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On Machine Learning and Public Administration

Letian Cao[1]

[1] School of Public Administration, Shandong Normal University, Jinan, China

Correspondence: Letian Cao, School of Public Administration, Shandong Normal University, Jinan, China.

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Abstract

The fifth Plenary Session of the 19th CPC Central Committee further emphasized the related concepts of digital governance and smart government. The rapid development of the big data era in recent years is an important opportunity for theoretical development in the field of public governance. Machine learning as one of the key technologies in the era of big data, integrates data into information that can be better applied to the daily operations of subjects, especially during epidemic outbreaks, using new data technology to prevent and track the epidemic prevention and control situation, greatly improving the efficiency of public management and public crisis handling in China. This paper will focus on analyzing the new developments of public governance theory in the specific field of public management and the new values of public management and explore the new developments of public management.

Keywords: machine learning, data, public administration, public services, government

1. The Theoretical Vein of New Technology and Public Management

Since the 1990s, After making new technological breakthroughs in deep learning technology, Various fields based on machine learning are also beginning to make rapid progress, in recent years, With data connectivity in the data age, The gradual improvement of data management, Applications of machine learning are becoming more common, In our daily lives, Like the development of autonomous driving technology by major Internet companies, The literature screening tools we use, and even voting elections in our political life, can leverage the effects of machine learning, Helping politicians to participate in electoral activities, Using the public psychology, Better use for people, But the origin of the new technology and public management, Not so easy to state yet, Application potential but more professional analysis is needed.

first, Restricted by the general background of our country in the middle of the last century, China has not been able to participate in the new technology field represented by informatization and biotechnology in the last century, There must be no place in the field of artificial intelligence development, Therefore, from the context of new technology public management in western European and American countries, Summarize the three development stages of technology governance, First, the e-government. Then came the digital government, Today is the electronic governance stage, This is put forward by the Chinese scholar Huang Jianwei, He believes this division by specific technological advances, It can also be regarded as the representative technology of the transformation of modern public administration, Simple and clear. But in accordance with the explicit technology affects people and the real realization degree of public services to distinguish, more should be “modified” and “substantial” to illustrate the interaction between citizens and the government, the first stage is unilaterally received information and services, the second stage is the citizens really participate in public life, deep interaction with the government. In these stages, great progress has been made in public administration, but at the same time, it faces different problems at each stage.

In the comparison of these three stages, we can think that: e-government and we pursue the same traditional public administration as economic people, with the pursuit of “3E”, and we are more concerned about efficiency,

efficiency and cost. Digital government is more corresponding to the stage of new public management, pursuing transparent and efficient public policies, while electronic governance corresponds to the good governance stage of public governance. With governance theory, two-way interaction and public participation of multiple subjects are emphasized.

In the first two stages of an excessively biased unilateral output of public information, Technology and efficiency occupy the value pursuit of government operations, The wide application of ICT, The efficiency of public administration is greatly improved, But this does not meet the better and more diverse public needs, With technological progress, public awareness, and the solution of social problems, The government itself has also begun to transform its service-oriented functions, so, The value of public administration began to receive renewed attention in the field of public administration, So, in recent years, Learn to mainly combine the pursuit of technology and publicity, Public objectives are the theme, Technology serves as a means of realizing the public value.

2. The Advent of the Era of Wisdom and Governance

The inner core of economic development since the 20th century lies in the change in the production mode of communication technology. As a major field of artificial intelligence, machine learning has begun to be explored and practiced in the public domain. As an important force of artificial intelligence, machine learning has seen its huge energy in industry, business and even academia. We can very quickly screen out our favorite items, screen out our information and documents, and constantly improve our own learning model, and even deal with new data. The involvement and integration of various Internet giant companies in various major industries, such as the financial industry, the shopping platform and even the new manufacturing industry, so that there are no industry giants that can fight alone in this era, and every industry may be closely related to data processing. In this case, public management should learn from these industries that have achieved phased victories, pay better pay attention to the needs of the public, and better provide more convenient and diversified public services for what the public wants.

In the prevention and control of the new pneumonia epidemic, We grasp the advantages of AI, Excellent for using the advantages of artificial intelligence, In the most daily way, Use the health code to create a good and safe living environment for the people, Greatly increased the public confidence, In exchange for the health care of the public's daily life, Big data tracks and screens the data of users holding QR codes, Release of epidemic maps in a timely manner, Trtrajectory analysis of the confirmed patients, Release of thermal dynamic display maps for areas with a large flow of people, Timely release on the major platforms, This can select some potential users who need prevention and control, Ensure the public's right to know about the epidemic. In the public security system of public security, machine learning can play a great use. Through deep learning, epidemic prevention application and daily tracking, positioning and supervision of public security, it can more effectively protect public security, supervise market transactions and online public opinions, and better ensure social stability. But at the same time, we should also note that public management can not easily collect all kinds of public preferences like Internet companies. The public may click on all kinds of entertainment software more frequently to search for their own preferences, but few people can release their own information according to their own political needs. In this case, the government can only rely more on the initiative to make adjustments and actively provide corresponding services to the public. But at the same time, in this era, we still can't avoid data-related problems.

First of all, the complexity of data collection, the first is due to the government management structure and barriers between departments, the characteristics of government department segmentation, will inevitably lead to many data collection, waste of a lot of manpower, and local governments subject to their own interests and local protection, will inevitably set various obstacles in the data sharing, hinder the free circulation of data. Second, in view of the data collection and processing, the elderly group than younger groups of data collection and service is more complex and difficult, many old people in the government's new government treatment cannot detect its advantages, but become obstacles, the elderly in Shandong province in the process of social insurance, and cannot and data processing matching traditional way, make the old man with the day of the newspaper certificate still enjoy social security qualification. and the government affairs hall still needs the elderly to take the initiative to operate, It did not serve as the government in providing public services, especially for the elderly, a vulnerable group who needs more social attention, For the middle-aged and elderly people who do not master the Internet technology but need to handle various social affairs more, Further intensification of the aging society in the future, The number of elderly people with mobility difficulties continues to increase, If government public services are not available in place, That is a typical example of government failure, Not only does it not reflect the transformation of our government as a service-oriented government, And it does not conform to the theoretical requirements of the contemporary new public governance, It does not conform to the public value pursuit of public governance. Third, data collection involves personal privacy issues, there are many disputes, as

mentioned in the public domain cannot directly collect detailed personal information, Internet companies collect user information advantage than public domain, and can collect more detailed, more personalized personal information, so public domain data collection is generally through purchase, but in this process, also cannot avoid personal information may be purchased and leaked, and due to the particularity of data, data ownership has been a controversial topic, did not get the corresponding attention.

First of all, we need to make clear our purpose of using artificial intelligence to handle modern public affairs, In order to better implement the transformation of government functions and service type, All intelligent processing should be done to better simplify the process of citizens, To better serve the people, such as the provincial and municipal governments launched the "run at most once" government services, Although all provinces and cities have participated in the construction of such government activities, But there are still big differences between citizens and data sharing and machine learning, The most prominent province is Zhejiang province's "Run at most once", With the help of the high and new technology of China's most outstanding Internet companies and the developed data management technology, Successfully leading in the forefront of the country, Truly realized the title of "smart Zhejiang", But other provinces' "intelligent" process is not satisfactory, The reason is still subject to the barriers to data sharing, Data equipment purchased in rural areas in the North, Basically abandoned, It doesn't really make its work, But rural areas are the most central areas where public services should be achieved, Because information access in rural areas is not as convenient as in cities, There is no complex and extensive information network in cities, Rural areas cannot have easy and easy access to urban public services, at the same time, The phenomenon of "hollowing out" is now widespread in rural areas, The population is gradually declining, And the proportion of the elderly most in need of public services has increased, Compared to the complexity and diversification of urban population information, Data from the rural areas are easy to collect, One of the daily affairs of the township government, To collect data from rural areas. So the government should be based on the advantages of rural areas to put can really serve the countryside, meet the people's growing demand of diversified wisdom service, the township government staff should earnestly develop the modernization of social public services, improve the efficiency of rural equipment, enrich the cultural needs of the villagers' from simple easy to learn culture provides function, let the villagers have leisure opportunities, to make the most in need to get the most real service.

3. New Thinking

First of all, we need to make clear our purpose of using artificial intelligence to handle modern public affairs, In order to better implement the transformation of government functions and service type, All intelligent processing should be done to better simplify the process of citizens, To better serve the people, such as the provincial and municipal governments launched the "run at most once" government services, Although all provinces and cities have participated in the construction of such government activities, But there are still big differences between citizens and data sharing and machine learning, The most prominent province is Zhejiang province's "Run at most once", With the help of the high and new technology of China's most outstanding Internet companies and the developed data management technology, Successfully leading in the forefront of the country, Truly realized the title of "smart Zhejiang", But other provinces' "intelligent" process is not satisfactory, The reason is still subject to the barriers to data sharing, Data equipment purchased in rural areas in the North, Basically abandoned, It doesn't really make its work, But rural areas are the most central areas where public services should be achieved, Because information access in rural areas is not as convenient as in cities, There is no complex and extensive information network in cities, Rural areas cannot have easy and easy access to urban public services, at the same time, The phenomenon of "hollowing out" is now widespread in rural areas, The population is gradually declining, And the proportion of the elderly most in need of public services has increased, Compared to the complexity and diversification of urban population information, Data from the rural areas are easy to collect, One of the daily affairs of the township government, To collect data from rural areas. So the government should be based on the advantages of rural areas to put can really serve the countryside, meet the people's growing demand for diversified wisdom service, the township government staff should earnestly develop the modernization of social public services, improve the efficiency of rural equipment, enrich the cultural needs of the villagers' from simple easy to learn culture provides function, let the villagers have leisure opportunities, to make the most in need to get the most real service.

Second, machine learning is playing an increasing role in improving the quality of public services and improving the judgment efficiency of public management, but we should fully realize the risks brought by artificial intelligence technology to public management subjects. In the transformation process of public management using data processing, there is a rush of public value and personal safety, and the risk of data rights is not clear. We should first see that the source of data machine learning problem, is leakage in data collection, specific can be called more data use right and ownership problem, data used in the public management, in the broad social life, there is a huge leakage risk, telecom fraud is one of the harmful phenomena, in view of this problem, we need in the future corresponding legal measures and legal license, clear data use and permission, confirm the

security of public information.

Data processing and machine learning algorithms have played a huge role in the prevention and treatment of COVID-19. People at all levels of Chinese society have accepted the treatment of smart government, which to some extent improves the recognition of middle-aged and elderly people of new technologies in public management and public services. In order to reduce the risk of contact, government affairs without leaving home during the epidemic period have been unanimously recognized by the general public. But while using intelligent technology to promote the progress of public management, we should also be fully prepared for the problems. Data processing only in the field of public management and full cooperation, close communication to play the role of machine learning for our daily life, our country needs to combine their own national conditions, further implement the “industry 4.0” and national information strategy, in complex data collection and processing clarity, can really use machine learning ability, can not waste our efforts on data collection and technology research and development.

Finally, can the new digital governance technology represented by machine learning become a new paradigm of public governance theory? Digital governance is to improve the efficiency of public management, improve the level of public service of technical means and tools, or can exist as a new subject paradigm, it is worth our thinking, if machine learning is a new paradigm, with the future technology, more technical means whether to classify as a new paradigm? If it is only used as a technical means, with the further increase of digital governance technology in public management, it has become an essential or even normalized theory of government governance in modern society. The relationship between artificial intelligence and public management is more and more close, and machine learning as the role of artificial intelligence is more and more prominent, but we as a public managers to fully realize the machine learning data processing process risks and difficulties, we develop information strategy and wisdom in the process of government, we should also be processing data security measures.

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