Optimasi Produksi menggunakan Metode Simplex Di Toko Matrix Jaya Berbasis Website

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ABSTRACT

Matrix Jaya shop is a shop that sells processed catfish raw materials. Processed products include catfish chips, widaran catfish and shredded catfish, the problems that occur at the Matrix Jaya store are the lack of raw materials and how to maximize profits. And there is often a buildup of one product due to the lack of optimal determination of the variety of products produced. The case in the Matrix Jaya store is that the widaran catfish product has a lot of demand from consumers, but what is produced more is catfish chips, as a result, there is a buildup of stock of catfish chips which results in losses at the Matrix Jaya Store. Therefore, an information system is needed that can optimize the production of processed catfish. Included in the decision support system, it is expected to be able to provide product recommendations to be produced by maximizing raw materials and maximizing profits. For this reason, the method used in operations research, namely the simplex method. This method is considered suitable for use in this study because the optimized product is more than two products. In one production, Matrix Jaya produces 7 products of shredded catfish, 4 products of catfish chips and 8 products of widaran catfish with a profit of Rp. 100,000. Meanwhile, when using this website, it is able to provide production solutions of 5 shredded catfish, 5 catfish chips and 10 widaran catfish with a profit of Rp. 102,000. So it can be concluded that the system provides the optimal solution.

Keywords: Processed Catfish, Operations Research, Simplex Metho