



Using Decision Models to Increase Effectiveness of Information Dissemination  
on WWW



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### ABSTRACT

The objectives of this research are to design a Decision Supported Web System (DSWS) using an expert system as a decision model and to integrate it with the web system. This work also evaluates the effectiveness of our DSWS in comparison to that of general web pages. The expert system for the DSWS was developed with Jess 5.0 and integrated into the web system using a CGI program developed in Java with servlet architecture. The DSWS was implemented for Internet Information Service (IIS) webserver and servlet engine utilizing Jrun3.1 (Professional Evaluation version). The content of herbs for primary health care was used as the paradigm for information dissemination.

This research is based on the following assumption: information dissemination on the WWW with the DSWS model is more effective than without the model. This assumption has been proved by our hypothesis testing (Z test) with a positive result. The DSWS appears significantly more effective than the use of general web pages in the following aspect: information retrieval, the decision process, and content of decision features.

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