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CONSTRUCTION AND DESIGN OF SMART CITIES ON THE EXAMPLE OF CHINA

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ABSTRACT
This article focuses on building and designing smart cities due to the abundance of traffic and congestion in local areas. Currently, urban planning is facing environmental, economic, social and other aspects of the problem, the main reason for which is that the city has not become a self-regulating and sustainable development system. Therefore, the future of urban development must follow a combination of several sustainable development paths. This is where the smart city's concept was born. Governments at home and abroad are actively involved in building smartcities, but there is still a lack of systematic thinking about the vision, architecture, and model of smart cities, what hinders the construction of smart cities in China, so it is urgent to conduct in-depth research in accordance with the national conditions of China.

Keywords: Smart city; a vision; strategic objectives, modern urban, "smart city149", architecture of the Digital City

INTRODUCTION

Modern urban development faces a whole near problems such as Environment, Food Safety, Energy, Economics, Transportation and Public Security. Particular after joining the XXI century the deterioration of the state of the surrounding medium, food shortage, lack of energy, financial tsunami, Terrorism and other problems arose in an infinite stream, and these problems continue to spread mainly due to the fact that Cities did not develop in self-regulating and sustainable Systems. Therefore, the future urban development should go along the way Intellect, inclusiveness and sustainable development. Results and development The concept of "smart city 149" is largely due to the behavior business, not the government itself. The system of the smart city should pay more attention to the foundation for the construction of a smart city, to ensure its capabilities of sustainable development.

Smart City Indicator System was carried out with the involvement of international experts. The system consists of four high-quality and 22 quantitative categories, which are further divided into 51 key factor and 129 key components, 275 targets and 723 measures to monitor the implementation of implementing decisions. The following are examples of economy indicators:

-Number of scientists and researchers for 10,000 people;
-Assessment of the development of the city for compliance with the regional economy Ecology and Environment;
-Air quality (SO2, NOX) relative to maximum permissible concentrations on national requirements ;
-Level of surface water quality based on national requirements ;
-Score of noise in different functional areas ;
-Analysis of impact on natural reservoirs and wetlands;
-Analysis of vegetation used for improvement on its locality;
-Evaluation of the impact on the local natural environment Resources ;
-Evaluation of water consumption on domestic and technical needs;
-Evaluation of greenhouse gas emissions (in CO2 tons) relative to the gross domestic product (in terms of million dollars;
-Evaluation of objects within the city certified by green standards ;
-Square of public green zones in terms of 1 per capita ;
-Evaluation of day water consumption per capita ;

-Evaluation of day formation of waste for 1 per capita;
-Availability of public spaces (cultural objects, sports infrastructure available to each) within 500 m of the walking distance;
-Arrangement of a barrier-free environment;
-The level of cleaning of harmful and dangerous solid waste;
-The level of coverage of the city by municipal services;
-The proportion of energy obtained from renewable energy sources;
-The proportion of clean water used, received not from the city network Society;
-Share of the used green transport;
-Share of municipal housing;
-Definition of job balances (relative to people who come to the city;
-Compliance with regional principles and politicians - Harmony of socio-cultural life.

MAIN PART

Development and characteristics of smart cities in recent years in Western countries, the concept of smart cities plays an increasingly important role in their urban development strategy and planning. QUIIL CITY is the integration of the digital city, ecological city and innovative concept of three-dimensional Cities that includes of technical attributes and social attributes: through advanced digital technology to give the city Intellect, through education to cultivate creativity and wisdom of people, through culture to cultivate senses of people, and then increase the safety and happiness of the life of people. According to reflections on the nature of the smart city and combing preliminary research data, we believe that common The characteristics of the smart city are as follows: First of all, long-term strategic thinking and short-term planning the world-class urban development; secondly, suitable for life, environmental environment; Third, suitable for individuals, Innovative, entrepreneurial organizations and industries Investment environment. In fourth, medical and medical systems world-class and concern measures in empty Nests. In the fifth, the intellectual educational park and the cultural study center. In recent years there were a lot of disputes on the direction of development future city, such as a digital city, city knowledge, ecological City, create a city, create a city and so on. In essence, these cities trying to increase the economic, political and cultural The value of the city with the help of information technologies. This makes them blurred borders with each other and even abuses abuse. Some scientists believe that a smart city is a three-dimensional city, which unites the digital city, the ecological city and intelligent City. wdol of this line of thinking and expansion, in combination with data preliminary survey, this study believes that the concept of smart Cities are a digital city, a city of knowledge, an environmental city, creating urban integration: it includes technical Architecture of the Digital City, Values of the City of Knowledge, Environmental urban habitat and creates a city of creativity, and ultimately reaches sustainable development of the city. It can also be said that the intelligent cities complex, which unites the digital cities, the city of Knowledge, Ecological cities and urban functions above and above cities. Vision and strategic objectives of the smart city. There are many discussions about the vision of the smart city, the main The moments of which are the following four categories: According to foreign scientists, the vision of the smart city is to apply information and communication technologies to all aspects of the functioning and development of cities, through Computerized system structure for effective completion perception, processing, decision-making and other complex forms behavior that makes the urban environment more suitable for life Urban operations are more intellectual, urban management more efficient. In the second category, the vision of IBM smart cities is to achieve the sustainability of the urban economy due to widespread participation and application of advanced information technologies in urban development. In third, some scientists believe that Sustainable economy development is only one of the important aspects. strategies for the sustainable development of the city, and put forward the "economic and environmental" model of sustainable development, they consider that the city when considering its sustainable development strategy, Economic, social and environmental policy should be integrated, balanced to achieve a balanced Sustainable development of three countries. Carts category, Ningbo in full Extent uses modern information and communication technology at the same time, also emphasizes active picking human wisdom, putting things by intelligence, so the collection Smart people and smart things interacts with each other, complements each other to promote each other to achieve optimization Economic and social activities of the new generation.

Innovation Ningbo in understanding the smart city is that his Human resources included in the strategic construction framework smart city. In order, the vision of the smart city is not only involves the construction and bookmark of intellectual technologies, but and should pay formation, culture and human resources due attention is the only way to allow people to collect wisdom so that things have intelligence through coordination and The complementarity of these two factors to achieve innovation and The development of the city. Only this is the true vision of a smart city. Summing up, we believe that by virtue of a holistic, holistic and The systemic nature of the smart city is his vision lies in achieving three goals of sustainable Development (Economic, Social and Environmental). At the early stage of the study, it was found that The current construction of the smart city of China, pay attention to Construction of information technologies, ignoring an important The role of a smart city in improving the quality of life of people. However The strategic goal of a smart city is to improve quality urban life (including material and spiritual quality of life) Thereby increasing the sense of safety and happiness in people. In that time as the quality of material life, we must rely on a steady Development of the city and environmental economy for support, spiritual Quality of life We must rely on the sustainable development of social and economic support of the city.

CONCLUSION

Architecture of the Smart City We begin with a typical research and analysis in the country and for Rube, and then through a preliminary study and study Some provinces and cities of China put forward a three-layer four-column architectural model in accordance with national conditions. In our architectural design, the infrastructure layer must to be a mass foundation. Starting activists at this level are city inhabitants who have the greatest impact on Development and lifestyle of your city. Some 2-it is a layer of innovative Systems, namely regional innovative platform cities, the main role of this layer is to through urban regional innovative infrastructure platform layer develop strategies and policies to incubate innovation, Configuration favors innovative and entrepreneurial medium and system settings, as well as the formation of intelligent systems, namely intelligent system construction. 3 is a sustainable development. The first two layers of the intellectual function Designed for the third service layer, that is, through intelligent products, intelligent technologies, Intelligent decision-making system and intellectual Innovative system to promote healthy functioning economics of the city, social and harmonious development, Environmental green suitable for life, that is, wisdom for Enhance services, acceleration of development. As mentioned earlier, SMART City Research is a systemic Engineering in order to better understand the structure and characteristics Systems, in the future you can create a research model for appropriate analysis. Currently, domestic and foreign cities are actively participate in the construction of smart cities. What is from data collection and Surveys of the provinces and cities of China, in this study were The following conclusions were obtained. First, in recent years there have been a lot of future disputes Direction of the city's development. Taken as a digital city, city knowledge, environmental city, city of creation, innovative city and so further. In essence, these cities are trying to increase their economic, Political and cultural values with the help of information Technologies. We put forward a pyramidally star model structure smart city, which not only integrates digital characteristics cities, ecological city, innovation city, etc., but also above They are an advanced form of urban development. Secondly, this article puts forward a vision of a smart city and strategic goal with chinese characteristics, namely Achieving "economic and social and social" comprehensive sustainable development and in the final account satisfaction feeling safety and happiness inhabitants in Life. Indeed smart cities are sustainable cities that are not only strengthen the economic and political power of the city, but also contribute to social and cultural prosperity. As compared to Other forms of urban development, a smart city is more perfect form of urban development. Third, the architecture of the smart city for foreign countries based only at the technical level, is based on the proposed technical level, ignoring the social level of analysis and consideration. In combination with our research, we have developed The architecture of the smart city and the strategic structure in accordance with National Conditions of China to provide some Theoretical parameters for future construction of smart cities exam.

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