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Chapter

Artificial Intelligence and ISO 26000 (Guidance on Social Responsibility)

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Abstract

With the rapid development of artificial intelligence, it has a more and more far-reaching impact on social, economic, cultural, and other fields. At the same time, artificial intelligence faces ethical, moral, privacy, and security issues. In order to realize the healthy development of artificial intelligence, it is urgent to apply the social responsibility management system to artificial intelligence. Based on the seven core subjects of social responsibility proposed by ISO 26000: organizational governance, human rights, labor practices, the environment, fair operating practices, consumer issues, and community involvement and development. In this chapter, the possible risks of artificial intelligence in these seven aspects are analyzed, and the corresponding countermeasures are discussed according to the causes of these problems. The final conclusion is the aspects that artificial intelligence should pay attention to when fulfilling its social responsibility.

Keywords: artificial intelligence, ISO 26000, social responsibility, seven core subjects, issues

1. Introduction

Artificial intelligence has become the focus of social concern. At present, various countries are expanding and strengthening new industrial clusters, implementing big data's development actions, strengthening the research and development of the new generation of artificial intelligence, and promoting the "Internet" in many fields such as medical care, old-age care, education, culture, sports, and so on. At present, the innovation rhythm of artificial intelligence technology is accelerating constantly, the application scene also changes with each passing day. The realm of artificial intelligence is not limited to playing go and acting as a smartphone assistant; manufacturing, warehousing, transportation, car, education, health, finance, home, escort, entertainment, services, and many other industries can see the presence of artificial intelligence. And what's more, it's. We are now from industrial water testing to large-scale application stage. The global market for artificial intelligence will reach $643.7 million in 2016 and $36.8 billion in 2025, according to a study by the US Tractica [1].

Artificial intelligence is the subversive technology that leads the future industrial change. It may mean as much to human society as the Internet, electricity, and steam engines. The more powerful technology is, the more obvious the tool

attribute is in practical application: it can greatly improve social productivity, bring well-being to human society; it may also be used improperly; and it brings new challenges to social management. Therefore, it is necessary to standardize the application of artificial intelligence by strengthening social responsibility. Recently, the dispute over Facebook and data privacy, Uber auto-driving accident of, which is relate to the artificial intelligence security. It is wise to consider the social responsibility of artificial intelligence in a timely manner.

2. Artificial intelligence and industry

Artificial intelligence (AI), as a leading and strategic technology in the future, has become an important driving force for the new round of scientific and technological revolution and industrial transformation. Artificial intelligence can run through the design, process, production, management, service, and other links of industry, so that the industrial system has the mode and result of intelligent functions such as description, diagnosis, prediction, decision-making, and control. The impact of the COVID-19 outbreak in 2019 on industrial production has become apparent. Some enterprises have accelerated the application of intelligent industrial robots and other new ways to carry out intelligent production. Industrial enterprises can make use of AI to digitize and intellectualize manufacturing, supply, sales, and other information in production, and finally achieve the purpose of providing consumers with fast and effective personalized product supply.

Through artificial intelligence learning, industrial enterprises can assist maintenance personnel and engineers with more accurate identification and diagnosis from massive historical maintenance records, technical data, drawings, experience, and other data, so as to shorten the maintenance time and improve the accuracy of predictive maintenance. Artificial intelligence analysis can inform business decision makers of the data performance reflected in what is the most impact on profitability, what is the reason? By using AI technology, manufacturing will achieve higher engineering efficiency, shorter time to market, and production flexibility in the future.

Industrial enterprises form a sustainable industrial ecological chain through the Internet, virtual economy, personalized marketing, and hardware manufacturing. The relationship between the business and the consumer will change the original custom relationship. Take the smart refrigerator as an example. As the pace of life quickens, people have much less free time to do housework. The advent of smart refrigerators will be necessary to improve people's quality of life and save resources. When people buy food and put it in the refrigerator, it often causes waste. On the one hand, they buy too much food at one time; on the other hand, they forget it after putting it in the refrigerator. Smart refrigerators can not only process expired food by themselves and purchase fresh food but also make overall arrangements to reduce food waste and make personalized recipes. It adjusts the location of the ingredients in the fridge to remind people to eat them in time, depending on whether they are fresh or not. In addition, the smart refrigerator can also analyze the rationality of users' meals and make recipes. At the same time, it is suggested that once the user has determined the ingredients that need to be supplemented, the smart refrigerator will automatically select e-commerce for home delivery, directly realize the automation and intelligence of food distribution and delivery, and realize the remote viewing and control of the mobile phone. The use of artificial intelligence in industrial products can greatly enhance user experience and product value.

3. Artificial intelligence and social responsibility

Since 2016, the issue of social responsibility for artificial intelligence has received increasing attention. In September 2016, The British house of commons science and technology committee issued a report, robotics and artificial intelligence, calls for greater ethical research on artificial intelligence to maximize the benefits and try to minimize its potential threat. In the report, they recommended a commission on artificial intelligence should be established to identify principles to govern the development and application of artificial intelligence, provide advice to the government, and foster public dialog [2]. In September 2017, the World Commission on Ethics of Scientific knowledge and Science and Technology (COMEST), which is an advisory body and forum of reflection that was set up by UNESCO in 1998, issued the report on Robotics Ethics. Considering that robots not only need to respect the ethical norms of human society but also need to incorporate specific ethical norms into robots. There are seven relevant ethical principles and values, which are human dignity, value of autonomy and privacy, do not harm principle, principle of responsibility, and value of beneficence and justice [3]. In January 2017, Future of Life Institute, an artificial intelligence research institute, convened Asilomar Conference. A large number of experts and scholars in the fields of law, ethics, philosophy, and so on convened the 2017 Asiloma Conference and formed 23 AI principles as a guide to the research, development, and utilization of artificial intelligence. They believe designer and builder of stakeholders in the moral implications of their use, misuse, and actions, with a responsibility and opportunity to shape those implications [4]. In addition, governments and industry have invested heavily in setting up research funds to advance the social responsibility of artificial intelligence. In December 2016, the Institute of Electrical and Electronic Engineers global initiative for ethical considerations in artificial intelligence and autonomous systems, a standard-setting organization, released ethical design: a vision for prioritizing human well-being with artificial intelligence and autonomous systems (version 1: for public discussion). The aim is to encourage scientific and technological personnel to prioritize ethical issues in the research and development process of artificial intelligence [5].



Figure 1.
Social responsibility seven core subjects bases on ISO 26000.

Based on ISO 26000, social responsibility means"responsibility of an organization for the impacts of its decisions and activities on society and the environment, through transparent and ethical behaviour that contributes to sustainable development, including health and the welfare of society; takes into account the expectations of stakeholders; is in compliance with applicable law and consistent with international norms of behaviour; and is integrated throughout the organization and practised in its relationships" [6]. To identify relevant issues and set its priorities, artificial intelligence should address the following core subjects (see **Figure 1**): organizational governance, human rights, labor practices, the environment, fair operating practices, consumer issues, and community involvement and development. This chapter comprehensively analyzes the problems of artificial intelligence on social responsibility in theory and practice by using the research framework of ISO 26000.

4. Challenges of artificial intelligence faces on social responsibility

4.1 Organizational governance

Organizational governance is the most crucial factor in enabling artificial intelligence to take responsibility for the impacts of its decisions and activities and to integrate social responsibility throughout the organization and its relationships [7]. The White House's October 2016 report on artificial Intelligence, "preparing for the Future of artificial Intelligence," said organizational governance should aim to ensure public safety and a fair market. Some characteristics in the process of artificial intelligence research and development and operation challenge the organizational governance of artificial intelligence social responsibility. Firstly, the covert nature of artificial intelligence research and development, which little visible infrastructure investment, is required. Secondly, the decentralization nature of artificial intelligence research and development, which developers, participants, etc., may be distributed in different countries or regions. Thirdly, the discontinuity nature of artificial intelligence research and development, which involving many components and elements. Fourthly, the opacity nature of artificial intelligence research and development, which stakeholders do not know the artificial intelligence system. It may be difficult to define the artificial intelligence system that needs to be managed by the organization.

Artificial intelligence-related products, such as robots and self-driving cars into the human society, when it causes damage, how to allocate responsibility? Existing governance frameworks, such as product liability and fault liability, have limitations in managing the damage caused by artificial intelligence systems. Designers may also be unable to foresee their follow-up actions, making it unfair for designers to take responsibility for unforeseen damage. Because of the autonomous learning ability of artificial intelligence, when the user loses control of the artificial intelligence system, the user or anyone is no longer responsible for the artificial intelligence system.

On the one hand, what kind of organizational governance can contribute to the development of safe, reliable artificial intelligence systems? On the other hand, when artificial intelligence systems cause personal and property damage, how should responsibilities be allocated? These two aspects are not only realistic problems that need to be studied in depth, but also challenges faced by existing management systems.

4.2 Human rights

Human beings influence everything on earth. They have invented many different tools to improve human productivity. Artificial intelligence is also a tool

invented by humans; it has its uniqueness; it may be smarter than us in many ways. A huge paradigm shift is taking place. We will develop faster than before. Artificial intelligence will solve problems that we cannot solve in the future, such as cancer and traffic accidents. But artificial intelligence has also raised a range of questions about human rights. Since 2016, celebrities such as Stephen William Hawking, Elon Musk, and Eric Emerson Schmidt have expressed concern about the development of artificial intelligence. It is even thought that the development of artificial intelligence will open the door to human destruction.

Robots and artificial intelligence systems are becoming more and more human-like, both in their external form and in their internal mechanisms. What on earth should man do with artificial intelligence? Can artificial intelligence enjoy a certain moral or legal status? The rights of machines have been paid more and more attention and become an unavoidable problem in human society. With the increasing popularity of robot applications, this problem will become more and more important. In addition, what is the law of artificial intelligence systems such as robots? Natural person? Legal person? Animal? Or is it a new subject of law? Answering this question may involve agency, tax payment, liability, and so on [8].

Although artificial intelligence provides a wide range of information, gives people a lot of choices, and offers many opportunities, its essence is to liberate human knowledge and loosen control, and in practice, if it is controlled by certain power organizations, humans will be restricted in the reception of certain information and narrow their horizons opportunities. This will result in a more serious centralization, which is easily ignored and difficult to detect.

Artificial intelligence has an impact on human privacy, freedom, and dignity. It challenges human privacy and data protection by collecting, utilizing, automating, and intelligentizing data analysis. At present, artificial intelligence based on machine learning needs a lot of data, many of which are personal data. How to protect human privacy? If human beings are surrounded by artificial intelligence systems everywhere in the future, how can individual freedom be realized? Gender discrimination. Artificial intelligence always associates women with certain elements, a "sexist" artificial intelligence, which thinks the person standing in the kitchen should be a woman. Gender bias is not only common in databases but also magnified by artificial intelligence.

4.3 Labor practices

Artificial intelligence has many beneficial effects on labor practice. Artificial intelligence can help companies select suitable candidates, avoid the risk of false resumes, and reduce recruitment and training costs. At the same time, it can also create a more honest and fair competitive environment for job seekers. Like any science and technology in human society, the application of artificial intelligence in many fields such as transportation, medical health, manufacturing, service industry, and so on will inevitably bring safety problems. In July 2015, for example, a robot at the Volkswagen factory in Germany suddenly "shot" a worker in the chest, killing him instantly.

Artificial intelligence replaces human beings on a large scale in low-skill, low-creative work or tasks, which is the trend of the times. With the advent of more versatile artificial intelligence systems, even highly skilled, highly creative occupations, such as doctors and teachers, may be partially replaced by artificial intelligence.

4.4 Environment

Artificial intelligence can promote the environmental protection, such as the related technology can better control the air pollution. But at the same time, the

development of artificial intelligence also brings more and more electronic garbage. Electronic waste exacerbates environmental degradation and brings environmental radiation; with the rapid development of artificial intelligence technology, the garbage generated by the replacement of related products will be even more severe [9]. Abandoned mobile phones, computers, etc. can be regarded as electronic waste. These electronic wastes contain precious metals such as gold, silver, copper, and so on, which can benefit from the recovery, but also contain a lot of toxic substances such as lead, mercury, and so on. If it is not properly treated, it will cause great pollution harm to the environment.

The emergence of artificial intelligence has given us too many reasons for upgrading electronic devices. Not only phones, sockets, cooking machines but also surveillance cameras, traffic lights, and so on, which are widely used as urban infrastructure, are also being updated. Artificial intelligence reduces the cost of related products. Low-cost products mean shorter service life and higher wastage rates. The resulting mass of discarded hardware could become a far-reaching burden on the environment.

4.5 Fair operation practices

Artificial intelligence automated decision-making systems are increasingly widely used in many fields such as education, employment, advertising, medical care, criminal justice procedures, and so on. From speech assistant sex discrimination to crime assessment software discrimination against blacks, the unfairness of artificial intelligence system decision-making has spread to many fields. In the concept of artificial intelligence, the wedding dress is a white western wedding dress and does not "know" the culture of the third world. The search engine responds not to reality but also to its user's understanding of reality. Search for "black," but come up with "black criminals." When identifying image content in the United States and the third world, artificial intelligence is always "selective blind." Today's machines, of course, do not have the ability to experience emotions or deliberately impose prejudices, but honestly reflect the real prejudices in the database and even in society, which are sometimes not what we want.

Artificial intelligence will replace human beings in taking on more and more decision-making, and the question is how can fairness and justice be guaranteed? How can we ensure that there is no discrimination and injustice in the algorithm? When an individual is implicated in such a decision, how can he or she be provided with a complaint mechanism in order to achieve fairness to the individual? If you have artificial intelligence technology, you will have wealth.

Tech giants will enjoy rich resources of big data, which may pose a threat to mankind, although it cannot be inferred. Big date's monopoly will become a barrier and a tool for industry giants to pursue their personal interests. It may lead to the accumulation of wealth in the hands of a small number of people, resulting in new inequalities.

4.6 Consumer issues

Artificial intelligence provides consumers with a lot of convenience. The merchant recommends the next item according to the consumer's shopping history and interest. Through the network taxi, greatly reduce the travel cost of consumers and provide consumers with a more reliable time security. Self-driving can reduce the death rate in traffic accidents because machines do not suffer from fatigue, road rage, drunk driving, speeding, and congestion problems, which can reduce many traffic accidents. At the same time, due to the remote internet operation of

unmanned cars, the average speed of the vehicle can be greatly improved, and it can also be of great help to the urban traffic. Artificial intelligence can help people solve the problem of parking better. Also with its help, you can better find parking spaces, through positioning, to avoid the trouble of forgetting the location of parking.

Artificial intelligence also brings a series of problems to the rights and interests of consumers. Many businesses promote artificial intelligence face recognition payment. Face recognition payment does provide a quick and convenient payment experience for consumers, but how to use the consumer portrait data obtained by businesses? Artificial intelligence system for personal data automation, intelligent analysis, and decision-making affect consumers' personal rights and interests, and consumers may be completely unaware of this, and how to achieve the balance between data commercial utilization and consumer rights and interests? In recent years, there have been many accidents in driverless cars. Who should bear the responsibility for the accidents?

4.7 Community involvement and development

In addition to offline communities, there are online communities. Cyberspace is a real virtual existence, an independent world without physical space. The leakage of Facebook user data reflects the fact that personal privacy has been embezzled in the era of big data. People do not keep their information secret anymore, they volunteer to share their information online, but it just means people are adopting new definitions and new privacy rules. Keeping information private does not mean keeping it secret; people want to control the information share to whom and how to use the shared information.

5. Causes of problems

5.1 Technical limitations and culture factor

Intelligent robots, however, lack the unique conscience of mankind. The reason for this concern is essentially due to the limitations of artificial intelligence technology. Today's artificial intelligence does not have the ability to be emotional or deliberately biased, but honestly reflects the biases that exist in the database and even in society. Artificial intelligence recombines and pushes the contents through the algorithm; however, the original data are not completely fair; some of the original data have been biased, and the algorithm will further expand the original data. In addition, the machine is prone to make another mistake, is to treat most of the characteristics of the data as general features; this can be very unfair for a small number of data. Artificial intelligence for data mining and understanding always has a variety of limitations.

5.2 Lag of policies and regulations

Artificial intelligence technology as the emerging development technology, and it is not a long time, which causes the related social responsibility problem that are gone beyond the scope of the existing law, such as the environment, labor practice, and community involvement and development. These problems are more constrained by the social responsibility consciousness of researchers and developers. Since they are not mandatory, the effect is not very obvious. At present, many countries have made efforts; however, these policies are still relatively simple, need human being to improve constantly.

5.3 Stakeholders' social responsibility consciousness is insufficient

How stakeholders manage conflicts of interest, including current and long-term interests, local interests and overall interests, anthropocentrism and sustainable development? [10]. If developers, designers, and users have poor motives to treat artificial intelligence, such as for nuclear testing, inventing intelligent weapons for war will eventually destroy the harmony and stability of human society. If people use artificial intelligence technology to carry out illegal and criminal activities, it will pose a threat to the public interest. In addition, the random dissemination of false information about artificial intelligence will make people panic when people do not know enough about artificial intelligence. The scientific and cultural qualities of the developers and users of artificial intelligence technology can greatly affect the sustainable and healthy development of artificial intelligence technology.

The mistakes, discrimination, and prejudices of artificial intelligence also come from technical staff problems. They lack consideration of the data and the social realities behind them, and groups and regions that do not have the right to speak are likely to be more severely marginalized in the future.

6. Suggestions

By regulating the development of artificial intelligence through social responsibility, it can be avoided from being improperly used, so as to deviate from the original intention of letting technology benefit human society and to build up consumers' trust in artificial intelligence, thereby reducing unnecessary suspicion, panic, and exclusion. To strengthen the social responsibility management of artificial intelligence, the characteristics of artificial intelligence should be deeply considered.

6.1 Organizational governance

A social responsibility committee for artificial intelligence could be set up to guard the design and development of artificial intelligence to ensure that robots conform to ethical, legal, and other norms of human society. The committee should be interdisciplinary, involving both male and female participants. Conduct cross-disciplinary monitoring of artificial intelligence applications, identify industry best practices, and propose regulatory measures in due course. On the one hand, it promotes the application and innovative development of artificial intelligence by clearing some existing rules and institutional barriers. On the other hand, it ensures the security and reliability of artificial intelligence systems in these fields through the perfection of rules and standards, maintain public safety, enhance public trust, and accelerate the popularization of new technologies.

To promote the standardization of social responsibility in artificial intelligence at the international level, we should continue to work toward the international unification of social responsibility standards of artificial intelligence. It is necessary to establish the corresponding artificial intelligence social responsibility standardization framework, so as to avoid the conflicts and disputes arising from the inconsistency of standards among countries.

6.2 Human rights

When artificial intelligence enters human society, it is necessary to abide by the legal, moral, other norms and values of human society, and to act legally and

in accordance with human morality. Because artificial intelligence system is the subjective design of research and development personnel. On the one hand, it is necessary to embed all kinds of norms and values into artificial intelligence system in a technically feasible and effective way, so that the system can make ethical behavior when it is running. On the other hand, it is necessary for research and development personnel to avoid subjective bias, preference, discrimination, and so on in the process of artificial intelligence system research and development.

The policy makers, researchers, and consumers of products need to take responsibility toward artificial intelligence, because once the artificial intelligence technology is developed, it is unlikely will fall back. It is necessary to integrate the social responsibility concept into the artificial intelligence technology.

6.3 Labor practices

Automation driven by artificial intelligence is disrupting the labor market. In the future, it is necessary to strengthen the education and training of talents in artificial intelligence, so as to ensure that workers can adapt and transform to the new employment and work paradigm brought about by artificial intelligence.

In the environment of artificial intelligence, the working hours and rest of workers are being blurred. The organization should create the conditions as far as possible so that the employees can realize the balance between work and life. To prevent the stress and anxiety of employees caused by the speed-up of the work rhythm caused by the intelligence of the workplace, and to create the appropriate professional environment to adapt to the physical and mental health of the employees.

6.4 Environment

E-waste can be recycled in a more rational and environmentally friendly way. Establish professional electronic waste disposal institutions to provide workers with protective measures to separate precious metals and toxic substances from electronic waste in a safe environment and to dispose of toxic substances in a specified manner. Educating stakeholders, advertising, setting up e-waste collection sites on the streets, and so on is to make people aware of the dangers of private disposal of e-waste.

6.5 Fair operation practices

The degree of automation of artificial intelligence decision-making is increasing day by day. It is necessary to ensure transparency, participation, and accuracy in artificial intelligence decision-making process. When an algorithm-based artificial intelligence system makes important decisions, it ensures transparency, participation, and accuracy. Transparency and accountability should be the primary goal in the design of artificial intelligence system.

6.6 Consumer issues

Artificial intelligence is a series of related technologies, which is widely used and involves all aspects of society. It should be taken into account in the process of social responsibility management. Moreover, the development of artificial intelligence technology relies heavily on big data, which greatly improves data acquisition. And the efficiency of processing also increases the risk of improper application and disclosure of data, so it is necessary to pay special attention to data application and privacy protection in social responsibility management.

6.7 Community involvement and development

Pay attention to the network community. The Internet is not an extrajudicial place. Behavior in network community, including business innovation, must be on the rule of law track. For a long time, there has been a view that the Internet should be completely self-disciplined, to survive the fittest by itself. Now it has been found that this is not the case. Regulate the developers, users, and owners of artificial intelligence; do not harm the legitimate interests of the state, society, and individuals.

7. Conclusion

The development of artificial intelligence has had a profound and long-term impact on human production and life. While making people enjoy the good life, it also allows people to feel its negative effects, such as infringing on human privacy and bringing new inequalities to human beings. There are a lot of problems in theory and practice of artificial intelligence on social responsibility. However, these problems will not be solved in a short time. This chapter discusses the social responsibility problem of artificial intelligence with some related suggestions. We will proceed from the seven core subjects to enhance the social responsibility of artificial intelligence and ultimately achieve the sustainable development.

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