

Analysis of Performance Improvement Factors in Supply Chain Manufacturing Using Analytic Network Process and Kaizen

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Abstract : A company producing drinking water through many incompatibility issues that affect supply chain performance. The study was conducted to determine the factors that affect the performance of the supply chain and improve it. To obtain the dominant factors affecting the performance of the supply chain used Analytic Network Process, while to improve performance is done by using Kaizen. Factors affecting the performance of the supply chain to be a reference to identify the cause of the non-conformance. Results weighting using ANP indicates that the dominant factor affecting the level of performance is the precision of the number of shipments (15%), the ability of the fulfillment of the booking amount (12%), and the number of rejected products when signing (12%). Incompatibility of the factors that affect the performance of the supply chain are identified, so that found the root cause of the problem is most dominant. Based on the weight of Risk Priority Number (RPN) gained the most dominant root cause of the problem, namely the poorly maintained engine, the engine worked for three shifts, machine parts that are not contained in the plant. Improvements then performed using the Kaizen method of systematic and sustainable.

Keywords : analytic network process, booking amount, risk priority number, supply chain performance

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020