FACTORS AFFECTING ACCOUNTING INFORMATION

SYSTEMS SUCCESS IMPLEMENTATION

(An Empirical Study on Central Java Small and Medium Company)

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ABSTRACT

Because of its important role in economics growth, small and medium business enterprises has to increase its capability and human resource in order to win the global competition with foreign economics institution. One technique that can be used to increase its ability and competitive power of small and medium business enterprises is by employing information technologies. With employing information technology, small and medium business enterprises can reduce its production cost and then increasing its profitability and competitive power. Small and medium business enterprises, generally have limited resource if compared with large business. Resource poverty refers to the lack of financial and human resource. Because the lack of financial resource, small and medium business enterprises usually make minimal commitments that are often spread out at different moment in time.

Employing information technologies need more consent than just its implementation, because it didn't had any quantitative measure. With its absent of quantitative measure, effectiveness and efficiency of information system application cannot be measured directly. This condition brings to indirect measure of information system implementation. The information system (IS) success determinants as an indicator of information systems effectiveness are developed relies on a number of theoretical areas including expectancy theory, theory reasoned action, theory of planned behavior, theory of acceptance model, social cognitive theory and innovation diffusion theory. With these theories combination, determinant of IS success is a function of user related variables, management variables, external expertise support, environmental context variables.

From previous analysis using structural equation modeling with Smart PLS, it can be concluded that Management context factor had a positive impact on information system success implementation. User related factor not had significant on accounting information system success implementation. External expertise factor had significant on accounting information system success implementation. Environmental factor had no significant impact on accounting information system success implementation. Management factor had positive impact on user relate factor. Environmental factor had positive impact on user related factor.

Abstraksi

Perkembangan perekonomian dunia yang cepat dan kehilangan batas-batas antar negara menuntut kemampuan yang lebih dari pelaku ekonomi di satu negara. Sebagai salah satu pilar utama dalam perekonomian, usaha kecil dan menengah harus selalu meningkatkan kapabalitas dan sumber daya yang dimiliki untuk dapat bersaing dengan perusahaan asing. Salah satu alat yang dapat dimanfaatkan untuk meningkatkan kapabilitas dan keunggulan kompetitif adalah teknologi informasi. Dengan pemanfaatan teknologi informasi ini maka biaya akan dapat diturunkan sehingga produktifitas akan meningkat. Penerapan sistem informasi pada usaha kecil dan menengah dengan karakteristik yang unik yang tidak dimiliki perusahaan besar menuntut penelitian yang lebih mendalam tentang kesukesan penerapan sistem informasi pada usaha kecil dan menengah. Penelitian ini mencoba untuk meneliti faktor-faktor yang mempengaruhi keberhasilan penerapan sistem informasi akuntansi pada usaha kecil dan menengah di Indonesia. Berdasarkan tinjauan teoritis dan penelitian terdahulu, faktor-faktor yang mempengaruhi keberhasilan penerapan sistem informasi akuntansi pada usaha kecil dan menengah adalah faktor pengguna sistem, faktor manajemen perusahaan, faktor dukungan dan pihak luar dan faktor lingkungan bisnis.

Akan tetapi implementasi sistem informasi dalam bisnis menuntut perhatian lebih dan kehati-hatian karena tidak adanya ukuran yang tidak kuantitatif. Ketiadaan ukuran untuk menilai efektifitas dan keberhasilan penerapan sistem informasi dalam organisasi membuat peneliti menggunakan ukuran tidak langsung yang berupa kepuasan sistem informasi dan inovasi teknologi. Determinan kesuksesan penerapa sistem informasi sebagai salah satu indikator efektifitas implementasi sistem informasi dibangun berdasarkan beberapa wilayah teori yang meliputi teori harapan, teoru tindakan beralasan, teori tindakan terencana, teori model penerimaan, teori kognitif sosial, dan teori difusi inovasi. Berdasarkan teori-teori ini dan penelitian terdahulu, faktor-faktor yang mempengaruhi keberhasilan penerapan sistem informasi akuntansi pada usaha kecil dan menengah adalah faktor pengguna sistem, faktor manajemen perusahaan, faktor dukungan dan pihak luar dan faktor lingkungan bisnis.

Dari hasil penelitian dengan menggunakan sampel penelitian sebanyak 53 responden dengan analisis PLS terlihat bahwa faktor manajemen dan dukungan dari pihak luar memiliki dampak yang signifikan terhadap keberhasilan penerapan sistem. Sedangkan faktor pengguna sistem informasi dan faktor lingkungan tidak memiliki pengaruh yang signifikan terhadap keberhasilan penerapan sistem informasi.

CHAPTER I

INTRODUCTION

1.1. Background

In order to win the competition across nation, a country should response its environmental change with increasing its ability of economics resource. Also, the globalization of the economy has forcing many businesses to change in order to survive (Caldeira & Ward, 2003 in Guinea et al, 2005). The capacity of a national economy to adapt the changing demands has been linked and achieved by flexibility and responsiveness of small and medium business enterprises (Hunter & Long, 2003). Small and medium business enterprises as largest proportion of economics pillar in a country need to response competitive environment facing business. In many countries, small and medium business enterprises has important role in creating employment and supporting economics growth. This condition also exist in Indonesian economy, where small and medium business enterprises has important role in creating employment opportunities and generating income, especially in rural areas (Tambunan, 2000). Because its important role of small and medium business enterprises in supporting economic growth, Indonesian government had to builds and develops the strong small and medium business enterprises in order to win the global competition.

Small and medium business enterprises (SMB) had to develop new business strategies and employ new technologies (Caldeira & Ward, 2003). One of strategies should be chosen was by increasing its competitive advantage, and

decreasing production cost with adopting new technologies. Technical capabilities enhancement of the Indonesian SMB trough a greater and more diffusion of sophisticated technology among them, also the effective way to improve their productivity and competitiveness. In spite of the availability of various government assistance programs including computer technology acquisition and skill enhancement program, the effectiveness of information technology adoption among SMB is also an important tool to enhance SMB capabilities. Because computerized based accounting system can help overcome small and medium business enterprises problem and thereby improve prospect for success (DeLone, 1988), the application of information technology in Indonesian small and medium business enterprises is the only way to increase its productivity.

Information technology that a few year ago was within reach of only large companies can now be employed by number of the smallest, thereby increasing their competitive advantage (Malone, 1986). Information Systems provide an opportunity for business to improve their efficiency and effectiveness and even to gain competitive advantage, (Kimberly & Evanisko, 1981, Porter & Milar, 1985). With decreasing cost and even more powerful user friendly personal computers and better software packages, today the benefits of information system are accessible event to smallest business (Thong, 1999). Yet, while large business have been using computer for some time, small and medium business enterprises have been slow in adopting these technology innovation (Tong et.al. , 1994). This slow adoption is critical issue because small and medium enterprise constitute

over 55, 72 percent of gross domestic products in Indonesian economies (BPS, 2005).

Application of information system in enterprises had been studied extensively in recent years by many researcher. This research is focusing to measure successful application of information system in organization. The adoption of technological innovations may be depicted as three-stage sequence of initiation, adoption and implementation (Thong, 1999). The initiation stage is concerned with gathering and evaluating information about the technological innovation (Thong, 1999). After initiation stage, the next stage is adoption stage with concerned with a decision is made about adopting the technological innovation. When the decision is go a head with this adoption, subject will make implementation involves implementing the technological innovation in the business. After the implementation stage, the final stage is evaluation stage. In this stage, subject will make an empirical evaluation about the information systems had been applied. A concept of IS Success is widely accepted through-out IS research as the principle criterion for evaluating information systems (Rai at al., 2002).

Although many definition and construct had been explored about the component of information systems success and factors affected them, but none direct measure about information systems success its self. According to Sabherwal et al, 2006, information system success constructed from four aspect of information system success including system quality, perceived usefulness, user satisfaction and system usage. Trait & Vessey, 1988, depicted that a system will

perceived successful when system usage increase, when perception of system quality are favorable, or when user satisfy with information they receive increase. DeLone & Mc Lean, 1992 proffered a relational model that interrelates the six variables categories (Rai et al, 2002). The DeLone & McLean's Model is constructed largely form Mason's model, but do not provide empirical validation (Rai et al., 2002).While DeLone & McLean IS success model constructed from system quality, information quality, system usage, and perceived usefulness (DeLone & McLean, 2003). Seddon, (1997) believes that DeLone and McLean's model is too encompassing and introduces some of confusion because it mixes process and causal explanations. A model of information system success proposed by Terry & Standing, 2003 included user satisfaction and organizational impact as a measure of system success. Although many research conducted in IS are about IS success, but the results are inconsistent and an overall synthesis across the numerous empirical studies seems lacking (Rai et al., 2002: Sabherwal et al., 2004). As no consistent IS success definition and measure constructed in IS research, determinant of IS success also inconsistent over the IS research.

The application of computer based information in large organization has been carefully studied and several models of growth has been proposed although its result still inconsistent (Huff, et.al, 1988, Nolan 1973, Saarinen, 1989). However, very little knowledge is known about the evolution of computing in small and medium firm, even though more and more small firms has installed computer or if they already installed, have continued to upgrade (Cragg & King, 1993). Many of information system research is based on application of

information system in large companies, and only a little research had studied application of information system in small and medium business enterprises. Because small and medium business enterprises has different characteristics from large companies, an in depth study about the adoption of information systems in SMB had to be done. Considering small and medium business enterprises characteristics is important to avoid the danger of technical determinism (Plaffenberger, 1991). According to Chih, 1993, small and medium business enterprises should not be thought of as miniature version of large businesses but quite different and unique in their own right.

The concept of resource poverty provides one explanation to this uniqueness (Thong, 1999; Choe, 1996; DeLone,1981; Raymond, 1985) . Small and medium business enterprises, generally have limited resource compared with large business. Resource poverty refer to the lack of financial and human resource (Thong et al., 1994). Because the lack of financial resource, small and medium business enterprises has to make minimal commitments that are often spread out at different moment in time (Guinea et al., 2005; Hunter, 2002). Research conducted by Duxbury, Decady and Tse, 2002 found that the main perceived barriers to implementation computer technologies among Canadian small business were the lack financial resource and skilled personal. Another uniqueness characteristic of   small and medium business enterprises is organizational structure. small and medium business enterprises tends to highly centralized structures with critical role of chief executive officers (CEO), Mintzberg, 1979. With this characteristic, the adoption of information system in small business will

depend on decision of CEO. Consequently, result regarding large business information systems environment may not apply in small and medium business enterprises (Guinea at al., 2005; Ein-Dor & Seger, 1978; Raymond, 1985).

As resulted by prior research, successful information systems is a function of firm size (Lee, 1987; Foong, 1999). According to those research, there is a relationship between information systems success and firm size. With its characteristic of small and medium business enterprises, research conducted in large business will have different impact on small business. Another research conducted in large business resulted that successful information systems depend on MIS function at high organization level (Raymond, 1985) and presence of a systems analyst (Montazemi, 1988). These research indicate that building on internal rather external MIS expertise is important to small organization (Cragg & King, 1993). But as different characteristic of small and medium business enterprises which have a limited resource in expertise employee, small and medium business enterprises chose different strategies. An appropriate vendor choice and better vendor support in information systems application is a critical in small and medium business enterprises.

Another characteristic of small and medium business enterprises is support dependency form environment. Because its limited resource of financial and human resource in small and medium business enterprises has forcing small and medium business enterprises to make minimal commitment. This condition also require supports from another parties in information systems application. As Thong et al., (1993) found that although top management support is important for

IS effectiveness in small, high-quality of external IS expertise is even more critical.

This research is trying to investigate factors affecting information systems application success in small and medium business enterprises. The information systems (IS) success model used was a mixed model from DeLone & McLean, Seddon, and Shaberwal et al.. As DeLone and McLean (1992) proposed, information systems success equation is including of systems quality, information quality, use, user satisfaction, individual and organizational impact. Seddon, (1997), proposed information systems success were systems quality, information quality, perceived usefulness, net benefit to individual, net benefit to organizations, and net benefits to society. The IS success determinant developed relies on a number of theoretical areas including expectancy theory, theory reasoned action, theory of planned behavior, theory of acceptance model, social cognitive theory and innovation diffusion theory. With these theories combination, determinant of IS success is a function of user related variables, management variables, external expertise support, environmental context variables.

1.2. Problem Statement

As DeLone and McLean (1992), Rai et al. (2002), and Sabhrewal et al. (2006) suggest that the observed empirical relationship among the various dimension of IS success might due to the exclusion of the other factor affecting them. By reviewing and examination dimensions of IS success along with the

factor affecting of IS success, could mitigate those problem (Sabhrewal at al, 2004). By including another factors affecting information system success, this research is addressing the following questions:

1. How management variable affecting accounting information system success in Indonesian small and medium business enterprises?

2. How user related factor variables affecting accounting information system success in Indonesian small and medium business enterprises?

3. How external expertise support variable affecting accounting information system success in Indonesian small and medium business enterprises?

4. How environmental context variable affecting accounting information system success in Indonesian small and medium business enterprises?

1.3. Research Objective

As prior research question proposed, this research intended to achieve these following objectives:

- Highlights concept of accounting information systems success and factors influencing in Indonesian small and medium business enterprises;

- Explore how management variables affecting accounting information system success;

- Explore how user related variables factors affecting accounting information system success;

- Explore how external expertise variables affecting accounting information system success

- Explore how environmental variables affecting accounting information system success

1.4. Research Contributions

This research intended to give contributions for many parties concerned with successful adoption of information system in Indonesian small and medium business enterprises. Because many parties concerned with development of small and medium business enterprises especially in information systems adoptions, according its own interest, this research expected to give beneficial contributions to those parties. These benefit is can break downed as follows:

- To provide theoretical contribution about accounting information system successful adoption dimension to information system science;

- To provide practical guidance for accounting information system implementation in small an medium business;

- To provide empirical and practical contributions for organization in effectively applying accounting information system in small and medium business enterprises.

1.5. Structure of Thesis

This research report organized in accordance with academics guidance which divided onto chapters. Chapter I is Introduction. In this chapter, reader will provided with research background, problems formulation research objective and research benefits. Next chapter is chapter II Literature review. This chapter provide literature review included theoretical development and prior research, research framework, and hypothesis development.

The third chapter is research methodology. This chapter presenting research method included research design, sampling method, variable, research instruments, research location, data collecting procedure and analytical technique. The fourth chapter is Analysis. This chapter provide reader with data analysis which included descriptive analysis, statistical analysis and hypothesis testing.

The final chapter is chapter V, Conclusion This chapter presenting discussion, limitation and future development of research and also conclusion concerning the research had been done.