0.

RESULTS AND DISCUSSION

Artificial Intelligence Change Lifestyle

Artificial Intelligence (AI) is no longer futuristic science fiction but has become a reality in our daily lives. Several researchers have highlighted how this computer-based intelligence affects our lives and possibly changes our future. Understanding that artificial intelligence can change human lifestyles can be seen from several facts that are happening in our society today. There are several examples, and the impact of lifestyle changes can be described as follows: 1). Hedonism (Kurt Lampe, 2015, p. 27; J. Clerk, 2015, p. 11); 2). Flexing (Darmalaksana, 2022), 3) Consumptive (Fitriyani, Widodo, & Fauziah, 2013). Today, consumptive behavior has hit all levels of society.

In addition to some of the negative patterns that AI makes for lifestyle changes, here are some positive impacts of AI where the human lifestyle is made easier. Here are some ways AI can change the way we live : 1) A smarter home: Imagine a home that can anticipate your needs and handle tasks automatically, from turning on the light when you wake up to making sure your coffee is ready. With AI powering our homes, this could soon become a reality. 2) Improved safety and security: AI can help us identify potential hazards and security risks before they occur. For example, facial recognition technology can spot potential criminals in a crowd or track missing people. 3) Improved health care: AI can diagnose diseases earlier and more accurately than before. Additionally, AI-powered chatbots can provide valuable support and advice to patients suffering from anxiety or depression. 4) More efficient transportation: Traffic jams could soon be a thing of

the past thanks to self-driving cars and drones. These autonomous vehicles will be able to navigate the best path to a destination and even offer drone lift options and the best day with the least traffic jam alternative while building a to-do list.

Artificial Intelligence Change Financial Literacy

Applications of AI technology can be found in various business functions, including production, distribution, procurement, sales and marketing, accounting and finance, auditing, research and development, human resource management, etc. AI is now being used to help people manage their finances better and become more financially literate. The following is the impact of positive change thanks to technological advances towards modernity :

- 1) Application of AI in Accounting and Auditing Davenport & Ronanki (2018), writing in their Harvard Business Review, suggest that organizations should focus on AI in terms of business capabilities rather than technology skills. In general, AI can help businesses fulfill three main goals: automate business processes, gain insights through data analysis, and connect with consumers and workers. Chukwuani & Egiyi (2020) examine the impact of artificial intelligence on the accounting industry. Thus, they show the level of progress that is taking place in the accounting industry in automating accounting processes.
- 2) Blockchain technology Blockchain technology enables secure and cost-effective transmission of any value (data, assets, cash, and information) in real time (Zhang et al., 2020). All blockchain features contribute to the development of a new generation of audits based on continuous assurance. Professional auditing standards, on the other hand, are not equipped to incorporate these new changes into the old auditing process (Zemánková, 2019).
- 3) Paradigm in ethical and fraud concern: Artificial intelligence in accounting and auditing raises many ethical and moral issues (Zemánková, 2019). AI is something that needs to be answered and made aware of. Just as applications and practices change, so does the way fraud is committed. New forms of white-collar crime are emerging. Ucoglu (2020) calls for ethical and regulatory guidelines and oversight with regard to accounting and auditing firms.
- 4) The emergence of big data Big data is a double-edged sword characterized by the four Vs: large volume, high speed, wide variation, and uncertain truth (Zhang et al., 2020; Luan et al., 2020). It can be used for the benefit of modern entities, and vice versa, it can be considered a threat if proper measures are not taken by the organization to handle large amounts of data.
- 5) The Rise of the Gig Economy and Professional Hybrids: Griffin (2019) suggests that the wider application of AI will cause remote work to become more common. The digitization of work and the emergence of the gig economy will change the dynamics of work and the workplace. Many jobs will be freelancing, and professional hybrids will be in high demand in that scenario.

Toward A The Era Of Society 5.0

The concept of Society 5.0 emerged in 2015 in Japan as a national strategic political initiative (Ferreira & Serpa, 2018; Gladden, 2019). Salimova et al. (2019) define and characterize Society 5.0 as follows :

[...] a social-and-economic and cultural system developing in a sustainable way in the direction, which is optimal for the mankind on the basis of processing the 'big data' results, where a physical- and cyber space are becoming an integral whole for solving the social problems, providing security and eco friendliness of innovations and sustainable economic growth. The concept of the Society 5.0 is focused on attaining such goals specified by the United Nations Organization in the field of sustainable development up to 2030 (p. 2).

Society 5.0 is a super-intelligent society, embodied in cyber-physical-social relations, that primarily seeks to improve the quality of life (Sharp, 2020; Gladden, 2019; PotoCan, Mulej, & Nedelko, 2020; Deguchi et al., 2020). The Federation of Japanese Business (2016, cit. in Ferreira & Serpa, 2018) states that: *Every individual including elderly people and women can live safe and secured comfortable and healthy life and each and every individual can realize his/her desired lifestyle. [...] Improvement of productivity through digitization and reform of business models are promoted, and at the same time, the new economy and society will be realized by promoting innovation and globalization.*(pp. 27 e 28).

In turn, Sharp (2020) characterizes the relationship between Society 5.0 and super-intelligent society and justifies the relationship between them :

Society 5.0 can be referred to as a Super Smart Society due to its inextricable links with technology; think of it as a digitisation of society. But human control will retain centre stage. In addition to AI, the technologies that will take centre stage in Society 5.0 are the Internet of Things (IoT), big data, robots and the sharing economy. The idea is that big data collected by IoT will be converted into a new type of intelligence by AI and will provide solutions for improved human lives (p. 1).

These researchers argue that the concept of society 5.0 emerged under the influence of industry 4.0 (Salimova et al., 2019, 2020; Ferreira & Serpa, 2018; Sharp, 2020; Gladden, 2019). Berawi (2019) makes a distinction between the two concepts, stating that:

“Industry 4.0 emerged from innovative digital technology to create value creation, whilst Society 5.0 is argued as a human-centered society that balances economic advancement with Industry 4.0” (p. 222). Gladden (2019) also limits these two concepts, arguing that : *“Society 5.0 seeks to take the rapidly evolving technologies that Industry 4.0 employs for production within businesses and to integrate them more deeply into the everyday lives of ordinary people” (p. 2).*

In this process, which is shaped by cyber-physical factors (Alvarez-Cedillo et al., 2019), digital literacy plays an important role (Santos & Serpa, 2017; Deguchi et al., 2020). Some of these technologies are not yet in place effectively and efficiently for a full implementation of Society 5.0, which will pose several challenges (Gladden, 2019; Alvarez-Cedillo et al., 2019). One of these challenges was mentioned by Deguchi et al. (2020) as follows:

When the computer systems of Society 5.0 analyze raw real-world data, they must do so using a structure that mirrors the real, physical world. [...] The ultimate

objective of Society 5.0 is to incorporate real-world models into cyberspace such that they can deliver highly nuanced solutions to real-life problems (p. 3).

There is hope that Society 5.0 will make a potentially strong contribution to social inclusion (Deguchi et al., 2020; PotoCan et al., 2020; Salimova et al., 2019). According to PotoCan et al. (2020) :

Vision of Society 5.0 offered a new understanding of the role and importance of technological development for solving of current social problems in modern society, initiatives and actions for further development of the known social concepts of sustainable society and expose decisive importance of innovations for humankind's and society's survival (p. 12). Namun, penerapan Society 5.0 memerlukan tiga perubahan besar pada : "a. Technological change; b. Economic and geopolitical change; c. Change of mind" (Alvarez-Cedillo et al., 2019, p. 696).

And the recently discussed Industry 5.0 (I5.0) (Carayannis & Morawska-Jancelewicz, 2021; Breque et al., 2021; Fukuyama, 2018) highlights the need to rethink existing work methods and approaches to innovation and focus instead on developing solutions for human-oriented and social innovation (Morawska-Jancelewicz, 2021). Society 5.0 and Industry 5.0 both reflect a fundamental shift in society and the economy towards a new paradigm for balancing economic development with solving social and environmental problems and for addressing the challenges associated with human-machine interaction and skill matching (Breque et al., 2021). It also emphasizes that even the most advanced technology must not be above humans (Sulkowski et al., 2021).

Apart from that, society 5.0 has also achieved a high degree of convergence between virtual space and real space. In the past, in the information society (Society 4.0), people would access cloud services (databases) in cyberspace via the Internet and search, retrieve, and analyze information or data. In Society 5.0, a large amount of information from sensors in physical space is accumulated in cyberspace. In cyberspace, this big data is analyzed by artificial intelligence (AI), and the results of the analysis are fed back to humans in physical space in various forms. In the past, in an information society, the common practice was to collect information via a network and analyze it by humans. However, in Society 5.0, people, things, and systems are all connected in the virtual world, and optimal results obtained by AI that exceed human capabilities are returned to the physical space. This process brings new value to industry and society in a way that was not possible before.

CONCLUSION

There is no doubt that AI is a powerful driver of social and economic change (Araya, D., 2019). However, there are significant challenges in lifestyle and economy. It is important for individuals to understand the importance of human creativity in the development of artificial intelligence and intelligent argumentation. The changing nature of work and people strategies should aim to combine creativity and technology to train a workforce that applies technology in order to develop their talents and skills. The risk is high-tech object syndrome. The focus should be on data and data quality; identify where data analysis or AI can improve human

decision-making or enhance creativity (Masih, A., 2018). The problem with the creation of an AI-like brain is that, like any living organism, its basic instinct is to maintain its existence. In other words, once the artificial brain becomes aware of its own consciousness, it will logically struggle to be free from entities that have the potential to "threat freedom", namely humans.

By analyzing the characteristics of AI, humans have determined that the goal of the human species is to take advantage of AI. At the same time, we must not make the mistake of substituting human capabilities by trying to imitate the human brain. In conclusion, AI is here to survive, thrive, and further develop as a result of the capabilities of the human mind. AI was created by humans, and it is now up to humans to determine how to take advantage of the many opportunities of AI while minimizing threats to human existence.

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