# ACCOUNTING SYSTEM FOR SMALL BUSINESS IN INDONESIA (CASE STUDY CONVECTION BUSINESS IN TINGKIR LOR VILLAGE)

# Endang Haryani,

Faculty of Information Technology Satya Wacana Christian University Indonesia.

#### **ABSTRACT**

SMEs play a very important role in Indonesia's economy and have a great potential for strengthening the real sector in Indonesia. But there has not been no appropriate infrastructure yet which is accounting system to show the business feasibility.

Convection business in Tingkir Lor Village had been started by a family, but has gotten bigger now. This business has many strengths and weaknesses. Based on the condition and background, the proposed-accounting system has been developed. It has been also successfully tested for a month transaction and revised.

Adding knowledge management into accounting system is an alternative way to develop the proposed-accounting system. The four modes of knowledge creation will facilitate the business and its owner to add some modules in accounting system and to reengineer the business process.

Keyword: Accounting System, Small Business, Knowledge Management

#### INTRODUCTION:

Small business plays a very important role in Indonesia's economy, particularly in aspects increased employment, income generating, economic development and non-oil exports increasing (Tambunan, 2009). In addition, this sector is considered as a driving force for the rural economy. But until now there are still many problems to hinder the small business growth. Facts in the Asia Pacific region revealed that Small and Medium Enterprises (SMEs) employ about 60 percent of the workforce. Only 10 percent of the total companies in Asia Pacific which is a big business, the rest are SMEs (Basuki, 2009). For Indonesia, according to BPS data in 2008 the numbers of micro, small and medium enterprises develop into 51.26 million and able to contribute to the total national GDP amounted to 52.7 percent, or approximately Rp 2.609,4 trillion of the total GDP of Rp 4.954 trillion. SME sector is also able to absorb labor force 90.9 million people or 94.4 percent of the total national workforce (KSP, 2010). This shows a great potential and role of SMEs for strengthening the real sector in Indonesia.

The APEC SME Summit 2009 in Singapore noted that the business potential of SMEs in the Asia Pacific region could grow one trillion dollars when all APEC members provide a supportive business climate for these businesses (Basuki, 2009). But this time instead SMEs face barriers impenetrable layer since lacking of facility/infrastructure and legal procedures. Sigi Research and New Services (Kedaulatan rakyat, 1997) stated that SMEs also have to handle internal problems of management, human resources and technology. Without regardless of the other problems, management is still the crucial problem, since it is the root to manage organization. Even the lacking of management is usually a failure reason of business.

Basic problem of management in small business is inability of owners to determine their management style that appropriate with the business need and development stage. In early stage of business, family management style leads to one-man show. According to improvement of business environment, that conventional style could not be pushed longer (Rachmina, 1998). Especially in financial management, the business owners could not be able to separate the financial management of business and family yet. Besides, they have not well planned, managed and reported periodically yet. It is caused by there is no appropriate infrastructure which is accounting system. The impact is that the owners of small business have difficulties to cooperate with external such as bank or another financial institution. The owners have difficulties to show their feasibility business when they want to propose credit or make a business contract with another business.

Based on the importance of an accounting system, this research results a proposed-accounting system which can be applied by owners of small business in Indonesia. The proposed-accounting system is a generic model of purchasing and selling system that should be enhanced according to business need and by refer to the knowledge management approach.

# LITERATURE REVIEW:

#### ACCOUNTING SYSTEM:

According to Gillespie (Mulyadi, 2001), accounting system is an organization of document, form and report which is managed to provide information for management. Based on that definition, elements of accounting system are documents, forms and reports, but still concern with procedure and internal control. Therefore, proposed-elements in this study will refer to it.

#### **SMALL BUSINESS:**

Under the law of Micro, Small and Medium Enterprises (2008), definition of SMEs in Indonesia is explained by the table below. Based on the definition, the research object is categorized as a small business.

TABLE 1. DEFINITION OF SMES IN INDONESIA

Type of SMEs	Number of employee (person)	Sales per year (in Rupiah)	Asset total (in Rupiah)
Micro	≤ 4	≤ 300 million	≤ 50 million
Small	5 – 19	_	> 50 million - ≤ 500 million
Medium	20 – 99	million > 2.500 million - ≤ 50 billion	> 500 million - ≤ 10 billion

#### **SYSTEM DEVELOPMENT:**

System development in this study will follow the three main steps which were stated by Bodnar and Hoopwood (2006):

- a. System analysis:
  - Activities in this stage are initial study, feasibility study, requirement definition, and specification system arrangement.
- b. System design:
  - After finishing system analysis, the next activities are system design, system building and system testing.
- c. System implementation:
  - Based on system testing, a revised system will be established. Finally, system is implemented and operated. At this stage, company will conduct maintenance activity.

# RESEARCH METHODOLOGY:

Since this study wants to develop a proposed-accounting system, "Research and development" approach which is applied in this study is a research program that is followed by a development program (Borg and Gall, 1989). It is a combination of descriptive study that describes the actual phenomenon in an object and exploratory research that develops a proposed-accounting system. A proposed-accounting system is focused on purchasing and selling system since those are the main activities in the business.

The location of this study, convection small business in Tingkir Lor village, was chosen on purpose, because this business in the village has significantly improved in sales and human empowering, also government is paying attention by giving assistantship for both management and technology. Primary data of this study was the results of guided interviews and observation.

Based on the three main steps of Bodnar and Hoopwood (2006), the steps of this study are designed as follow:

- a. Initial study
  - Preliminary research was conducted to comprehend previous studies and literature, guided questionnaire drafting, and convection business understanding.
- b. System requirement defining
  - At this stage, the data was obtained by interview with business owners and observation directly to the business. By understanding the research object condition and background, also the strength and weakness, the accounting system requirement could be defined.
- c. Development of proposed-accounting system
  - At this stage, development of proposed-accounting system was managed by interviews, observation, and group discussion among owners, researcher and government, related to main accounting system elements, which are document, form and report. In its development, knowledge management approach was proposed to use since it can facilitate business daily operation into business standard operation. The result of this stage was a proposed-accounting system.
- d. Testing and implementation
  - Testing was accomplished by implementing the proposed system to handle a month transactions. Owners and their staff used it to run transactions of purchasing and selling for a month. By running the system, problems were found and then they were used to revise the system. At this stage, a revised-accounting system was established.
- e. Conclusions and recommendations
  In the final stage of this study, conclusions and suggestions from all research processes were stated.

#### **RESULT AND DISCUSSION:**

# PROFILE OF CONVECTION BUSINESS IN TINGKIR LOR VILLAGE:

Tingkir Lor village has known as a center of convection business in Salatiga - Central Java which produces house ware convection, such as cover of refrigerator, rice cooker, dispenser, phone machine, and other electronic, tablecloth, bedclothes, and other house ware accessories. But people of village do not know how it can be. There have been tailors in the village since 1945. They used simple machine which be run by hand (sewing machine called onthel in Javanese language). In 1970s Mbah Ijah had opened the way for village tailors to reach PT. Damatex for buying scrap textile as Damatex's waste material. Starting from Mbah Ijah's family until thirteen tailors had an access to PT. Damatex. Each business consists of owner as a manager, employer and also cutting-out workers. All entrepreneurs started their business on their own initiative and none started their business from the legacy of their parents. Most of them graduated from elementary school. Now convection business of Tingkir Lor which is more than 82 business units has an assistantship from Department of Industrial and Trading which has been run by Department of Cooperatives in Salatiga.

#### IMPACT OF NON-EXISTENCE ACCOUNTING SYSTEM:

Record transaction

Not to record transaction

Sales and purchase are the main activities in the business. By interviewing 22 owners which are the dominant owners there, they stated that operation activities such as selling and purchasing have been handled by custom, without accounting system. They do not have any accounting system for handling their transactions. It is showed by there is no element and procedure to form an accounting system. Most of them have not kept and given a transaction document, and also not record a transaction in a form (journal or ledger) (Table 2).

Activities	Purchasing document		Selling document	
	Number %		Number	%
Keep/give document	12	54.55	9	40.91
Not keep/give document	10	45.55	13	59.09

7

TABLE 2. TRANSACTION DOCUMENT AND HANDLING

7

31.81

31.81

68.19

Since there is no accounting system, owners face many difficulties and what accounting information needed to fix the difficulties (Table 3). By discussing with owners, actually they have realized the importance of accounting system, but they have limitation of time, fund, knowledge and ability to make it happen.

No	Difficulties	Information Need
1	Planning	
	# Going concern of business	# Financial report
	# Cash outflow	# Cash
	# Inventory of material and product	# Inventory
2	Management	# Sale
	# Cash inflow and outflow	# Purchase
	# Inventory of material and product	# Cash
	# Sales of credit and cash	# Inventory
		# Receivable
3	Controlling	# Sale
	# Cash inflow and outflow	# Purchase
	# Production continuity	# Cash
	# Sales	# Inventory
	# Credit sales	# Receivable

TABLE 3. DIFFICULTIES AND INFORMATION NEED

# ACCOUNTING SYSTEM ELEMENTS NEEDED:

In order to develop the accounting system for the business, it needs to determine strengths and weaknesses of the business. So that the developed-accounting system will meet the business need.

# **Purchasing System:**

#### Documents

The strength conditions are that 54.55% owners pay attention on the importance of purchase documents and owners realize the existence of documents will lead them for having business documentation. But the rest do not. In order to develop a purchasing system, owners have to ask the invoice from supplier to be filed. By filing the invoice, owners have purchase documentation. Therefore, accounting system will set that the purchase document from supplier has to be kept.

#### • Form

The weakness conditions are that 68.19% owners do not pay attention on transaction recording. If they have a journal or note, it has not enough covered the accounting information and has been mixed by another note. They usually record all transactions in one form. While they realize that they have to spend more time to manage their journal/note. But the strength is that 31.81% owners still pay attention on the importance of recording a transaction. Therefore, accounting system should develop a simple purchase form (journal/ledger).

# Report

Owners have no enough knowledge to set a report. But they realize that they need it to show the business feasibility documentation. Therefore, a developed report should be a recapitulation of purchase transaction, but it will still show the business.

# **Selling System**

#### Documents

The weakness conditions are that 59.09% owners do not pay attention on the importance of sales documents. By adding documents, they will spend more money. But 40.91% owners provide the document to their customer, since based on that they know how well their sales and business. Therefore, accounting system will set that the sales document to customer should be simple and cheap. There is no necessary to separate between credit and cash sales. How to fill the document should facilitate those two sales.

#### • Form

68.19% owners have the transaction recording, but not specific for sales transaction. But the strength is that 31.81% owners still pay attention on the importance of recording a transaction. Actually they have realized that transaction recording is the important documentation to show their business and progress, also to plan and control their business. Therefore, accounting system should develop a simple sales form (journal/ledger).

# Report

Owners also have no enough time to set a report. But they realize that they need it as the business feasibility representation. Therefore, a developed report should be a recapitulation of sales transaction as well as purchase report. Report will be produced only recap of forms.

#### THE PROPOSED-ACCOUNTING SYSTEM:

The proposed-accounting system should be supported by condition and background of owners since those factors will affect on implementing and utilizing the system. Those difficulties in table 3 relate to the owners background and business condition.

# Education level

TABLE 4. OWNERS' EDUCATION LEVEL

Education Level	Number	%
No educated	1	4.54
Elementary	11	50.00
Junior high school	3	14.64
Senior high school	5	22.73
Diploma degree	2	9.09
Bachelor degree	0	0.00

Owners of 69.18% (14 out of 22) have a low level of education (junior high school and below). This weakness leads to an effort to develop an accounting system which should be simple and easy to use.

- Convection business is not a side job for owners.
  - Owners always handle their business seriously and try to improve it. This strength recognises that owners need an accounting system to run their business.
- All business activities have been operated by the owners, exclude production which has run by employees. Owners make decision directly about planning, managing, and controlling of the business. This strength indicate that the developed accounting system should be simple but has a good control system.
- All purchase is cash.
  - Based on the conditions, owners control their cash regardless account payable. Therefore, the developed system should be purchase by cash.
- There is enhancement of purchase and sales system, and also marketing reach.
  - Owners has started to face difficulty to manage their finance since value of transactions has increased significantly. So that, the developed accounting system should fix their finance management difficulty.
  - Based on the impact of the above conditions, the proposed accounting system, especially purchasing and selling system will be explained in three components which are document, form and report (Table 5).

TARLE 5	<b>ACCOUNTING</b>	SYSTEM ELEMENTS

Element of Accounting System	Purchasing System	Selling System
Document	Sales invoice from supplier	Sales invoice to customer
Form	Form of Purchase	<ul> <li>Form of Sales</li> </ul>
	Daily cash form	<ul> <li>Daily cash form</li> </ul>
	Card of material Inventory	<ul> <li>Form of Receivable</li> </ul>
		<ul> <li>Card of finished goods</li> </ul>
		Inventory
Report	Purchase Recapitulation	<ul> <li>Sales Recapitulation</li> </ul>
	Cash report	<ul> <li>Cash report</li> </ul>
Procedures	Purchase procedure	<ul> <li>Sales procedure (credit and</li> </ul>
	Material receiving procedure	cash)
	Cash expenditure procedure	<ul> <li>Inventory recording procedure</li> <li>Cash receive procedure</li> </ul>

# TESTING OF THE PROPOSED ACCOUNTING SYSTEM:

The proposed accounting has been implemented to handle a month transaction. One credit sales transaction and return needs approximately 2 – 4 minutes, and 2 – 3 minutes for cash sales transaction. Relates to fund spending for providing documents and forms, owners need 6 books that can be used for more than a year and one sales invoice book for 25 transactions. It is a low expenditure for owners. Meanwhile, owners conduct their transaction recording and reporting. Since there is not always a transaction in a day, batch transaction recording has been applied. By this possibility, owners have not faced difficulties, they only need more time. Based on the completion, form of purchase and sales could be functioned as a report of purchase or sales (purchase or sales recapitulation).

After finishing a month transaction, owners could handle their transaction well, except for card of material inventory since there is different standard of material usage for each product. It is complicated to have a detail counting. Owners can conduct a physical material audit anytime. But it is possible for having a detail counting for finished goods since it is an obvious flow. Based on the implementation, function of inventory card still can be utilized as a form (journal/ledger).

At the beginning of design, report of inventory and cash is supposed to implement. But then only cash report (on hand) is preferred to apply since inventory movement is clear to report as well as cash report (on bank).

By testing the system, internal control can be showed, especially on inventory and cash. All controlling is conducted by owners. When there is incorrect counting and the difference between form and physical, owner can find out the causes soon. It will lead to achieve the goal of internal control.

#### ADDING KNOWLEDGE MANAGEMENT INTO ACCOUNTING SYSTEM:

Nonaka and Takeuchi (1995) stated that the success of Japanese companies is determined by their skills and expertise on creating their knowledge organization (organization knowledge creation) which is the key of innovative. They also stated that knowledge plays an important role in gaining competitive advantage through continuous innovation. The experience of Japanese companies could be a choice for small businesses in Indonesia to enhance their capabilities.

Documentation is very important in knowledge management, since it is knowledge which could be accessed by anyone and anytime in company (Setiarso et al., 2009). Owners of convection business in Tingkir Lor can utilize media for creating knowledge, such as periodically meeting and group discussion in convection business community (industry), internet and other media, also government regulation and announcement. The four modes of knowledge creation by Nonana and Takeuchi (1995) are applied as follow:

# Socialization

Owners can create company knowledge through meeting in their company or in their community. They should facilitate their staff by face-to-face meeting such as discussion and monthly meeting. Through this meeting, all staff can share their knowledge and experience about business problem and how to handle it. Through sharing knowledge, staff will learn knowledge (information, experience and expertise) from another staff. It will lead to learning process in producing creative and innovative ideas. Conversation in the meeting should be recorded in meeting notes which will be the documentation (explicit form) of knowledge.

# • Externalization

Meeting notes should be re-documented become a set of concept, procedures, manual operation and job description. When it is documented in electric file or database, it will be more useful since it can be published or shared to anyone who related.

# Combination

All documentation should be organized based on separate category in knowledge management system. In this case, the proposed accounting system should be separated into two modules, purchasing system and selling system. Each module consists of concept, procedure, and manual operation. The module becomes a business standard to ensure the same treatment for the same case or transaction. This standard will be a part of data warehouse of the company.

#### • Internalization

Then the standard should be implemented. Everyone in the company must have the standard and learn by doing in order to run it appropriately. Owners can facilitate their staff by training.

#### CONCLUSION AND RECOMMENDATION:

Accounting system is a main part of every company, also small business. Although it must be simple and easy to use, it should be developed appropriately. The proposed accounting system in convection business of Tingkir Lor Village has been set by the strength and weakness of small business and successfully tested for a month transaction to revise the design. There is an alternative way to develop the proposed accounting system which can be approached by knowledge management. The four modes of knowledge creation will facilitate the business and its owner to add some modules in accounting system and to reengineer the business process. By providing accounting system as a business infrastructure, it is supposed to assist small business for achieving competitive advantage.

# **REFERENCES:**

- [1] KSP. (2010). "UKM: Solusi Bertahan dalam Krisis", Kompas 11 January, http://kesehatan.kompas.com/read/2010/01/11/20152012/UKM.Solusi.Bertahan.dalam.Krisis. (Accessed 30 March 2011)
- [2] Basuki, Orin. (2009). "Membantu UKM Menembus Batas", Kompas 19 November, http://bisniskeuangan.kompas.com/read/2009/11/19/06035366/Membantu.UKM.Menembus.Batas (Accessed 30 March 2011)
- [3] Bodnar, George H. and William S. Hopwood. (2006). "Accounting Information System". New Jersey: Prentice Hall.
- [4] Borg, Walter R. and Meredith Damien Gall. (1989), "Educational Research: An Introduction". Fifth edition. New York: Longman.
- [5] Mulyadi. (2001). "Sistem Akuntansi", Yogyakarta: STIE YKPN
- [6] Nonaka, Ikujiro and Hirotaka Takeuchi. (1995). "The Knowledge-creating Company: How Japanese Companies Create the Dynamic Innovation", Oxford University Press, New York.
- [7] Rachmina, Dwi. (1998). "Masalah-masalah di Seputar Usaha Kecil Indonesia, Proceeding Small Business National Conference, Cipanas, 4-6 August 1997", ISEI-KADIN-TAF, Jakarta.
- [8] Setiarso, Bambang, Nazir Harjanto, Triyono, and Hendro Subagyo. (2008). "Penerapan Knowledge Management pada Organisasi", Graha Ilmu, Yogyakarta.
- [9] Sigi Research and New Services. (1997). "Mendorong Memetik Untung Besar", Kedaulatan Rakyat, 6 October, p. 23.
- [10] Tambunan, Tulus T.H. (2009). "UMKM di Indonesia". Bogor: Ghalia Indonesia.
- [11] Ministry of Justice and Human Right. (2008). "Undang-undang Republik Indonesia Nomor 20 Tahun 2008 tentang Usaha Mikro, Kecil dan Menengah". Jakarta



# **ANNEXES**

The generic format of the three elements for the proposed accounting system:

# Form of Purchase

D	ate	Cumplian	Invoice Amoun		Remark
Month	Date	Supplier	Number	Amount	Kemark

# **Card of Material Inventory**

Name of Material:

Date	In	Out	Balance	Remark

# Daily Cash Report (On-hand)

Data	(+) In-flo	W	(-) Out-flo	W	Balance
Date	Invoice/Remark	Amount	Invoice/Remark	Amount	Dalance

# **Sales Invoice**

Store		Number	
		Date	
Unit	Product	Price	Amount
Note		Total	
		Down Payment	
	(Sign)	Balance	

# Form of Sales

Da	te	Customer	Invoice	Amount	Remark
Month	Date		Number		

# **Card of Finished Goods Inventory**

Name of Finished Goods: .....

Date	In	Out	Balance	Remark

# Form of Receivable

	Date	(+) Receivable		(-) Cash receipt for receivable		Balance
		Invoice/Remark	Amount	Invoice/Remark	Amount	
ſ						

# **Cash Report (On Hand)**

Cash Report (On hand) for the ending of month		
Cash,(the beginning of the month)		
Receipt	+	
Available Cash		
Expenditure	-	
Cash, (the end of the month)		