

ABSTRACT SMART EDUCATION

About 53% of Indonesian population live in urban areas, such as Bandung, Surabaya, Semarang, Medan, and Batam (*Transformasi Center for Public Policy Transformation*, 2016). Besides Jakarta, other big cities in Indonesia as also be the main purpose of urbanization. As the average of city growth more than 50%, the problem faced by the city could be more complex in terms of convenience, traffic jam, even municipal solid wastes, as a consequences of the increasing number of people living in the city. Ramdani in *Media Indonesia* (2016) stated that at the end of 2030, about 67% of Indonesian population will live in urban areas.

Bandung is one of big city in Indonesia with the population about 2.481.469 people in 2015 and located in West Java Province (BPS Kota Bandung, 2015). Currently, development of Bandung city use the concept of Smart City. Several areas of priority are applied on Bandung smart city program, such as Smart Government, Smart Education, Smart Transportation, Smart Health Cares, Grid/Smart Energy, Smart Surveillance, Smart Environment, Smart Society, Smart Reporting, Bandung Passport, Smart Payment, and Smart Commerce.

In 2015, Bandung smart city concept was elected as one of the finalists of six world big cities for World Smart City Awards in November 2015 by the *World Smart City Organisation* in Barcelona, in competition with the city of Moscow, Dubai, Buenos Aires, Curitiba, and Peterborough. (www.bandung.go.id).

In the smart city concept, there is one of the program called smart education which intended to deal with city's educational issues. Education is an important pillar in implementing smart citizen and consider as one of important factor in smart city concept. According to Ridwan Kamil (2015), smart city implementation is "the development and management of the city by using communication and information technology for connecting, monitoring, and controlling various available resources in the city with more effective and efficient ways in providing services to the residents".

Data IDC (International Data Corporation) shows the great potential market for IoT in Asia Pacific (including Indonesia). In 2015, number of devices that connected to internet (IoT) in Asia Pacific is about 3.1 billion and projected increase to 8.6 billion in 2020.

Director of Digital and Strategic Portfolio Telkom Indra Utoyo said that IoT implementation is predicted will be a trend in the future. The development of IoT will become a great business opportunity for Telkom Group as the largest digital company in Indonesia. Telkom is preparing Living Lab Smart City Nusantara to accelerate the implementation of information technology (smart city) for local government across the country for presenting smart government, one of them is Smart Education.

Information and data related to the implementation of smart city and smart education concept is very limited. It is hard to find variables and indicators used for smart education in the smart city concept for big cities in Indonesia. It is therefore, the objectives of this study is to develop variabels and indicators to support educational management in the cities in Indonesia .