



ABSTRACT

Address is one important thing in determining the location of the modern era. Positioning refers to the concept of geocoding addresses. Geocoding is the process that determines the position off the address adjusted with geographic coordinates. Addressing conditions in rural areas have different characteristics from urban areas. This requires further research to ascertain the quality of geocoding of addresses those areas. Form data model that can be used as reference data and models best address locator need to be sought to obtain geocoding results with good quality

Data address rural areas have a form of addressing which begins with the name of the village that followed the *Rukun Tetangga*, the *Rukun Warga* and house number. Geocoding process for 311 rural address data is performed with the reference data in the form of points and area. Geocoding is done using models address locator US Address - Single House and General - Single Field. In addition to using these two models are also used composite address locator which is the result of the integration model of the address locator.

Geocoding results using the address locator US Address - Single House produces 30% of the data match, and 59% of the data does not match in the absence of house numbers. Address locator General - Single Field with the name of the building attribute produces 77% of the data accordingly. While the address locator General - Single Field with the address attribute produces 34% of the data accordingly and the address does not have the numbers to produce 66% of tie data. Composite address locator that is a combination of two address locator with General models - Single Field attributes indicate the name and address corresponding to 38% yield. While the composite address locator combined results address locator General - Field and US Single Address - Single House show the results of 33% is appropriate. In rural areas the model most suitable address locator is General - Single Field. The percentage of the highest accuracy of the results for rural areas also exist in the model address locator General - Single Field.

Keywords: address, geocoding, address locator, composite address locator, reference data



INTISARI

Alamat merupakan salah satu hal penting dalam penentuan lokasi pada era modern ini. Penentuan posisi alamat merujuk pada konsep *geocoding*. *Geocoding* merupakan proses menentukan posisi alamat yang disesuaikan dengan koordinat geografik. Kondisi penulisan alamat pada wilayah perdesaan memiliki karakteristik yang berbeda dengan wilayah perkotaan. Hal ini memerlukan penelitian lebih jauh untuk dapat mengetahui kualitas *geocoding* dari alamat daerah tersebut. Bentuk model data yang dapat digunakan sebagai data referensi serta model *address locator* terbaik perlu dicari untuk memperoleh hasil *geocoding* dengan kualitas yang baik

Data alamat wilayah perdesaan memiliki bentuk penulisan alamat yang diawali dengan nama kampung yang diikuti Rukun Tetangga, Rukun Warga dan nomor rumah. Proses *geocoding* untuk 311 data alamat perdesaan ini dilakukan dengan data referensi berupa titik dan luasan. *Geocoding* yang dilakukan menggunakan model *address locator US Address – Single House* dan *General – Single Field*. Selain menggunakan dua model tersebut digunakan pula *composite address locator* yang merupakan hasil perpaduan model *address locator*.

Hasil *geocoding* menggunakan *address locator US Address – Single House* menghasilkan 30% data sesuai (*match*), dan 59% data tidak sesuai (*unmatch*) karena tidak adanya nomor rumah. *Address locator General – Single Field* dengan atribut nama bangunan menghasilkan 77% data sesuai. Sedangkan *address locator General – Single Field* dengan atribut alamat menghasilkan 34% data sesuai, alamat yang tidak memiliki nomor menghasilkan 66% data *tie*. *Composite address locator* yang merupakan gabungan dua buah *address locator* dengan model *General – Single Field* dengan atribut alamat dan nama menunjukkan hasil 38% yang sesuai. Sedangkan *composite address locator* hasil gabungan *address locator General – Single Field* dan *US Address – Single House* menunjukkan hasil 33% yang sesuai. Untuk daerah perdesaan model *address locator* yang paling sesuai adalah *General – Single Field*. Prosentase keakuratan hasil yang paling tinggi untuk wilayah perdesaan juga ada pada model *address locator General – Single Field*.

Kata kunci : alamat, *geocoding*, *address locator*, *composite address locator*, data referensi.