ABSTRACT

City management in the future, of course, will be increasingly complex due to the rate of population growth, urbanization, the limited number of natural resources, and other factors. One solution to deal with this problem is the application of the smart city concept, namely a city development model that has high effectiveness and efficiency functions with the support of technological developments. Smart city consists of many dimensions, one of which is smart water, which is mostly initiated by cities including the city of Bandung.

Research on Smart Water has been done before by Indrawati, Parlagutan, P, and Amani (2017) with findings on variables and indicators related to smart water. The purpose of this study is to confirm the model and get the index value of smart water readiness in the city of Bandung. The water cycle (raw water resources, production, distribution, consumption of clean water and waste water collection and treatment) plays an integral part of the urban system, which affects every pillar of urban society and its function, produces energy, supports tourism, ensures the realization of environmental health and humans, and ultimately can trigger the development of the local economy (ITU-T, Smart Water in Cities, 2014). Indirectly increasing convergence such as encouraging urban growth.

This research is a mix method research, namely explorative research in the form of data retrieval using analytic data and descriptive research through data search to obtain an index. Descriptive data collection was carried out by searching for best practice data and secondary data which were confirmed through interviews with informants. The resource person was chosen to use the quadruple helix concept: government, business player, researchers / expertise in the field of smart water and educational service users. Analytical data carried out relates to indicators that have the highest and lowest levels, with the aim of comparing data taken broadly with selected data taken. This study found the index of readiness of smart water in the city of Bandung is number 51.05, where This value indicates that the level of readiness of smart water in Bandung City is bad, there are still many shortcomings. The highest index obtained is water quality and the lowest index, which is dam protection.

Keywords: Smart City, Smart Water, water cycle, Index