

## BAB 5

### KESIMPULAN DAN SARAN

Pada bab ini memuat kesimpulan dari hasil penelitian untuk menjawab tujuan yang telah ditentukan. Masukan atau saran diberikan sebagai bahan pertimbangan untuk penelitian selanjutnya yang lebih baik.

#### 5.1 Kesimpulan

Berikut merupakan beberapa poin kesimpulan yang dapat ditarik dari hasil penelitian untuk menjawab tujuan penelitian yang ditetapkan.

1. Model persediaan terintegrasi berhasil dikembangkan berdasarkan batasan dan asumsi penelitian yang telah ditetapkan. Aspek *sustainability* dari segi ekonomi dan lingkungan diperhatikan dalam pengembangan model untuk menyesuaikan permasalahan yang sedang terjadi di dunia nyata. Selain itu juga, terdapat sistem alokasi biaya dengan metode *shapley value* yang lebih adil dari pada sistem penelitian sebelumnya karena memperhatikan kontribusi penambahan biaya pada koalisi oleh masing-masing pihak.
2. Perubahan *demand* dapat mempengaruhi keputusan yang diambil untuk meminimasi biaya. Selain itu juga, penambahan/ pengurangan pada nilai *demand* dapat meningkatkan/ menurunkan nilai JTEC dan *shapley value* yang lebih signifikan dibandingkan perubahan *ordering cost*, *holding cost*, dan tingkat barang cacat. Untuk

itu, penggunaan metode *forecasting* dengan akurasi yang tinggi sangat disarankan dalam memenuhi permintaan pelanggan dengan biaya yang minimal.

3. Kapasitas gudang dan modal merepresentasikan kemampuan pihak dalam memenuhi kebijakan pemesanan yang optimal. Hal tersebut berbeda dengan *service level* merepresentasikan kewajiban bagi pihak untuk memenuhinya melalui kebijakan pemesanan yang optimal. Sehingga penentuan kapasitas gudang, kapasitas modal, dan *service level* sangat mempengaruhi kelayakan dari solusi yang dihasilkan.

## 5.2 Saran

Pada sub bab ini memuat beberapa saran yang dapat digunakan untuk penelitian selanjutnya. Berikut merupakan beberapa saran yang dapat dijadikan perhatian untuk kedepannya.

1. Model persediaan terintegrasi memperhatikan batasan yang dimiliki oleh masing-masing pihak baik untuk meminimasi biaya ataupun memaksimalkan profit secara keseluruhan. Batasan yang memiliki variasi tinggi dapat menghambat performansi dalam pencarian solusi optimal seperti ada pihak yang memiliki kapasitas gudang yang tinggi dan rendah. Pihak yang memiliki kapasitas rendah dapat menghambat kemampuan pihak yang memiliki kapasitas tinggi karena perlu menyesuaikan dan dapat meningkatkan biaya keseluruhan. Untuk itu, penyelesaian permasalahan dapat dilakukan dengan metode *clustering* yang tepat bagi pihak yang memiliki batasan yang serupa setelah itu diselesaikan secara independen supaya performansi dalam pencarian solusi optimal dapat meningkat.

2. Pada pengembangan model persediaan untuk kedepannya dapat mempertimbangkan penentuan persentase barang cacat, *lead time*, dan *service level*

yang optimal dalam memenuhi kebutuhan dan meningkatkan kepuasan pelanggan. Selain itu juga, kasus *deteriorating item* dapat diperhatikan untuk persediaan barang yang cepat rusak seperti bahan makanan.



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