Incidents can occur due to decision-making errors, such as not checking the results of one's work or decisions after the work. In order to prevent mistakes in the decision-making process, it is effective to educate and train employees depending on their individual decision-making skills. However, it is not easy to evaluate individual decision-making skill quantitatively. In this study, we model “decision making” not only on judgment and choice as a result, but also on a process that consists of four stages, including the situation awareness before and after the decision is made. On the basis of the model, we develop a method to evaluate individual decision-making skill.