

# Analisis perbandingan strategi supply chain antara fuzzy qspm dan fuzzy qfd = Comparison analysis of supply chain strategy between fuzzy qspm and fuzzy qfd

Renan Lintang Prakoso, author

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## Abstrak

Saat ini perusahaan berlomba-lomba untuk meningkatkan kinerja SCM (Supply Chain Management)-nya, karena SC (Supply Chain) adalah salah satu kunci penting dalam memenangkan kompetisi dengan pesaingnya. SC memainkan peranan penting dalam sebuah industry berat, khususnya industry baja, karena perusahaan harus mengelola material, proses produksi dan bahan jadi yang bentuk dan ukurannya berbeda-beda dan dengan jumlah jutaan ton per tahunnya.

Penelitian ini dilaksanakan di PT. Krakatau Steel Tbk, yang lokasinya di Cilegon, Banten, Indonesia yang akan membandingkan hasil prioritas strategi dari 2 metode yaitu metode Fuzzy QSPM (Quantitative Strategic Planning Matrix) dan Fuzzy QFD (Quality Function Deployment).

Pengolahan data menggunakan Fuzzy QSPM mempunyai kekuatan bahwa strategi yang dihasilkan adalah pendapat dari para ahli atau experts yang mengarahkan prioritas strategi SC yang tepat buat perusahaan. Sedangkan pengolahan data menggunakan Fuzzy QFD mempunyai kekuatan bahwa strategi yang dihasilkan adalah berdasarkan apa yang diinginkan pelanggan (Voice of Customer), selain itu pada metode QFD prioritas strategi yang dihasilkan harus memenuhi komposisi dari tingkat prioritas dan biaya implementasi. Metode QFD juga memperhitungkan keterkaitan antar strategi, yang berarti bahwa strategi yang mempunyai keterkaitan dengan strategi lainnya mempunyai skor yang lebih tinggi daripada strategi yang tidak terkait dengan strategi lainnya/independent.

Setelah mempertimbangkan proses pengolahan data yang telah dilakukan dan kebutuhan perusahaan saat ini, maka para ahli memutuskan bahwa perusahaan akan memilih prioritas strategi yang dihasilkan oleh metode QFD, berikut hasil prioritas strateginya :

Rank	Strategies	Crisp Values
1	Inventory Level Control	51.22
2	Increase On Time Delivery Percentage	48.65
3	Increase Production Volume	41.65
4	Arrangement Delivery Transportation & Mode	38.97
5	Human Resource Development	38.56
6	Increase Sales Volume	38.22
7	Arrangement Operation Mode (Energy Efficiency)	27.86
8	Raw Material Fulfillment	25.08
9	Product Diversification	24.95
10	Decrease The Production Cost	24.62
11	Increase Production Quality	12.76

Selain hal tersebut diatas, pada proses perhitungan jarak antara persepsi pelanggan dan persepsi perusahaan terkait kinerja SC, terdapat 2 (dua) kriteria penting yang harus diperhatikan oleh perusahaan, karena perusahaan menganggap kriteria tersebut sudah dicapai dengan baik, tetapi pelanggan menganggap kriteria

tersebut belum memuaskan pelanggan, dua hal tersebut antara lain Complaint Response Management (selisih persepsi 2,00 angka) dan Reject Rate (selisih persepsi 1,42 angka).

.....Currently companies are trying hard to improve their SCM (Supply Chain Management) performance, because SC (Supply Chain) is one of the important keys in winning the competition with its competitors. SC plays important role in a heavy industry, especially for the steel industry, companies have to manage materials, production processes and finish goods that has various shape and size with the number of millions tons per year.

This research was conducted at PT. Krakatau Steel Tbk, which is located in Cilegon, Banten, Indonesia.

This research will compare the results of two methods of strategic priorities, namely Fuzzy QSPM (Quantitative Strategic Planning Matrix) and Fuzzy QFD (Quality Function Deployment).

Data Processing using Fuzzy QSPM has the advantage that the output strategy is the opinion of the experts who directs the SC strategy priorities for the company.

While data processing using a Fuzzy QFD has the advantages that the output strategy is based on what customers need (Voice of Customer), in addition to the QFD has output that the strategic priorities has composition of high the priority levels and implementation cost. QFD method also calculating correlation among the strategies, which means that the strategy is linked with other strategies, they have higher scores than other strategies that are not correlated with other strategies / independent strategy.

After considering the data processing and the company requirements, the experts decided that the company choose the priority strategies generated by the QFD method, and that strategies priorities results, as follows :

Rank	Strategies	Crisp Values
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In addition, the process of calculating the distance/GAP between customer's perceptions and company's perceptions related company SC performance, there are two (2) important criteria that must be considered by the company, because the company judge these criteria have been good achievement, but the customer judge these criteria have not been satisfying, these two things, as follows Complaint Response Management (perceptual difference is 2.00 points) and the Reject Rate (perceptual difference is 1.42 point).