
Smart Cities to Smart Villages

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1. Introduction

Nowadays, technologies develop rapidly, while humans are trying to enhance the quality of lives relying on technologies. In the city area, citizens want efficient and effective public infrastructures and lifestyle. Smart cities is an idea that leads citizens into this enchanting lifestyle that people desires. For now, this design has been brought into the lives of many cities. There is also a similar idea called Smart villages coming along. But this plan still has a long way to go.

2. Smart Cities

Generally, As Anthony M. Townsend wrote in his book, “Smart cities are places where information technology is combined with infrastructure, architecture, everyday objects, and even our bodies to address social, economic and environmental problems” [1]. Technically, the idea of Smart city combined various technologies including Internet of things (IoT), Cloud computing, Information and Communication Technology (ICT), Big data, etc. The key idea is using electronic IoT sensors to collect data from citizens, infrastructural devices, public software systems. After processed information, it will be applied to the systems and offer users a multifunctional, citizen-centralized, information-accessible, sustainable city network. This is definitely an efficient way to manage different kinds of city services and benefit the daily life of citizens.

A simple example could be a Smart parking system. When a citizen drive in an unfamiliar area and eagers to spot a parking space, he or she could enter a concern application which is controlled by Smart cities technology. The Smart cities would tell the driver where is the optimal option for parking by monitoring the traffic conditions, parking vacancies and locations of the driver.

More specifically, Smart cities technology provides convenient networks allowing citizens could interact with city infrastructure and communities easily. Quickly accessing the required information without detours is certainly time-saving. It is more surprising that Smart cities could help to organize the control flows in one or multiple areas and even give responses to problems [2]. Furthermore, Smart cities technology keeps monitoring the incidents happened inside the cities and being predictable on natural or human behaviors in certain timeframes, such as weathers, rush hours, and even natural disasters [3]. Under the circumstance that it predicted, Smart cities would give warnings or make corresponding adjustments on

presenting solutions against users demands. It is designed to be considerate to citizens and respond to the challenges.

3. Smart Villages

As you can see, Smart cities brought enormous convenience to citizens in cities successfully. There is a trend of developing Smart villages plan born afterward, but it still remained under-discussed in the literature stage [4].

EU Commission described "Smart Villages refers to rural areas and communities which build on their existing strengths and assets as well as on developing new opportunities. In Smart Villages traditional and new networks and services are enhanced by means of digital, telecommunication technologies, innovations and the better use of knowledge, for the benefit of inhabitants and businesses." [5], it targets different angles from Smart cities. The populations in cities are far more than rural areas, the communication is not a significant issue for city network. Conversely, the population densities in villages are much lower than cities, which make the issue of communications primarily.

Besides the communication problem, the infrastructures of villages are insufficient. People lived in villages need to concern about lives and death, safety and security issues, since they don't have complete medical facilities.

4. My Opinions on Smart Villages

As my opinion also, although the Government could support heavily by constructing all the facilities they need of, it is still papering over the cracks in the short term. Teach him how to fish and he eats for a lifetime. Agriculture is still the basic business flows and important source of incomes for people who live in rural areas. For the longer term, education and offering technologies that can be applied to Agriculture are "fishing skills" for them. Primarily, the educational achievements of rural people should be the foundation and critical link for developing Smart villages system. Moreover, it is ideal that the Government could invest money on developing an agricultural system, allowed rural farmers could raise and monitor crops or livestock in the optimized way instead of the empirical way.

For instance, this agricultural system could help to allocate the farmlands for separate crop varieties based on the conditions of farmers. And farmers could monitor their crops or livestock and spray pesticides by operate system indoor. In general, bringing technologies into the agriculture and reap the benefits without slaving away.

It was predicted that until 2050, there are nearly 80% of people will live in cities. Smart villages should attract attentions from city-living people, and drive them toward there [6]. According to these ideas, people would love to live in villages or rural areas. Citizens who

live in the cities might consider to move into rural areas and start work in rural areas. They will feel free and leisure instead of stressful and feeling unsafe.

5. Conclusion

In conclusion, Smart cities is really helpful to the living environments of citizens in downtown areas. However, since the City lifestyle is trendy enough, it might be the time to concentrate on decrease or even eliminate the gaps of poverty and rich. Smart villages could be effective to the people who live in rural areas as same as the Smart cities to the city people, but the way of doing that should be different since they have different life environments. Besides safety and communications issues in the short term period, in my opinion, it should focus on education and developing agricultural systems as well. Unfortunately, it is a tough task under long-term implications.

Reference

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