

INTISARI

Alamat merupakan identitas yang berfungsi untuk menunjukkan suatu posisi tertentu. Alamat menjadi penting karena digunakan oleh masyarakat maupun pemerintah. Masyarakat biasanya menggunakan alamat untuk layanan pesan antar, jual beli secara daring, hingga pengiriman paket. Selain itu, pemerintah menggunakan data alamat dalam pelayanannya, misalnya dalam pemberian bantuan sosial dari rumah ke rumah. Alamat seharusnya membuat semua objek alamat menjadi unik. Kenyataannya alamat di Indonesia, khususnya di Kemantren Mantrijeron masih beragam bentuknya. Oleh karena itu, penelitian ini melakukan standardisasi alamat mengacu pada SNI 9037:2021 sekaligus membuat sistem informasi alamat sebagai penghubung antara alamat *existing* dan alamat standar.

Penelitian ini dimulai dengan melakukan standardisasi alamat berdasarkan SNI 9037:2021. Standardisasi alamat dilakukan untuk 8.546 objek alamat di Kemantren Mantrijeron. Pengalamatan sesuai standar dilakukan untuk setiap objek alamat seperti objek alamat di jalan atau gang, di perumahan, tanah kosong, ataupun di gang pendek/buntu. Alamat standar dianalisis perbedaannya dengan alamat *existing*. Setelah itu, dibuat sistem informasi alamat yang mewadahi kedua format alamat. Sistem didesain dengan pembuatan rancangan arsitektur, pembuatan diagram kelas, diagram *use-case*, diagram aktivitas, rancangan basis data, dan rancangan antarmuka. Selanjutnya, sistem dibangun dengan membuat kode berdasarkan desain sistem dan hasilnya diuji melalui uji usabilitas berdasarkan lima kategori kegunaan.

Hasil penelitian menunjukkan perbedaan signifikan antara alamat hasil standardisasi dan alamat *existing*. Pada setiap kelurahan di Kemantren Mantrijeron, ditemukan perbedaan > 96% antara kedua format alamat. Secara rinci, tingkat perbedaan di Kelurahan Gedongkiwo sebesar 98,13%, Kelurahan Suryodiningratan sebesar 98,28%, dan Kelurahan Mantrijeron sebesar 96,47%. Fitur utama yang dikembangkan dalam sistem berupa fitur pencarian alamat *existing* atau alamat standar, *filter* pencarian alamat spesifik berdasarkan batas administrasi, serta penyajian informasi alamat standar dan *existing* dalam satu kesatuan sistem. Dalam menguji kegunaan sistem, dilakukan uji usabilitas menggunakan skala Likert dengan rentang nilai 1 hingga 5. Berdasarkan hasil uji, seluruh kriteria mendapatkan respon baik dengan nilai rata-rata 4,36 (*effective*), 4,24 (*efficient*), 4,16 (*engaging*), 4,27 (*error tolerant*), dan 4,35 (*easy to learn*). Hal ini mengindikasikan bahwa responden setuju bahwa sistem efektif, efisien, memiliki daya tarik, toleran terhadap kesalahan serta mudah dipelajari.

Kata kunci: standardisasi alamat, alamat *existing*, sistem informasi, pencarian alamat

ABSTRACT

An address is an identifier that indicates a specific location. Addresses are important because they are used by both the public and the government. The public typically uses addresses for delivery services, online sales, and package delivery. In addition, the government uses address data in its services, such as door-to-door social assistance. Addresses should ensure that all address objects are unique. Addresses in Indonesia, especially in the Mantrijeron subdistrict, still vary in form. Therefore, this study standardizes addresses according to SNI 9037:2021 while also creating an address information system linking existing addresses to standardized addresses.

This research began with standardizing addresses based on SNI 9037:2021. Address standardization was carried out for 8.546 address objects in Kemantren Mantrijeron. Standardized addressing was carried out for each address object, including those on roads or alleys, in housing complexes, on vacant lots, or in short/dead-end alleys. Standard addresses were analyzed for differences with existing addresses. After that, an address information system was created to accommodate both address formats. The system was designed by creating an architectural design, class diagram, use-case diagram, activity diagram, database design, and interface design. Next, the system was built by creating code based on the previous design, and its usability was tested through a usability test based on five categories of usability.

The results of the study show significant differences between standardized addresses and existing addresses. In each sub-district in Mantrijeron District, there was a difference of $> 96\%$ between the two address formats. Specifically, the level of difference in Gedongkiwo Sub-district was 98.13%, in Suryodiningratan Sub-district it was 98.28%, and in Mantrijeron Sub-district it was 96.47%. The main features developed in the system are the existing address or standard address search feature, a specific address search filter based on administrative boundaries, and the presentation of standard and existing address information in a single system. To test the usability of the system, a usability test was conducted using a Likert scale with a value range of 1 to 5. Based on the test results, all criteria received good responses with average scores of 4.36 (effective), 4.24 (efficient), 4.16 (engaging), 4.27 (error tolerant), and 4.35 (easy to learn). This indicates that respondents agree that the system is effective, efficient, engaging, error-tolerant, and easy to learn.

Keywords: address standardization, existing addresses, information systems, address search