

ABSTRACT

Risk management is an essential business activity for enterprises of all sizes. Enterprises that manage risks effectively will thrive and produce high quality products or services where these are the organizational objectives. The effective implementation of risk management is started by monitoring the risk, conducting a risk assessment, identify and analyze the risk that can be occur, conducting risk evaluation, and providing treatment that suitable to the risk. This research tries to identify the priority of risk that probably occurred in the company by using FMEA supported by a multi-criteria decision making (MCDM) method TOPSIS. This research is conducted in production department of Sogan Batik. Sogan Batik is a batik manufacturing company that located in Sleman, Yogyakarta. In identifying the priority of risk, the research will consider the severity risk level, the occurrence risk level, and the detection risk level. By using the FMEA theory, the 10 risks that obtained by interviewing an expert are scored based on severity, occurrence, and detection level parameter. Then by conducting the TOPSIS method, the risks are ranked based on the risk priority. The result in this research shows that the risk priority from the highest to the lowest rank are delay in supplier delivery of raw material, Lack of raw material inventory, defect on the product, worker accidents, delay in product delivery, similar batik motive in the market, raw material damage in inventory, low durability of machines and defect material from supplier. In the last of this research, the researcher will give some recommendation of actions that can be conducted to minimize the probablity of risk occurring.

Key Words: FMEA supported by TOPSIS, Risk Management, Production Department Risk