

**INFORMATION SYSTEM SUCCESS MODEL EVALUATION
ON SMALL SCALE MEDIUM ENTERPRISES
AT YOGYAKARTA USING DEMATEL AND ANP**

A THESIS

**Submitted in Partial Fulfillment of the Requirement for the Bachelor Degree
Of Engineering in Industrial Engineering**



**VERONIKA PUJIASTUTI
121407088**

**INTERNATIONAL INDUSTRIAL ENGINEERING PROGRAM
DEPARTMENT OF INDUSTRIAL ENGINEERING
FACULTY OF INDUSTRIAL TECHNOLOGY
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IDENTIFICATION PAGE

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submitted by
Veronika Pujiastuti
12 14 07088

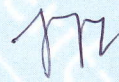
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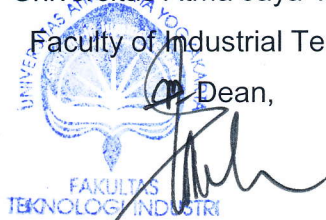


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DECLARATION OF ORIGINALITY OF RESEARCH

I certify that the research entitled "Information System Success Model Evaluation on Small Scale Medium Enterprises at Yogyakarta using DEMATEL and ANP" in this research has not already been submitted for any other degree.

I certify that to the best of my knowledge and belief, this research which I wrote does not contain the works of parts of other people work, except cited in the quotations and bibliography as a scientific paper should.

In addition, I certify that I understand and abide the rule stated by the Ministry of Education and Culture the Republic of Indonesia, subject to the provisions of *Peraturan Menteri Pendidikan Nasional Republik Indonesia Nomor 17 Tahun 2010 tentang Pencegahan dan Penanggulangan Plagiat di Perguruan Tinggi*.

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DEDICATION

The deepest gratitude for generously sharing their wisdom, love, and divinity goes to the author's parents and family, Mr. Jualinus Djemingin and Mrs. Maria Magdalena Wati Rochima. Their love and dedication for the author have been mainly power to support, conduct, and finally finish this research.

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My command is this: Love each other as I have loved you. Greater love has no one than this: to lay down one's life for one's friends.

(John 15:12-13)

Come to Me, all you who are weary and burdened, and I will give you rest.

(Matthew 11:28)

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Finally, the author hopes that this research may give contributions and benefits to the readers.

Yogyakarta, April 26, 2016

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Veronika Pujiastuti

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ABSTRACT

Information system is important to be applied in enterprise system by giving contribution to productivity, quality, and organization competitiveness, especially for Small Scale Medium Enterprises (SMEs), somehow SMEs face some inaccurate data process. In fact, information system success is influenced by many criteria, however there is no finding evaluates criteria correlations. Through information system success model, correlations among criteria can be determined. Therefore, evaluation of information system implementation is important, so that SMEs know how to effectively implement good information system. Information system success model of Sinaga et.al is a new information system model adopting Gable, et.al model and Delone and McLean which have been widely known.

This research adopts information success model of Sinaga, et.al, Gable, et.al, and Pratama. It is conducted by interviewing and observing several Small Scale Medium Enterprises (SMEs) which manually organize the information system in Yogyakarta. First observation is proposed to know criteria correlation impacts by using Decision Making Trial and Evaluation (DEMATEL). The second observation is proposed to evaluate whether SMEs which manually organize information system needs information technology (IT) improvement or not to overcome information problems they face by using Analytical Network Process (ANP).

The research results correlations and priority of IT needs. Furthermore, ANP synthesis shows that the weight of IT's need improvement is 60.7% while the remaining 39.3% denotes SMEs do not need IT improvement. The ANP priority also shows the weight of information system implementation on Finance, Marketing, and Production is 39.1%, 37%, and 23.9% respectively. Moreover criteria of Ease of Use becomes the most important criteria to be concerned.

Keywords: Information System Success Model, Decision Making Trial Evaluation and Laboratory (DEMATEL), Analytical Network Process (ANP), Small Medium Enterprise (SMEs).

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