Research on the Precise Supply and Optimization Mechanism of Social Policy Driven by Digital Technology

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Abstract: This article is devoted to studying the promotion of digital technology to the optimization and progress of social policies. By carefully analyzing the core elements of digital technology and their broad application prospects in the field of social policies, the theoretical support and practical path of digital technology to promote the accurate supply of social policies are constructed. In the research method, the core concept of digital technology is defined at the beginning, and the theoretical implication of accurate supply of social policy is discussed. Subsequently, the specific effects of digital technology in policy planning, resource allocation, implementation efficiency improvement and other dimensions are expounded, and the overall framework and design ideas of digital technology leading social policy optimization mechanism are established. It is found that the application of digital technology can significantly improve the accuracy and implementation efficiency of social policies, broaden the scope of policy benefits, reduce implementation costs, and enhance public satisfaction with policies. Constructing the optimization system of social policy driven by digital technology will further promote the scientific, refined and intelligent development of social policy.

1. Introduction

In today's era, digital technology is developing at an unprecedented speed [1]. Its influence has penetrated into every corner of society. From the wide application of big data to the rapid development of artificial intelligence, from the popularity of cloud computing to the rise of blockchain, digital technology has changed our way of life and profoundly affected the operation mode of social economy and the way of government governance [2]. In the fields of medical care, education, transportation and urban management, digital technology has injected new vitality into social development by improving efficiency, optimizing resource allocation and innovating service mode [3].

However, there are still many challenges in the supply and implementation of traditional social policies [4]. Information asymmetry is a prominent problem, and it is often difficult for policy makers to accurately grasp the real needs and preferences of target groups, which leads to the lack of pertinence and effectiveness in policy design [5]. At the same time, the uneven distribution of resources is also an important factor restricting the effect of social policies. Limited resources are often difficult to accurately put into the places and people who need them most [6]. These problems have affected the implementation effect of social policies, and also damaged the credibility of the government and social fairness and justice.

The emergence of digital technology provides new possibilities and advantages for the precise supply of social policies. Through big data analysis and mining, policy makers can more accurately understand the needs and preferences of target groups and formulate more realistic policy programs [7]. The application of artificial intelligence and intelligent algorithms can help the government optimize the allocation of resources and improve the efficiency and accuracy of policy implementation. Digital technology can also enhance the transparency and traceability of policies and improve the credibility of the government and the trust of society [8]. How to use digital

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technology to drive the precise supply and optimization mechanism of social policies has become an urgent problem to be studied. The purpose of this study is to explore the application prospect and potential of digital technology in the field of social policy, analyze its role and mechanism in policy formulation, implementation and evaluation, and provide more scientific, accurate and effective policy tools and methods for the government. Through in-depth study of the integration path and innovation mode of digital technology and social policy, we are expected to provide strong support for building a fairer, more just and efficient social governance system.

2. Digital technology and the theoretical basis of precise supply of social policies

With its unique attraction and infinite possibilities, the digital wave is gradually turning into a key driving force to promote social development. In this wave, big data, artificial intelligence, cloud computing and other technologies constitute its core architecture [9]. Big data provides solid information support for policy making with its huge, fast and diverse data characteristics; Artificial intelligence pushes policy analysis and decision-making to intelligence by imitating and expanding human wisdom; Cloud computing, with its excellent data processing and storage functions, provides an efficient guarantee for policy implementation and evaluation. These technologies have broad application prospects in the field of social policy. They help the government to grasp the social pulse more accurately, formulate policies more reasonably and implement and evaluate the effectiveness of policies more effectively.

The theoretical connotation of precise supply of social policy focuses on the accuracy of policy in goal setting, resource allocation and effectiveness evaluation [10]. Accurate target positioning ensures that policies can accurately identify and meet the needs of target groups. Accurate allocation of resources requires reasonable allocation of policy resources according to actual needs to prevent waste of resources. Accurate effect evaluation is an objective and accurate measure of policy effectiveness and provides a basis for policy adjustment and improvement. These precise requirements highlight the social policy's pursuit of scientificity and effectiveness.

There is a close relationship between digital technology and the precise supply of social policies. These technologies help policy makers to grasp social trends and people's needs more accurately through powerful data processing and analysis capabilities, and achieve accurate positioning of policy objectives [11]. At the same time, they optimize the allocation of resources, improve the efficiency and accuracy of policy implementation, and ensure the accurate delivery of resources. Digital technology also enhances the transparency and traceability of policies and provides solid support for policy effect evaluation. Based on the above, digital technology plays a key role in promoting scientific, refined and intelligent social policies. However, the application of digital technology in the field of social policy has also encountered challenges and constraints, as shown in Figure 1.

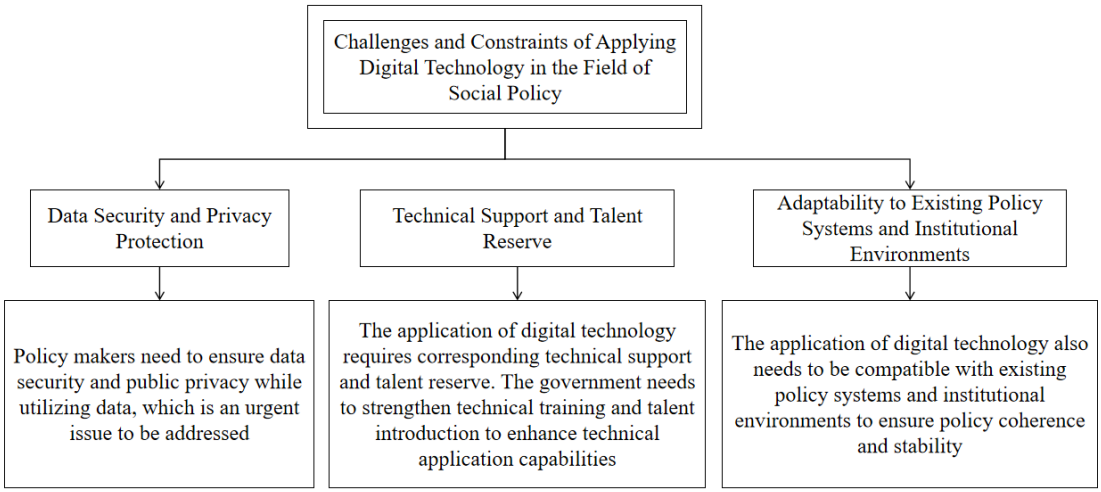

Figure 1 Challenges and Constraints of Applying Digital Technology in the Field of Social Policy

Figure 1 summarizes the main challenges and constraints faced by digital technology in the field of social policy. It provides a reference for the government and relevant institutions to formulate coping strategies.

3. Practice of digital technology driving precise supply of social policies

Driven by digital technology, the formulation and implementation of social policies are undergoing unprecedented changes. Digital technology, with its powerful data processing and analysis capabilities, provides policy makers with more accurate tools to identify target groups. Through big data analysis, policy makers can dig deep into the behavioral characteristics, demand preferences and potential problems of social groups, so as to define the target audience of policies more accurately. This data-based identification method improves the accuracy of policy positioning, makes the policy closer to the actual needs of the people, and enhances the effectiveness of the policy. At the same time, digital technology is effectively improving the efficiency of resource allocation. Traditional resource allocation methods are usually based on experience and subjective speculation, which leads to inaccurate resource allocation. Now, through the real-time monitoring and data analysis of digital technology, we can continuously track the use of resources and changes in demand, providing scientific decision support for resource allocation. The data-driven feature of this method promotes the utilization rate of resources and reduces the ineffective investment and redundancy of resources. It ensures that limited resources can maximize their social impact.

Using digital platform and information system, policy implementers can obtain and implement policy instructions more quickly, reducing the complexity and delay of information transmission. Digital technology also supports the automatic implementation and intelligent supervision of policies, reduces the dependence on manual intervention and the interference of subjective factors, and improves the fairness and transparency of policy implementation. When evaluating the effectiveness of digital technology in the implementation of social policies, its positive impact is obvious. The scope of benefits of the policy has increased significantly, allowing more people to enjoy the benefits brought by the policy. At the same time, the cost of policy implementation has also dropped significantly, and the use of digital technology has reduced the input of human resources, materials and finance, and improved the economic benefits of policy implementation. The public's satisfaction with the policy has also increased, and the awareness and acceptance of the policy have increased, which has enhanced the credibility of the government and social unity.

Summarizing the experience and challenges of digital technology in promoting the accurate supply of social policies, we deeply understand its value and potential. At the same time, we can also find the problems and risks in the application process. For example, the importance of data security and privacy protection, the compatibility of digital technology with the current policy system and institutional environment, and the necessity for policy makers and executors to improve digital literacy and technology application ability.

4. Construction strategy of digital technology driven social policy optimization mechanism

Based on the previous analysis, this article recognizes the great potential of digital technology in promoting the precise supply of social policies. In order to give full play to this potential, we need to build a social policy optimization mechanism driven by digital technology. The overall framework of this mechanism should focus on four key links: data collection, analysis, application and feedback, and the design principles should emphasize scientificity, efficiency, transparency and sustainability.

In the process of constructing this efficient mechanism, the data sharing platform plays a vital role. By building a platform across different departments and fields, we can eliminate information isolation and realize the circulation and sharing of data. Such a platform provides policy makers with more comprehensive and accurate data support, helping them to gain a more effective insight into social conditions and people's needs. Intelligent decision support system has also become an indispensable part. Using artificial intelligence and big data technology, the system can deeply mine

and analyze a large amount of data, bring intelligent suggestions and solutions for policy making, and significantly improve the scientific and accuracy of policy making. In addition, the real-time monitoring system of policy effect is also an important part of this mechanism. By tracking the process and effect of policy implementation in real time, it enables us to identify and correct the deviations and defects in the implementation in time and ensure the smooth realization of policy objectives.

When building a social policy optimization mechanism with digital technology as the core, we must also pay attention to three key issues: legitimacy, security and sustainability. Legitimacy is the foundation of digital technology application. It requires us to ensure that the process of data collection, use and analysis follows laws and regulations and respects personal privacy and right to know. Security is the guarantee of application. We need to strengthen data security protection and encryption measures to prevent data leakage and unauthorized use. Sustainability is a long-term consideration. We should focus on the long-term planning and development of digital technology to ensure its synchronous development with social policy changes. In order to promote the wide application and in-depth development of digital technology in the field of social policy, the suggestions put forward in this article are shown in Figure 2:

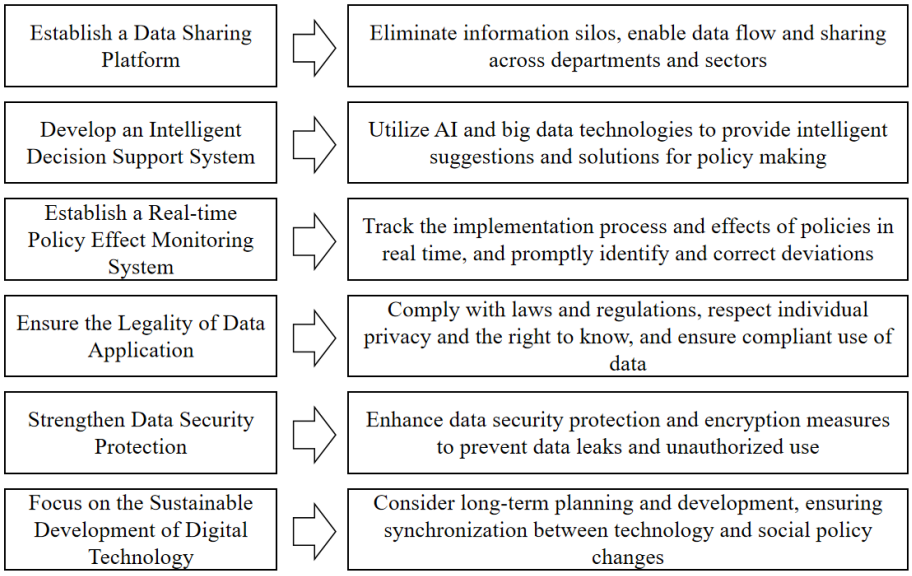

Figure 2 Suggestions and Implementation Key Points for Promoting Social Policy Optimization through Digital Technology

The content in the picture covers many aspects of social policy optimization promoted by digital technology. From data sharing, intelligent decision support, policy effect monitoring to legitimacy, security and sustainable development, it provides comprehensive suggestions and implementation points for the application of digital technology in the field of social policy.

5. Conclusions

In the tide of the digital age, this article deeply discusses how digital technology drives the optimization and development of social policies. Through the above analysis, we can find that digital technology provides a strong support for the precise supply of social policies with its unique data processing, analysis and application capabilities. Digital technology helps policy makers identify target groups more accurately, optimize resource allocation, and significantly improve the efficiency and effectiveness of policy implementation. This series of changes has made social policies closer to the actual needs of the people and enhanced the scientificity and effectiveness of policies. The application of digital technology is not achieved overnight, but requires constant exploration and practice. In this process, we need to pay attention to the legitimacy, security and sustainability of data, and ensure that digital technology can develop healthily on a compliant, safe and sustainable track.

In the future, with the continuous progress of technology and the continuous expansion of application scenarios, digital technology will bring more possibilities and innovations to social policies. In order to give full play to the potential of digital technology, we need to strengthen top-level design, improve laws and regulations, train professionals and promote international cooperation and exchanges. Only in this way can we ensure the deep integration of digital technology and social policies and build a more fair, just and efficient social governance system. Driven by digital technology, social policies will better serve the people and promote social harmony and progress.

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