

## **IMPLEMENTASI METODE *MODIFIED K-NEAREST NEIGHBOR* (MKNN) UNTUK KLASIFIKASI PENERIMA DANA BANTUAN COVID-19**

Reza Chaidir<sup>1</sup>, Hardian Oktavianto<sup>2</sup>, Reni Umilsari<sup>3</sup>

Program studi Teknik Informatika, Fakultas Teknik

Universitas Muhammadiyah Jember

e-mail: [rezachaidir09@gmail.com](mailto:rezachaidir09@gmail.com)

### **ABSTRAK**

Bantuan Langsung Tunai (BLT) yaitu program bantuan pemerintah yang pemberiannya dengan syarat dan tanpa syarat kepada masyarakat miskin dalam bentuk uang tunai atau berbagai bantuan lainnya (Kemenko Kesra, 2009). Bersamaan dengan itu, saat pandemi COVID-19 masuk ke Indonesia, BLT kembali diluncurkan pada tahun 2020. Warga yang terkena dampak pandemi Covid-19 bukan hanya masyarakat yang terkena dampak kesehatannya, tetapi juga masyarakat yang terdampak ekonominya. Meskipun BLT Dana Desa di Indonesia telah dialokasikan dengan tepat, masih terdapat kekurangan, salah satunya adalah masalah sasaran penerima BLT Dana Desa yang belum optimal. Seperti contohnya di Desa Andongsari, Kecamatan Ambulu, Kabupaten Jember. Oleh karena itu, agar penerima BLT Dana Desa semakin tepat sasaran atau sesuai kriteria, maka diperlukan alat atau metode untuk membantu permasalahan tersebut, salah satu diantaranya ialah menggunakan metode klasifikasi *Modified K-Nearest Neighbor* untuk dapat mengetahui tingkat akurasi, presisi, dan recall pada penyaluran bantuan langsung tunai yang ada di desa Andongsari. Berdasarkan hasil pengujian  $k$  yang telah dilakukan dari range 1-11 didapatkan hasil  $k$  optimal di angka 3, dan nilai akurasi sebesar 94,92%, nilai presisi sebesar 90,48%, sedangkan nilai recall sebesar 95%.

**Kata Kunci :** covid-19, *Modified K-Nearest Neighbor*, dana bansos, klasifikasi, data mining.

**IMPLEMENTATION OF THE MODIFIED K-NEAREST NEIGHBOR  
(MKNN) METHOD FOR THE CLASSIFICATION OF RECIPIENTS OF  
COVID-19 ASSISTANCE**

Reza Chaidir<sup>1</sup>, Hardian Oktavianto<sup>2</sup>, Reni Umilsari<sup>3</sup>

Program studi Teknik Informatika, Fakultas Teknik

Universitas Muhammadiyah Jember

e-mail: rezachaidir09@gmail.com

**ABSTRACT**

*Direct Cash Assistance (BLT), namely a government assistance program that provides conditional and unconditional assistance to the poor in the form of cash or various other assistance (Coordinating Ministry for People's Welfare, 2009). At the same time, when the COVID-19 pandemic entered Indonesia, BLT was held again in 2020. Residents affected by the Covid-19 pandemic are not only the people affected by their health, but also the people affected by their economy. Even though BLT Dana Desa in Indonesia has been properly allocated, there are still deficiencies, one of which is the problem of targeting beneficiaries of BLT Dana Desa which has not been optimal. For example, in Andongsari Village, Ambulu District, Jember Regency. Therefore, in order for Village Fund BLT recipients to be more on target or in accordance with the criteria, a tool or method is needed to help with this problem, one of which is to use the Modified K-Nearest Neighbor classification method to be able to determine the level of accuracy, precision and recall in distribution direct cash assistance in Andongsari village. Based on the results of the k test that has been carried out from the range 1-11, the optimal k results are obtained in number 3, and the accuracy value is 94.92%, the precision value is 90.48%, while the recall value is 95%.*

**Keywords :** covid-19, Modified K-Nearest Neighbor, social assistance funds, classification, data mining.