Smart Governance and Smart Cities: A Review of The Literature

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1. Introduction

Nowadays, peoples living in an era while the environment around us is supposed to be smart and smarter. Word of “smart” become popular as people usually used it intensively. It is explaining of economies, regions, environments, governance, people, mobility, development, communities, strategies, territories, states, cities, and politicians. In the middle of all, smart cities have to deal with all of that conceptual, just like a lot of researchers already found it. (Meijer et al., 2015; Adriana Zait, 2017; Grimaldi & Fernandez, 2016; Nam & Pardo, 2011; Ishkineeva et al., 2015; Caragliu et al., 2011; Deakin & Al Waer, 2011; Herrschel, 2013; Monfaredzadeh & Berardi, 2015; Albino et al., 2015, Stratigea, 2012; Meijer & Bolivar, 2015). Many researchers discuss the topic of smart city, some of them got difficulties to the concept of that in recent years, they got some lack of agreement of smart city is (Angelidou, 2015; Hortz, 2016; Trindade et al., 2017).

Smart Cities comes up as the needs of an urban smart peoples that can easily supply a sustainable living for them to increase urban population (Mutiaera, et al., 2018). United Nation claimed in 2010 there are 50% from world’s populations lived in urban areas and United Nations also forecast in the 2050 rising up to 75% from population will live in urban area. One way to improving
the quality of life for the citizen by implement the smart city (S.F., 2013). Based on that data, governments need to launch future place for the citizens. Policy maker and citizen need to collaborate to this smart city project to solve their future quality of life (Bakici, et al., 2013).

Which number of writers have that difficulty of the context, the definitions are opposite but some of them are overlapping (Scheel & Rivera 2013; Cocchia, 2014). Based on the present paper from many researchers the researcher analysis the basic theoretic of smart city concept itself, because some of them use terms such as, virtual city, innovative city, intelligent city, knowledge city, etc. The blind spot of smart city will gain the different meaning and bias in information system for the concept of smart city. Review literatures systematically from the most recently scientific articles focus on smart cities provide clear information for result of this paper.

Based on the literature review by Caragiu et al., (2011); Evelin, et al., (2017):

Table 1 The Following Main Characteristic of Smart City

| The Following Main Characteristic of Smart City | A | B | C | D | E | F |
|-----------------------------------------------|---|---|---|---|---|---|
| Administrative & the efficiency of economic enables the development of culture & society | Focus on the main purpose of any different kinds of urban resident in public services | High-tech & creative industries in long term period growth | Highlight the social capital and relationa l for the advance city | Social & environment sustainabilit y as main parts of smart city developmen t |

Source: analytical result, 2019

Caragiu (2011) and Trindade et al., (2017) found that smart city has the main characteristic which are divided into 6 (six) components such as; Administrative and the efficiency of economic, Business oriented, Main purpose, High tech. & creative industry, The purpose of social and relation capital, Social and environment sustainability.

Another researcher (Lee et al., 2014; Lazaroiu & Roscia, 2012; Jong et al., 2015) also focus on the arrangement of smart city, for examples: (a) smart mobility, (b) smart economy, (c) smart living, (d) smart environment, (e) smart government, (f) and, smart people. Jong, et al., (2015) elaborated the intelligent city context over the cities characterization by benefitting the advance insight, technology, and information, however still use the tool in systems and services for people.

In accordance to the introduction, this research use literature review as the basic for scientific writing. The researcher adopted from Jesson et al., (2011) a systematic analysis approach for the literature review. The researcher using (a) Science Direct, (b) Scopus, and (c) Emerald Insight as systematic review based on three major databases.

Result from three major based on database:

| (a) Science Direct | (b) Scopus | (c) Emerald Insight |
|--------------------|------------|---------------------|
| 167 documents      | 8 documents | 28 documents        |

2. Discussion

The researchers verifying and evaluating from topic, title, and “key-words” to separate which one is related with terms of smart city for this research. The researcher found there are more or less 87 papers which related. After that, there are 35 papers that researcher read fully. The framework of analysis selected 10 documents the most reviewed by other researchers for final analysis after a literature review which are present and provide such as sustainable urbanism, eco-worn, eco-city, smart city, green economy, and some model build statistics to monitor smart city.

Table 2 Research Studies

| No | Research | Writers | Title | Outline |
|----|----------|---------|-------|---------|
| 1. | Yigitcanlar, T., (2015) | | Smart cities: an effective urban development and manage under model? Australian Planner, 52(1), 27-34 | (1) The study discusses the emerging practices of global eco-cities. (2) The writer clearly done some critical review of smart city application model with smart city initiatives From Korea |
| 2. | Scuotto, V., F. Alberto, Bresciani, S. (2015) | | Internet of things, Application and challenges in smart cities: a case study of IBM smart city projects | The paper discussing an empirical testing on IBM smart cities projects was applied. |
| 3. | Alveniemi et al (2017) | | What are the differences between sustainable and smart cities? Cities, 60, 234–245. | The study discussing a specific city evaluation tool compare to 958 indicators and divided into 3 impact categories and 12 sectors |
| 4. | Angelidou, M. (2015). | | Smart cities: A conjunction of four forces. Cities, 47, 95-106. | The study summarizes factors influenced the elaboration of smart city concept, to replace the previous idea of smart city. |
| 5. | Neirotti et al., (2014). | | Current trends in Smart City initiatives: Some stylised facts. Cities, 38, 25-36. | The study discussing among city manager and policy maker using the guidelines to define smart city strategies |
| 6. | Lazaroiu, G. C., & Roscia, M. (2012). | | Definition methodology for the smart cities model. Energy, 47(1), 326-332. | A study discusses computation model to assess some indicators of smart city. |
| 7. | Edvardsson, I., Yigitcanlar, T., & Pancholo, S., (2016) | | Knowledge city research and practice under the microscope: a review of empirical findings. Knowledge Management Research and | The paper discussing the inclusive progress on city studies |
The 10 (ten) articles above have the similarities term using the sustainable system for smart city. The various focus discussion such as policy maker, information system and social management applied in the smart city with final purpose for better quality of the city.

3. Conclusion

On this part the researcher describes the main result from 10 articles mention above. From the table above we can conclude from the similarities, the differences, and the information from the research as a context of smart cities. From the table that present paper from many researchers we can conclude that this paper describes a basic theoretic of smart city concept by review from literature. Generally, the challenge of smart city is to making the quality of cities better, what people needs can facilitated by the government itself. It’s a high-challenge for governance. Washburn et al., (2010) clearly mention that there are challenges all aspect for making the cities more attractive, more explication but still in terms and concepts for service the needs to people, on the other hand its not main problem of smart cities, even thought seen as cities using technology to growth the environmental and sustainable outcomes. The point from this paper brings out contradiction smart cities in the concept and practice definitely bring out sustainability to the cities. Future studies could be continuously answering this big issue that points out this paper.

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