ABSTRAK

Hampir di seluruh wilayah Kabupaten Boyolali rawan bencana alam, tentunya korban terdampak membutuhkan bantuan. Dalam proses penyaluran bantuan diperlukan manajemen logistik yang dapat dilakukan oleh BPBD. Saat ini dalam melakukan proses pengelolaan dan pencatatan logistik masih belum efektif dan efisien seperti perencanaan kebutuhan persediaan dan jenis logistik yang kurang sesuai, logistik yang dikirimkan kurang tepat, pengelolaan logistik masih konvensional dan kurang memanfaatkan teknologi, belum terdapat sistem pelacakan, kurangnya koordinasi, belum adanya pemetaan lokasi untuk identifikasi lokasi secara visual untuk pengelolaan logistik. Perencanaan sistem informasi logistik dengan pemetaan lokasi dapat membantu mengatasi permasalahan tersebut. Penelitian deskriptif kualitatif untuk menggambarkan dan analisis sistem saat ini dan dilakukan perbaikan. Setelah analisis sistem saat ini dilakukan penggambaran alur data dan hubungan antar entitas dengan DFD dan ERD, serta desain interface dan arsitektur sistem. Kemudian dihasilkan rancangan sistem informasi yang dapat membantu pengelolaan logistik mulai dari perencanaan, pengadaan, distribusi, dan penerimaan, perencanaan rute, sarana koordinasi pihak yang memiliki kepentingan, membantu donatur mengambil keputusan dan melakukan pemantauan terhadap donasi yang diberikan.

Kata kunci*: bencana alam; bpbd; google maps; manajemen logistik; sistem informasi*

ABSTRACT

Almost in the entire area of Kabupaten Boyolali, natural disasters are prone to occur, and the affected victims certainly require assistance. In the process of providing aid, logistics management carried out by BPBD is essential. Currently, the logistics management and recording process is not yet effective and efficient, such as inadequate planning of inventory needs and logistics types, imprecise logistics distribution, conventional logistics management with limited technology utilization, lack of tracking system, coordination issues, and absence of location mapping for visual identification in logistics management. Planning a logistics information system with location mapping can help address these issues. A qualitative descriptive research is conducted to describe and analyze the current system and make improvements. After analyzing the current system, data flow and entity relationships are depicted using DFD and ERD, along with the design of the interface and system architecture. Subsequently, a design for the information system is produced to assist logistics management, including planning, procurement, distribution, and acceptance of aid. The system design also encompasses route planning, coordinating facilities for relevant parties, and assisting donors in decision-making and monitoring of their donations. By implementing the designed logistics information system, it is expected to enhance the efficiency and effectiveness of logistics management in Kabupaten Boyolali, ensuring timely and appropriate aid to victims of natural disasters.

Keywords*: disaster management agency; google maps, information system, logistics management, natural disasters*