

ABSTRAK

Sunny Four adalah sebuah usaha kecil menengah (UKM) yang bergerak pada industri konveksi rumahan yang didirikan pada tahun 2017. Sunny Four Konveksi berlokasi di Perumahan Cengkong Persada Blok C 11 Nomor 4, Kecamatan Purwasari, Kabupaten Karawang, Jawa Barat. Dalam beberapa bulan terakhir, permintaan pelanggan mengalami peningkatan yang tinggi, perusahaan juga menerima permintaan mendadak dari konsumen. Berdasarkan hasil wawancara tercatat dalam 11 bulan terakhir kegiatan produksi di Sunny Four menghabiskan biaya yang tinggi yaitu sebesar Rp.385.000.000,00. Perencanaan dan pengendalian produksi menggunakan metode peramalan dan perencanaan agregat, diharapkan dapat mengatasi permasalahan serta pesanan produk dari pelanggan dapat dipenuhi secara tepat waktu dan dapat mengurangi biaya produksi yang dikeluarkan oleh perusahaan seminimal mungkin. Hasil penelitian pada perhitungan peramalan dengan membandingkan 4 metode peramalan yaitu *Moving Average*, *Weight Moving Average*, *Exponential Smoothing*, dan *Naive Method*, menggunakan *software* aplikasi POM-QM for Windows diperoleh metode peramalan, yaitu metode *Exponential Smoothing* dengan analisis nilai *error* MAPE paling kecil. Untuk hasil perhitungan perencanaan agregat berdasarkan perbandingan 4 metode diketahui bahwa metode *Workforce Level Strategy* menghasilkan total biaya paling minimum sebesar Rp293.453.210,00. penghematan biaya perencanaan produksi sebesar Rp91.546.790,00. yaitu dari total biaya pada periode 2021 - 2022 sebesar Rp385.000.000,00. menjadi Rp293.453.210,00. untuk periode 2022 - 2023.

Kata Kunci: pengendalian produksi, peramalan, perencanaan agregat.

ABSTRACT

Sunny Four is a small and medium-sized enterprise (SME) engaged in the home convection industry founded in 2017. Sunny Four Convection is located in Cengkong Persada Housing Block C 11 Number 4, Purwasari District, Karawang Regency, West Java. In recent months, customer demand has experienced a high increase. The company has also received sudden requests from consumers. Based on the results of interviews, it was recorded that in the last 11 months, production activities at Sunny Four cost a high cost of Rp.385,000,000.00. Production planning and control using forecasting methods and aggregate planning, is expected to solve problems and product orders from customers can be fulfilled in a timely manner and can reduce production costs incurred by the company to a minimum. The results of the study showed on forecasting calculations by comparing 4 forecasting methods, namely Moving Average, Weight Moving Average, Exponential Smoothing, and Naive Method, using the POM-QM for Windows application software obtained a forecasting method, namely the Exponential Smoothing method with the analysis of the smallest MAPE error value. For the results of the aggregate planning calculation based on a comparison of 4 methods, it was known that the Workforce Level Strategy method produces the minimum total cost of IDR 293,453,210.00. production planning cost savings of Rp91,546,790.00. namely from the total cost in the 2021 - 2022 period of IDR 385,000,000.00. to IDR 293,453,210.00. for the period 2022 - 2023.

Keyword: *production control, forecasting, aggregate planning.*

KARAWANG