## Supply Chain Performance Measurement of Halal Frozen Food using Supply Chain Operation Reference (SCOR) Method

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Abstract. The demand for halal products in the global market is increasing along with the growth of the world's Muslim population. Currently, Indonesia is ranked 4th in the world trade in halal products but is dominated by the consumption sector. To be able to penetrate the global market, the quality of Indonesian halal products must be improved. Performance measurement is carried out to assess how well the achievements have been made. Producers of halal products need to assess how well the performance of halal production has been running so far. This research was conducted at a frozen food producing company located in Deli Serdang, North Sumatra with products such as donuts, rissoles, pao cakes, and kebabs, and the category is a small business scale. In its operational activities, companies tend to pay more attention to aspects of sales and operating income compared to other aspects, even though as a producer of halal products, companies need to take measurements to find out how well the halal guarantee system has been implemented. This study aims to measure the performance of the supply chain of halal production using the Supply Chain Operation Reference (SCOR) method and criteria weighting using the Analytical Hierarchy Process (AHP). This study obtained 58 Key Performance Indicators (KPI) taken from the criteria for the Halal Assurance System (SJH), then normalized the snorm de boer for each Key Performance Indicator (KPI). Next, AHP is weighted at level 1, level 2, and level 3 until the final weight is obtained. Based on the analysis with traffic light system, is categorized as 25 green KPIs, 5 yellow KPIs, and 28 red KPIs with yellow and red KPIs being KPIs supporting the effectiveness of the implementation of the halal assurance system. From the results of the assessment, the final value of performance for the halal supply chain is obtained for frozen food is 77.98 which is included in the good category. The improvements propose to the red and yellow indicators include conducting Halal Assurance System internal training, implementing written procedures, substituting materials that are not yet halal-certified, and carrying out HAS audits.

Keywords: Supply Chain Performance, Halal Supply Chain, Traffic Light System, Frozen Food.