

## Development of Terrorist Threat Prediction Model in Indonesia by Using Bayesian Network

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**Abstract :** There are more than 20 terrorist threats from 2002 to 2012 in Indonesia. Despite of this fact, preventive solution through studies in the field of national security in Indonesia has not been conducted comprehensively. This study aims to provide a preventive solution by developing prediction model of the terrorist threat in Indonesia by using Bayesian network. There are eight stages to build the model, started from literature review, build and verify Bayesian belief network to what-if scenario. In order to build the model, four experts from different perspectives are utilized. This study finds several significant findings. First, news and the readiness of terrorist group are the most influent factor. Second, according to several scenarios of the news portion, it can be concluded that the higher positive news proportion, the higher probability of terrorist threat will occur. Therefore, the preventive solution to reduce the terrorist threat in Indonesia based on the model is by keeping the positive news portion to a maximum of 38%.

**Keywords :** Bayesian network, decision analysis, national security system, text mining

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