

**BINUS INTERNATIONAL
BINUS UNIVERSITY**

Major Computer Science
Bachelor of Applied Science (Computer Science)
Semester Even 2010/2011

THESIS TITLE:

**Decision Support System for Stock Market Index by Utilizing Relative Strength Index and
Candlestick Analysis in PT. Mahadana Asta Berjangka**

Ika Yudhistira 1000859915

Abstract

Objectives. Information Technology keep evolving in every aspect of life, one of them is in the financial investment. By using the technology available in the Information Technology (IT), IT professionals can give a price prediction on the upcoming market price to design a stock price prediction model with certain analysis given by the financial analyst. This thesis objective is to analyze the implementation result of using DSS which is developed by utilizing expert analysis in the stock market index

at PT. Mahadana Asta Berjangka.

Method. To do this thesis, the author use research study through the Internet and books. The author also does interviews with trader of PT. Mahadana Asta Berjangka for the analysis in trading and develops the DSS with the analysis given from the analyst to overcome with the current risk they faced while trading.

Results. The implementation design of the DSS is obtain from the trader analysis, when trading in Hangseng Futures Index, to overcome the risk taken from trading without the DSS. The results of the analysis tell that the number of indicator used in the DSS or expert advisor is correlated to the precisions of the DSS when doing transaction at the market. The more indicator used the more precise the DSS will be when trading in the market on making the decision but the frequency of the transaction will be more rarely to happen.

Conclusion. The DSS or Expert Advisor proves to be complimentary solution to reduce the risk in trading. By utilizing analysis into indicator used in the Expert Advisor it is expect to keep the analysis run while trading without disturbance of traders emotional condition and other human error factors.

Key words: Expert Advisor, Relative Strength Index, Candlestick Analysis