CHAPTER 1
INTRODUCTION

1.1. Research Background

Small Scale Medium Enterprises (SMEs) have a significant role in supporting economic growth in Indonesia (Irjayanti & Azis, 2012). This statement is supported by Ministry of Cooperation and Small Medium Enterprise of Republic Indonesia data which stated that in 2013 out of 57,900,787 business units in Indonesia, 57,895,721 of them are SMEs covering 57,189,393 units of micro enterprises, 654,222 units of small enterprises, and 52,106 units of medium enterprises. It means that 99% of business units in Indonesia are SMEs which extremely contribute to National income and also absorbed up to 96.99% workers (Depkop, 2012). Moreover Indonesia starts to face ASEAN free trade area which is ASEAN Economic Community in the end of 2015. This condition forces SMEs to efficiently produce competitive products by implementing good management suitable to them. How Indonesia's SME situation is and its performance work out become important things to note. Taking into account this problem, success factors need to be evaluated (Kurniawati & Yuliando, 2015).

Nowadays, capital, lack of technology, and limited knowledge of business management and production become Indonesia's SMEs obstacles to grow (Irjayanti & Azis, 2012). A research of Yogyakarta SMEs conducted by Kurniawati & Yulianto in 2015 stated that the factors such as education, government policy, business competition, and technology are supporting factor that enable SMEs to enhance their competitiveness. Moreover, enterprises currently face fierce competitions to response global markets. In order to strive and meet the ever-changing demands of competitive business (Shih, Lin, Wang, & Hung, 2013), they have to know how to effectively implement good information system by evaluating information system implementation decision making. Information system is important to be applied in enterprise system by giving contribution to productivity, quality, and competitiveness of organization (Gable, Sedera, & Chan, 2003), but there are conflicting result such as incomplete or inappropriate measures success (Delone & McLean, 1992; Delone & McLean, 2003), and myopic focus on Finance performance (Ballantine et al., 1996). Moreover current information system tools as well as techniques of evaluation and design of information systems commonly are not well suitable to the organization needs and operational goals of either small

scale enterprises or large scale enterprises (Thoburn, Arunachalam, & Gunasekaran, 2000). Yet, computerization has not solved all of the information needs of small companies. Indeed, another condition often becomes the case. Information may be entered, processed and circulated by users with uncoordinated ease. Duplication of effort might occur while each user is trying to focus on information by their function, rather than by examination of the needs of primary use (Thoburn et al., 2000). Mr. Muji, Mr. Bandi, and Mrs. Yuni, the owners of Kartika, Warung Perak, and Yoni Arts respectively, commented that receiving clear, detail, and understandable information of design is pretty important. Somehow, in a particular case there are misconceptions of product design due to lack of information technology conveying the information and also missing data for transferring information to financial notes. In addition, Mr. Muji has a desire to improve information systems with internet and computer.

A research conducted by Gable in 2008 for 27 companies in Australia which have implemented SAP R/3 financial part of the company constructed an enterprise information system model. The model is determined by a variety of criteria and dimensions of success. 4 Dimensions and 37 criteria will determine the level of success of the company towards the goals of the company while that study did not represent all conditions that can describe the system in all types of existing businesses, but companies with large scale (Shih et al., 2013). In fact, there are differences types of jobs between large scale enterprise and small medium enterprise. Moreover, research of Pratama (2016) adopted Gable's criteria to be evaluated for manual SMEs by using SEM resulting 29 criteria.

Most organizations invest substantial investment to improve their information system by spending high budget or using complex system relative to the actual needs. However systematic evaluation to measure their success has been few. Either redundant features or complex technology will affect the human resource efficiency and productivity. Therefore, this study is aimed to identify and evaluate interrelation criteria that significantly influence the performance of SMEs in field of Information System. The research is considering researches conducted by Sinaga, et al.,(2015) and Pratama (2016). They already eliminated Gable's information systems success model in case of Australian company (2008), only for either factors that affect or are affected SMEs performance. Research conducted by Sinaga, et al.,(2015) resulted four clusters of information system applied in SMEs which are manually unorganized (Cluster 1), manually organized (Cluster 2), semi

computerized (Cluster 3), and computerized (Cluster 4). Based on Sinaga, et al., (2015) research, one cluster which is manually organized (Cluster 2) is selected to be studied. On the other hand, combining Decision Making Trial and Evaluation Laboratory (DEMATEL) and Analytical Network Process (ANP) could identify interrelation and weights among variables of business performance (Kurniawati & Yuliando, 2015; Sadehnezhad, Zaranejad, & Gheitani, 2013; Shih et al., 2013). This study evaluates interrelations among success criteria of SMEs performance and decide whether SMEs needs technology improvement or not. Previous researches have not evaluated yet using DEMATEL and ANP. Moreover, DEMATEL could identify complex relationships and build a network structure among the factors (Bacudio et al., 2016; Govindan & Chaudhuri, 2016; Kaplanog, Durmus, & Cenk, 2013; Kashi & Franek (2014); Kurniawati & Yuliando, 2015; Quader et al., 2015; Sadehnezhad et al., 2013; Shih et al., 2013) while ANP was used to evaluate information technology needs and also determine criteria weights with dependence factors and feedback (Shih et al., 2013). This research mainly focused on second cluster which manually organize information system located at Yogyakarta Province, Indonesia.

1.2. Problem Statement

There are many information system success model constructed (Delone & McLean, 1992; Gable at al., 2003; Gable, Sedera, & Taizan, 2008; Sinaga et al., 2015) either for small scale or large scale enterprises. However, none of them evaluates interrelation among criteria and weights. Furthermore, some SME's owners commented that receiving clear, detail, and understandable information is pretty important. Somehow, in a particular case there are misconceptions and data miss due to manually transferring the information and lack of information technology to convey information. So that, there is a lack of systematic evaluation to measure information system technology needs through interrelation among criteria and weighted impact with dependence factors and feedback. In addition this research evaluates SMEs second cluster which manually organize information system whether they need information technology improvement or not.

1.3. Research Objective

The research aims to evaluate whether second cluster of SMEs needs information technology improvement or not that ease the employees to work and improve information system. The specific objectives to achieve this main goal are identified as follows:

a. Identify and evaluate interrelation among information system success criteria that significantly influence the performance of manually organized (Cluster 2) SMEs in field of information system;
b. Evaluate the degree of information technology needs in SMEs which manually organize information system (Cluster 2).

1.4. Research Limitation

This study has several limitations as the following issues:

a. This study conducts evaluation of information system implementation performance on SMEs which manually organize information system (Cluster 2);
b. This research adopts Pratama (2016) result;
c. This study is limited by its small sample size of handcraft SMEs located in Yogyakarta province.