

Research On Informatization Application In New Urbanization Construction Under The Background Of Big Data

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Abstract: Under the background of big data, there is a relationship between the development and construction of informatization and new urbanization. As an important direction and road of modernization development, urbanization construction has become an important basic node for solving urban-rural integration. The purpose of this article is to analyze and analyze the application of informatization in the construction of new urbanization in the context of contemporary big data. This article adopts the literature analysis method and comparative analysis method, and conducts reasonable classification, sorting and analysis by referring to the relevant books, reports, papers and other materials of "New Urban Informatization Applied Research". Use comparative analysis to analyze and analyze the difference and connection between "traditional urbanization" and "new urbanization", and collect similarities and differences between urban households and rural households in life habits, ideology, etc. Provide information for new urban informatization application analysis. Experimental research results show that in the stage of new urbanization construction, the application of informatization has become an important foundation for the development of informatization, and the scientific and rational use and analysis of information has become the key guarantee for the comprehensive development of new urbanization.

1. Introduction

Big data is the cutting-edge technology in the field of data analysis. Data has become an important factor in every industry and business field today. This also indicates that big data is triggering a revolution in thinking [1-2]. The traditional urbanization construction is mainly committed to the transfer of rural areas to cities, and more is the construction of fixed assets investment based on road and bridge repair [3]. The way of thinking of big data is to shift from the simple linear causality of the event itself to the discovery of rich relationships. Under this kind of thinking, the data itself reflects not only the current state, but also an indirect reflection of the past and future [4].

As the leading medium that leads the development of cities, information will directly affect the judgment and choice of various participants, and will trigger the vitality and characteristics of urbanization construction [5]. Especially in the new situation, a new generation of information technology is developing rapidly, such as the Internet of Things, mobile Internet, cloud computing, and big data information systems, etc., and follow the overall requirements to take the intelligent road to green and low-carbon urbanization [6]. We believe that the main direction of development is to grasp the background of the interaction between urbanization and informatization. The "catalyst" that stimulates the internal and external demand for urbanization, leads the "indicator" of the characteristic road of urbanization, and constantly exerts the "multiplier" role of urban economic and social development [7].

In order to speed up the process of urbanization and give full play to the important role of informatization in accelerating the development of urban and rural integration, there is an urgent need to provide new impetus and means for informatization, gradually narrow the urban-rural digital divide and improve the level [8]. Coordinate urban and rural information application services, speed up the process of rural urbanization through informatization, achieve equalization of urban and rural information services, and promote the coordinated development of rural economy and

society and overall progress. The integration of urbanization and informatization can greatly promote the development of urban informatization, and open a broad market space for the construction of digital towns, livable cities and smart towns. With the continuous development of China's urbanization process, it has caused traffic congestion [9-10].

2. Method

2.1 Use big data to plan a new type of urbanization

At present, the urban planning theory and method based on big data simplifies the process of traditional urban planning, effectively avoids the risk factors in traditional urban planning, and provides data support for the rationality and compliance of urban planning evaluation. In accelerating the process of urban planning under big data, it is necessary to clarify the importance of historical data as the basic data for urban planning identification, and be able to use data modeling to assess the risks brought by different urban planning, so that urban construction management departments can take The corresponding risk control strategy promotes the overall upward development of new towns, while providing residents with a safer, more comfortable and efficient living, working and learning environment, it can also promote the rapid development of the urban economy.

2.2 Model setting predicts future urbanization rate

Studies have shown that the population shows the development process of "S" growth under the restriction of nature or nature and technology. According to the "S" curve theory, the development of urbanization level is consistent with the growth process of Logistic growth. Therefore, the relationship between urbanization level and time variable can be expressed as:

$$U_t = \frac{c}{1+e^{a-bt}} \quad (1)$$

Among them, U_t represents the urbanization level at time t , t represents the time variable, c represents the maximum saturation value of urbanization, a represents the integration constant, and b represents the growth parameter. By deforming the above equation, we can get:

$$U_t = \frac{c}{1+cke^{\ln dt}} \quad (2)$$

Among them, k and d represent the regression constant and regression coefficient of the model, respectively.

2.3 Improve, value and promptly take the initiative of our new urbanization construction

Coordination mechanism for urban construction organizations. It is necessary to formulate urban development policies, encourage multiple parties to participate in the construction, establish a standardized and orderly urban construction management mechanism, and gradually improve the policy environment for urbanization construction. Fourth, pay attention to training and grasp the initiative of urbanization. "Promoting the development of urbanization with informatization" is a wide-ranging and highly complex theme that is related to the overall development. How to organize forces and research problems through diversified and pragmatic training activities to improve the level of understanding of various information. Urban subjects have become an important task to master the initiative of urbanization.

3. Experiment

3.1 Experimental survey objects

In order to be able to analyze the construction of new urbanization in the context of big data more deeply, this paper selects 30 cities and towns on the eastern coast of my country as research objects. Fifteen of them are traditional towns and the other fifteen are towns that have been built using information technology applications. After a period of investigation, we selected 100 people

of different ages to conduct a questionnaire survey through sample surveys and questionnaires, and further analyzed the situation of new urbanization construction in the context of big data.

3.2 Experimental design

This article uses the method of systematic research. This article regards the research object as a system composed of multiple indicators, and studies and analyzes the problem from the aspects of system structure and function, system control method and optimization method. The new urbanization level in the eastern coastal area is a multi-index system, including five factors: population, economy, social life, infrastructure and ecological environment. The combination of comparative analysis and inductive analysis. This paper analyzes the regional differences in the urbanization level of the eastern coastal areas, and then compares it with the new urbanization levels of other provinces, and also combines with the inductive analysis method to find the rules of the regional development of new urbanization levels.

4. Results

4.1 Application rate of urban household informatization

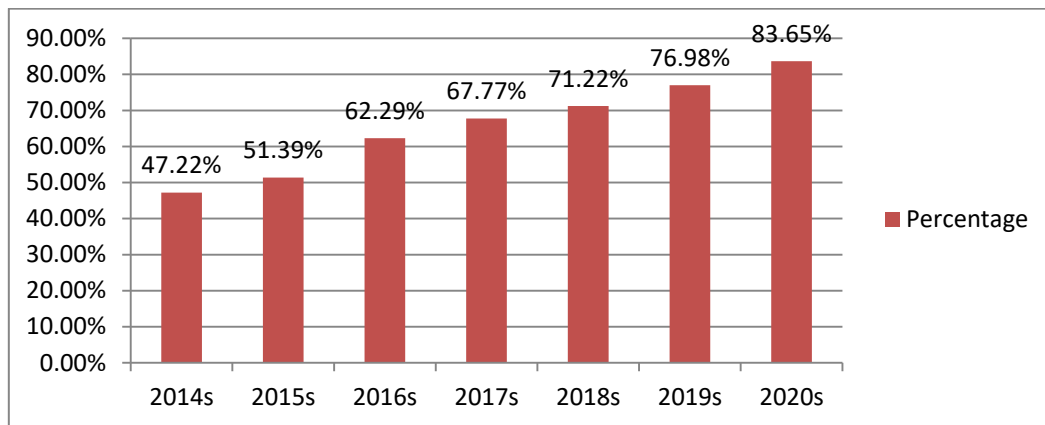


Figure 1. Trends Of Household Informatization In Eastern Coastal Towns From 2014 To 2020

It can be seen from Figure 1 that the quality of new urbanization in the east coast is not high. Although the trend of rural population transfer is obvious in the process of family urbanization, affected by various reasons, urbanization has developed at a high speed but without high quality. Taking the household registration system as an example, many migrant workers are only geographically transformed and do not enjoy or fully enjoy the public services such as education, health care, social security, and housing security that urban residents should have, so-called "semi-urbanization". It is not true comprehensive scientific and technological progress, economic progress, and civilized progress that have led to a fundamental change in the identity of farmers. The quality of urban household informatization is not high.

4.2 Distribution of urban distribution scale system

Table 1. Spatial distribution of the scale system of eastern coastal cities and towns

City class	Urban size (ten thousand people)	Quantity	Proportion of non-agricultural population.	Percentage of permanent population
Megacity	1 million or more	3	37.76%	12.07%
Big city	50-100	1	4.59%	1.16%
Medium-sized cities	20-50	16	29.37%	7.96%
small city	20 or less	46	28.06%	7.655

The population data of the cities along the eastern coast of China from 2015 to 2020 are shown in Table 1. From the main characteristics of the distribution data in Table 1, the population growth is relatively fast, and it is more concentrated in economically developed regions. It can be seen from the theory of dual economic structure that modern industrial system industries have the ability to absorb agricultural surplus labor due to technological advancement and capital expansion, and the surplus labor surplus from agricultural production will gradually increase. The composition of urban and rural population is one of the important aspects of population spatial distribution. The change in the spatial pattern of population distribution is the result of a combination of economic, natural, social, cultural, and historical factors. The final formation and development of urbanization are still the effects of population agglomeration.

4.3 Analysis of the relationship between urbanization and informatization

There is a mutual relationship between new urbanization and informatization. Urbanization is the main carrier and support of informatization. Informatization is an important means of modernization and provides a core force for urbanization. It is mainly reflected in two aspects: on the one hand, new urbanization is the spatial carrier of information development. The process of urbanization is usually accompanied by the gathering of development factors such as industry, capital, technology, market and talents, thereby promoting the innovation of information technology and improving the level of informatization, thus becoming the carrier and support of the development of informatization. On the other hand, informatization can drive the development of new urbanization, help change the urban industrial structure, and change the way of economic development. Today's regional imbalances in China mainly manifest in the east and west, cities and rural areas. On the basis of development, narrowing the gap between regions is a necessary and sufficient condition for the full development of society, and it can avoid hidden risks in developed regions. Secondly, according to public service theory, urban and rural public infrastructure and public utilities are the necessities for the government to provide to citizens. The improvement of rural infrastructure and the development of public service undertakings are conducive to embodying social equity and enhancing the authority of the government.

4.4 Raise the starting point and make a good plan for the application of new urbanization informatization

New urbanization construction must be rationally arranged and differentiated. Around the construction of the central urban area, the characteristics of various towns and towns should be highlighted, and the construction of a new urban-rural relationship that feeds the countryside, supports the countryside, and supports the coordinated development of urban and rural areas. It is also a harmonious blend of modern civilization and traditional concepts. New urban and rural forms. Maintaining the seriousness of the planning The new urbanization construction plan is not only a combination of urban planning and industrial planning, social security and other aspects. New urbanization planning and construction is a long-term and arduous task. It should maintain the seriousness of planning, set unified standards, formulate policies, plan preparations, frame structure, and allocate resources instead of reforming and building indiscriminately. Especially pay attention to the comprehensive consideration of the urban construction in the overall planning, analyze its current carrying capacity and future development trend, scientifically plan the development area, delimit the prohibited construction area, restricted construction area, suitable construction area, and clarify the urban green space, surface water body, nature The protection and control scope of landscapes, historical and cultural blocks and buildings guide their orderly spatial expansion.

The concept of integrated urban-rural development is a two-way interaction model between urban and rural areas, which places the countryside and the city in the same community, uses the results of urban development to guide rural development, and alleviates internal contradictions in the city according to rural agricultural development and improves the level of urbanization to achieve The overall development and progress of the region. Cities and villages are large social gathering places and are inseparable organic wholes. Therefore, in practical work such as construction planning, work deployment, and resource allocation, we must establish a global

concept, integrate villages and cities, and explore rural areas. Development model, improve the level of agriculturalization and urbanization, and establish a new type of equal and harmonious urban-rural relationship. At present, the construction of socialism with Chinese characteristics has entered a new era, and the main social contradictions have been transformed into contradictions between the people's needs for a better life and unbalanced and inadequate development. Among them, inadequate rural development is the biggest inadequacy, and urban and rural imbalances are the biggest imbalance. Based on such national conditions, the 19th National Congress of the Communist Party of China proposed a major strategic decision to implement rural revitalization. According to the theory of urbanization development stage, China is in the stage of rapid urbanization development of 30% to 70%. The task of urbanization has not been completed. In the future, it will still be in the stage of rapid urbanization. How to correctly understand and coordinate the promotion of new urbanization and Rural revitalization strategy is particularly important.

4.5 Countermeasures for new urban informatization construction sites

Urban informatization involves all aspects of society. In order to mobilize the enthusiasm of all parties, especially attach importance to the role of telecommunications operations and other enterprises, and carry out cooperation between the government and enterprises, agricultural enterprises, we need to work together to promote urban informatization. After investigation, analysis and research, the countermeasures to promote the construction of urban informatization in my country under the background of "triple network integration" are proposed. Strengthen the top-level design and strengthen organizational security. "Top-level design" must stand at the national level, taking into account the overall situation and the interests of all parties. The top-level design is to clarify the guiding ideology, principles and main content and the goals achieved, based on the basic situation of China's urbanization development and the basic laws of information development, from the aspects of capital arrangement, operation and management methods, organizational guarantee and supervision, etc. Make the corresponding regulations.

In addition, the national level should also strictly manage urban informatization construction projects and their qualifications in terms of funding sources, construction and operation management methods, and informatization evaluation indicators to prevent the blind construction of certain grassroots units. It can also be controlled by setting access conditions. It is necessary to deeply grasp the objective laws of urban informatization development under the background of "triple network integration", enrich the workforce, and form a unity.

4.6 Application of urban informatization

First, consumer information. Consumption informatization innovates and promotes the consumption pattern of urban residents to meet the urgent needs of urban residents in information consumption. Through the efficient integration of radio, television, network and telecommunications, the construction of important basic conditions for consumer informatization, the comprehensive and efficient use of various information resources, urban residents can obtain a large amount of information consumer demand. For example, online shopping, mobile APP, etc. are covered in the scope of consumer information.

Secondly, logistics informatization. It usually covers the construction of logistics network platforms, the development of transportation and logistics infrastructure informatization, the construction of logistics outlets and line control, all of which require the application of information technology. In addition, for the development of logistics service informatization, it mainly covers order query, cost query and real-time location query of goods, which can avoid various unnecessary problems caused by logistics distribution. Mobile Internet technology can effectively promote the development and construction of logistics service informatization. By using the advanced scientific model of "Internet + logistics", it is possible to adopt scientific and efficient management of logistics informatization, and the development and construction of logistics distribution and logistics traceability systems are more efficient and convenient, which fully meets the standard requirements of urbanization development and promotes new urbanization construction .

Finally, promote enterprise informatization. Covering the establishment of an enterprise e-commerce platform website, optimizing internal information management systems, through the use of advanced information technology, building enterprise information resource databases and information management system comprehensive receipts, strengthening information management, strengthening exchanges and cooperation between enterprises and financial institutions, and promoting Effective supervision of the company's capital status, with the help of information and data analysis, makes the company make decisions based on evidence.

Conclusion

The application of informatization promotes the construction of new urbanization. New urbanization can provide space carriers for informatization applications and are inseparable from each other. As a new type of urbanization, comprehensive urbanization development, the application of informatization is bound to break through the situation of binary opposition, so that the urban and rural areas can effectively exchange and share information and equality, so that the development of urbanization can be turned into a systematic project. Overall, the application of informatization will promote the stable and sustainable development of new urbanization. In the context of big data, in order to promote the informatization construction of new towns, information platforms and big data technologies should be used to manage diversified city data, which can greatly improve the management level of new towns and the utilization rate of files. Resources are believed to Efforts to use multiple means to improve the level of urban informatization construction is an inevitable result, and provides a basis for continuously advancing the urbanization process.

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