# Accounting Information for Business Decision Making and Performance Assessment in Small and Medium Enterprises（SMEs） 

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## I．Preface

Small and Medium Enterprises（SMEs）have an important role in Indonesia＇s economy．According to Musnandar（2012），the fundamental economy of Indonesia is actually supported by small and medium enterprises （SMEs）．Therefore，the Indonesian economy is relatively stronger than countries that do not have adequate numbers of SMEs．Statistics have shown that in Indonesia，SMEs make up about 99.8 percent of the total number of business units in Indonesia．Approximately 91.8 million people are involved in SMEs， comprised nearly 97.3 percent of the total Indonesian workforce（Musnandar， 2012）．SMEs play a significant role in developing Indonesia＇s economy because they mostly play very strong roles in real sectors．

By considering the importance of SMEs for Indonesia＇s economy，business management of SMEs need more attention．SMEs need qualified information to improve their business．They need accounting information in daily operations management to support their business decision making and performance assessment．Accounting information can help SMEs to operate efficiently and to evaluate their performance．Eventhough accounting has an important role for SMEs，not all SMEs in Indonesia apply accounting in their business．Based on previous researches，according to Kurniawati and Hermawan（2012）69．56\％of

[^0]SMEs had done recording, but only $34.78 \%$ of them made financial statements. SMEs face various hindrances in applying accounting including the educational factor, knowledge factor, and low level of awareness about the importance of accounting (Kurniawati, Nugroho, and Setiawati, 2011). According to Kurniawati, Nugroho, and Umiyarsih (2011), SMEs have document which is useful for transaction record, but the document is not used as a basis for making a report.

Accounting has an important role in recording and reporting process related to business transactions. Accounting has a role to produce information which is useful for business decision making and performance assessment. The accounting information is resulted from financial reporting process. However based on previous researches, not all SMEs apply accounting and do financial reporting in their business. Then how SMEs get accounting information and manage their business? This research will explain what kind of accounting information owned by SMEs and how they use it for business decision making and performance assessment.

## II. Literature Review

## 1. Information

According to Considine, Parkes, Olesen, Speer, and Lee (2010), information is data or facts that are processed in a meaningful form. According to Romney and Steinbart (2012), information is processed data used in decision making. Romney and Steinbart (2012) also stated that benefits of information are: reduce uncertainty; improve decisions; improve planning; and improve scheduling. Necessary characteristics of information are:
(1) Relevant: "The capacity of information to make a difference in a decision by helping users to form predictions about the outcomes of past, present, and future events or to confirm or correct prior expectations."
(2) Reliable: "The quality of information that assures that information is reasonably free from error and bias and faithfully represents what it purports to represent."
(3) Complete: "The inclusion in reported information of everything material that is necessary for faithful representation of the relevant phenomena."
(4) Timely: "Having information available to a decision maker before it loses its capacity to influence decisions."
(5) Understandable: "The quality of information that enables users to perceive its significance."
(6) Verifiable: "The ability through consensus among measurers to ensure that information represents what it purports to represent or that the chosen method of measurement has been used without error or bias."
(7) Accessible: Available when needed (see timely) and in a useful format (see understandable) (Romney and Steinbart, 2012).

## 2. Accounting Information

Warren, Reeve, and Fess (2005) defined accounting as information system that produces reports to the interesting parties about economic activities and company's condition. The primary objective of accounting is to provide information that is useful for decision making purposes. It means that accounting is an information providing activity. Warren, et al. (2005) also stated that the objective of accounting is simply to produce information used by managers to run company's operation. Accounting also gives information to the interesting parties about economic performance and company's condition. According to Considine et al. (2010), accounting's role is to gather data about a business's activities, provide a means for the data's storage and processing, and then convert those data into useful information. An accounting system consists of the personnel, procedures, technology, and records used by an organization (1) to develop accounting information and (2) to communicate this information to decision makers (Williams, Haka, Bettner, \& Carcello, 2008).

Accounting information is raw data concerning transactions that have been transformed into financial numbers that can be used by economic decision makers (Jones, Price, Werner, \& Doran, 1996). Jones et al. (1996) also stated that accounting information is knowledge or news about a reckoning of financial
matters.
Accounting information is central to many different activities within and beyond an organization (Considine et al., 2010). Accounting information is essential to business operations. According to Williams et al. (2008), the types of accounting information that a company develops vary with such factors as the size of the organization, whether it is publicly owned, and the information needs of management. The types of accounting information required depend on the types of business decision made by management. It means that the role of accounting information is assist manager in making business decisions.

Fiorelli, Zifaro (2008) in Handayani (2011), classified accounting information in to three different types according to the benefits for the users:

1. Statutory Accounting Information is the information shall be prepared in accordance with existing regulations.
2. Budgetary Information is the accounting information presented in the form of budget that is useful for internal planning, assessment, and decision making.
3. Additional Accounting Information is other accounting information prepared by the company in order to increase the effectiveness of decision making.

## 3. Small and Medium Enterprises

Based on Indonesian Regulation Number 20, 2008 about Micro, Small, and Medium Enterprises in article 1, the definitions of small and medium enterprises are:
a) Small enterprises is a productive economic activity which is private and owned by an individual, or a business entity that is not a subsidiary or a branch of a company not owned, ruled, or become, directly or indirectly, a part of medium or large business that fulfills the criteria of small business as mentioned in this act.
b) Medium enterprises is a productive economic activity which is private and owned by an individual, or a business entity that is not a subsidiary or a
branch of a company not owned, ruled, or become, directly or indirectly, a part of medium or large business with net worth or amount of annual sales as provided in this act.
According to the same regulation, the criteria for small and medium enterprises are:
a) Small Enterprises:

1. Net asset is more than IDR $50,000,000$ to IDR $500,000,000$, but land and building are not included.
2. Annual sale is more than IDR $300,000,000$ to IDR 2,500,000,000.
b) Medium Enterprises:
3. Net asset is more than IDR $500,000,000$ to IDR $10,000,000,000$, but land and building are not included.
4. Annual sale is more than IDR $2,500,000,000$ to $50,000,000,000$.

## 4. Business Decision

Decision is a reasoned choice among alternatives (Turban and Aronson, 2001). According to Jones and George (2011), decision making is the process by which managers respond to opportunities and threats that confront them by analyzing options and making determinations about specific organizational goals and courses of action. Thus, it can be said that business decision is a reasoned choice among alternatives respond to opportunities and threats that confront them by analyzing options and making determinations about business goals and courses of action.

According to Romney and Steinbart (2012), businesses engage in a variety of activities. Each activity requires different types of decisions. Each decision requires different types of information. Business decision related to what activities will be accomplished as well as what information is needed.

Romney and Steinbart (2012), stated that there is variation in the degree of structure used to make decisions:
(1) Structured Decisions are repetitive, routine, and understood well enough that they can be delegated to lower-level employees.
(2) Semi Structured Decisions are characterized by incomplete decision making rules and the need for subjective assessments and judgments to supplement formal data analysis.
(3) Unstructured Decisions are non-recurring and non-routine decisions. No frame work or model exists to solve such problems. Instead, they require considerable judgment and intuition.

## 5. Performance Assessment

A business manager can assess the business's performance using accounting information. Costs, prices, sales volume, profits, and return on investment are all accounting measurements (Williams et al., 2008). Ratio analysis is one of the best tools of business performance assessment. According to Jackson (2004), each ratio provides a certain kind of information when assessing a company. Ratio analysis involves methods of calculating and interpreting financial ratios to analyze and monitor the firm's performance (Gitman \& Zutter, 2012). The four categories of ratios to be covered are:

- Liquidity ratios measure a firm's ability to meet its current obligations (Gibson, 2011). According to White, Sondhi \& Fried (2003), liquidity analysis measures the adequacy of a firm's cash resources to meet its near-term cash obligations.
- Leverage ratios measure the extent of a firm's financing with debt relative to equity and its ability to cover interest and other fixed charges (Fraser \& Ormiston, 2001).

According to White et al. (2003), long-term debt and solvency analysis: examines the firm's capital structure, including the mix of its financing sources and the ability of the firm to satisfy its longer-term debt and investment obligations.

- Activity ratios measure the speed with which various account are converted into sales or cash-inflows or outflows. In a sense, activity ratios measure how efficiently a firm operates along a variety of dimensions such as inventory management, disbursements, and collections (Gitman \&

Zutter, 2012). According to White et al. (2003), activity analysis evaluates revenue and output generated by the firm's assets.

- Profitability ratios measure the earning ability of a firm (Gibson, 2011). According to White et al. (2003), profitability analysis measures the income of the firm relative to its revenues and invested capital.


## III. Research Method

Population of this research was Small and Medium Enterprises in Central Java, Indonesia. The samplings used convenience sampling method by choosing SMEs according to Indonesian Regulation number 20, 2008 as the samples and are willing to be interviewed and given questionnaires.

From 100 respondents chosen, 20 companies refused an interview and questionnaires, 5 companies did not meet the criteria which stated in the regulation, and so, there were 75 others left which will be researched furthermore. The sampling was based on rules of the thumb mentioned by J. T. Roscoe (1975), that is the adequate sample measurement ranges from 30-500 (Supramono and Utami, 2003).

Data which was used in this research was primary data from interview and questionnaires results which were given to the SMEs managers. The analysis technique is descriptive quantitative analysis technique.

## IV. Data Analysis and Discussion

## 1. Description of the Research Objects

SMEs taken as research object consist of three types of business, which are service, merchandising, and manufacturing business. Most of SMEs are proprietorship companies which is owned by one individual and most of the companies had been established for 10-20 years ( $41.33 \%$ ) (See table 1 and 2 ).

Table 1 Type of Ownership

| Type of Ownership | Quantity | Percentage |
| :--- | ---: | ---: |
| Proprietorship | 73 | $97.33 \%$ |
| Partnership | 1 | $1.33 \%$ |
| Corporation | 1 | $1.33 \%$ |
| Total | 75 | $100 \%$ |

source: modified primary data, 2013

Table 2 Age of Business

| Age of Business | Quantity | Percentage |
| :--- | ---: | ---: |
| $0-10$ years | 17 | $22.67 \%$ |
| $>10-20$ years | 31 | $41.33 \%$ |
| $>20-30$ years | 15 | $20.00 \%$ |
| $>30-40$ years | 7 | $9.33 \%$ |
| $>40-50$ years | 5 | $6.67 \%$ |
| $>50$ years | 0 | $0.00 \%$ |
| Total | 75 | $100 \%$ |

source: modified primary data, 2013

Most of SMEs managers were the owners ( $94.67 \%$ ) and most of them were high school graduates ( $45.33 \%$ ) (See table 3 and 4).

Table 3 Business Manager

| Business Manager | Quantity | Percentage |
| :--- | ---: | ---: |
| Owner | 71 | $94.67 \%$ |
| Employee | 4 | $5.33 \%$ |
| Total | 75 | $100 \%$ |

source: modified primary data, 2013

Table 4 Educational Level of Manager

| Type of Ownership | Quantity | Percentage |
| :--- | ---: | ---: |
| Graduate | 1 | $1.33 \%$ |
| Undergraduate | 27 | $36.00 \%$ |
| High School | 34 | $45.33 \%$ |
| Junior High School | 10 | $13.33 \%$ |
| Primary School | 3 | $4.00 \%$ |
| Total | 75 | $100 \%$ |

source: modified primary data, 2013

Most of SMEs use their own capital as their source of fund (68.00\%) (See table 5). Most of them think that they do not need additional fund from a bank or other financial institution. They assume as long as they have enough income to run the business they do not need any additional fund. On the other hand, some managers have an unwillingness to take risks if one day they do not have an ability to repay their debt because they cannot predict their profit.

Table 5 Funding Sources

| Funding Sources | Quantity | Percentage |
| :--- | ---: | ---: |
| Own Capital | 51 | $68.00 \%$ |
| Own Capital and Bank | 24 | $32.00 \%$ |
| Total | 75 | $100 \%$ |

source: modified primary data, 2013

Most of SMEs do not apply business entity concept in their business (81.33\%) (See table 6). Most of them argued that their business is family business, so they do not need to do so. Even some of them assume that separation between business entity and owner entity will complicate them to use the fund for personal purposes.

Table 6 Entity Business Concept Application

| Apply Business Entity Concept | Quantity | Percentage |
| :--- | ---: | ---: |
| Yes | 14 | $18.67 \%$ |
| No | 61 | $81.33 \%$ |
| Total |  |  |

source: modified primary data, 2013

Most of SMEs used manual system ( $96.00 \%$ ) to record the business transaction and make the report (See table 7). They argue that their business only requires simple recording and reporting. Manual is simpler than the computerized system which need special skill and more expensive.

Table 7 Recording and Reporting Technology

| Technology Used | Quantity | Percentage |
| :--- | ---: | ---: |
| Manual | 72 | $96.00 \%$ |
| Computerized | 3 | $4.00 \%$ |
| Total | 75 | $100 \%$ |

source: modified primary data, 2013

Most of SMEs have transaction, both cash and credit (58.67\%) (See table 8).

Table 8 Type of Transaction

| Transaction Type | Quantity | Percentage |
| :--- | ---: | ---: |
| Cash | 31 | $41.33 \%$ |
| Cash and Credit | 44 | $58.67 \%$ |
| Total |  | 75 |

source: modified primary data, 2013

## 2. Accounting Information Owned by SMEs

Based on the research, SMEs have both, written and unwritten accounting information. The written information which owned by SMEs includes documents, transaction records, and reports. Whereas the unwritten information includes their memories, estimation and third party information they earn from the market, their suppliers and customers.

Most documents owned by SMEs are purchase notes (96.00\%) and sale notes $(76.00 \%)$ (See table 9). Purchase notes are usually used by managers to know their expenditures and the cost of goods sold. For SMEs that purchase on credit, they use purchase notes to know the account payables they have to pay to their suppliers. Sale notes are usually used by managers as sales documents for their customers. For SMEs that sell on credit, they use the copy of the bill to know the account receivables they will receive from their customers.

Table 9 Documents Owned by SMEs

| Documents | SMEs who have <br> documents |  | SMEs who do not <br> have documents |  | Total | Percentage |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Quantity | Percentage | Quantity | Percentage |  |  |
| Purchase Notes (Invoice, Purchases <br> Receipt) | 72 | $96.00 \%$ | 3 | $4.00 \%$ | 75 | $100 \%$ |
| Sale Notes (Invoice, Sales Receipt) | 57 | $76.00 \%$ | 18 | $24.00 \%$ | 75 | $100 \%$ |
| Tax Invoice | 37 | $49.33 \%$ | 38 | $50.67 \%$ | 75 | $100 \%$ |
| Receipt | 24 | $26.37 \%$ | 67 | $73.63 \%$ | 91 | $100 \%$ |
| Delivery Receipt | 18 | $24.00 \%$ | 57 | $76.00 \%$ | 75 | $100 \%$ |
| Purchase Order | 17 | $22.67 \%$ | 58 | $77.33 \%$ | 75 | $100 \%$ |
| Sales Order | 13 | $17.33 \%$ | 62 | $82.67 \%$ | 75 | $100 \%$ |
| Cheque | 13 | $17.33 \%$ | 62 | $82.67 \%$ | 75 | $100 \%$ |
| Debit or Credit Memo | 12 | $16.00 \%$ | 63 | $84.00 \%$ | 75 | $100 \%$ |
| Goods Requisition | 7 | $9.33 \%$ | 68 | $90.67 \%$ | 75 | $100 \%$ |
| Time Card | 5 | $6.67 \%$ | 70 | $93.33 \%$ | 75 | $100 \%$ |

source: modified primary data, 2013

Based on the research, SMEs using different accounting information depends on their business characteristics. Sales information is important information for services, merchandising and manufacturing business, therefore, they require document of sale notes (invoices). Especially for services and manufacturing business, customer order is important information. Therefore, they require document of customer order. Services business also requires document of receipt as proof of payment for their customer.

The results showed that the most transaction records owned by SMEs are transaction records about cash inflows/ outflows (52.00\%) and sales (38.67\%) (See table 10). SMEs who recorded cash inflows and cash outflows, they simply assume that the profit can be estimated from the difference between cash inflows and cash outflows, especially for cash transaction. Sales records are used by SMEs to predict their income and to know what kind of product is demanded by the customer, so they can plan to buy more products. SMEs who sell goods or services in credit, usually they have account receivable records. They will record the down payment from their customer and will receive the rest after they give their goods or complete their services.

Table 10 Transaction Records Owned by SMEs

| Recorded Transaction | SMEs who have <br> transaction records |  | SMEs who do not have <br> transaction records |  | Total | Percentage |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Quantity | Percentage | Quantity | Percentage |  |  |
| Cash Inflows/ Outflows | 39 | $52.00 \%$ | 36 | $48.00 \%$ | 75 | $100 \%$ |
| Sales | 29 | $38.67 \%$ | 46 | $61.33 \%$ | 75 | $100 \%$ |
| Salary Expenses | 27 | $36.00 \%$ | 48 | $64.00 \%$ | 75 | $100 \%$ |
| Inventories | 24 | $32.00 \%$ | 51 | $68.00 \%$ | 75 | $100 \%$ |
| Account Receivables* | 22 | $29.33 \%$ | 53 | $70.67 \%$ | 75 | $100 \%$ |
| Other Operational Expenses | 21 | $28.00 \%$ | 54 | $72.00 \%$ | 75 | $100 \%$ |
| Sales Order | 18 | $24.00 \%$ | 57 | $76.00 \%$ | 75 | $100 \%$ |
| Income/ Outcome | 14 | $18.67 \%$ | 61 | $81.33 \%$ | 75 | $100 \%$ |
| Account Payables** | 10 | $13.33 \%$ | 65 | $86.67 \%$ | 75 | $100 \%$ |
| Purchases | 7 | $9.33 \%$ | 68 | $90.67 \%$ | 75 | $100 \%$ |
| Other Record: |  |  |  |  |  |  |
| Production Schedule*** | 15 | $20.00 \%$ | 60 | $80.00 \%$ | 75 | $100 \%$ |
| Employee Attendance List | 11 | $14.67 \%$ | 64 | $85.33 \%$ | 75 | $100 \%$ |
| Price List | 9 | $12.00 \%$ | 66 | $88.00 \%$ | 75 | $100 \%$ |
| Equipment List | 8 | $10.67 \%$ | 67 | $89.33 \%$ | 75 | $100 \%$ |

* from 75 respondents, only 25 SMEs who have account receivables
** from 75 respondents, only 21 SMEs who have account payables
*** from 75 respondents, only 25 SMEs which are manufacturing business
source: modified primary data, 2013

Based on the research, SMEs need some records which are useful in their business. Record of cash inflows/ outflows and sales are important records for SMEs. Record of cash inflows/ outflows (including sales and purchases transaction) provide the cash availability information, this record is useful to control the efficiency of spending cash. Some of them also have record of income/outcome which is similar with record of cash inflows/ outflows, but it also covers other than cash transaction. Record of sales provides information about the sales and the most demanding product. SMEs need a record of expenses and purchases to help them know the cost of goods sold. Merchandising businesses need a record of inventory to provide inventory availability information. Record of customer order (sales order) is important for business services and manufacturing. This record usually can be used for
planning and production schedules. Record of account payables and account receivables are important for SMEs which are conduct transactions on credit. These records are useful to control their due date. Record of account payables are made per suppliers and record of account receivables are made per customer. These records facilitate managers to manage their cash.

By doing financial reporting, managers can control their business. However, based on this study, only a few SMEs did the financial reporting. The results showed that from all SMEs who had done recording, not all of them made financial statement (See table 11). Only a few SMEs made income statement ( $16.00 \%$ ) and balance sheet ( $13.33 \%$ ). In addition for internal purposes to control their business, SMEs do financial reporting for external purposes to comply requirements from the bank or creditor and for tax purposes. For daily business needs, SMEs made other reports include cash report, expenses report, sales report, purchases report, inventory report, account receivables report and account payables report.

Table 11 Reports Owned by SMEs

| Report | SMEs who make <br> reports |  | SMEs who do not <br> make reports |  | Total | Percentage |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Quantity | Percentage | Quantity | Percentage |  |  |
| Financial Statements: |  |  |  |  |  |  |
| Income Statement | 12 | $16.00 \%$ | 63 | $84.00 \%$ | 75 | $100 \%$ |
| Balance Sheet | 10 | $13.33 \%$ | 65 | $86.67 \%$ | 75 | $100 \%$ |
| Statement of Changes in Equity | 6 | $8.00 \%$ | 69 | $92.00 \%$ | 75 | $100 \%$ |
| Statement of Cash Flows | 5 | $6.67 \%$ | 70 | $93.33 \%$ | 75 | $100 \%$ |
| Other reports: |  |  |  |  |  |  |
| Cash Report | 12 | $16.00 \%$ | 63 | $84.00 \%$ | 75 | $100 \%$ |
| Operational Expenses Report | 10 | $13.33 \%$ | 65 | $86.67 \%$ | 75 | $100 \%$ |
| Salary Expenses Report | 9 | $12.00 \%$ | 66 | $88.00 \%$ | 75 | $100 \%$ |
| Sales Report | 10 | $13.33 \%$ | 65 | $86.67 \%$ | 75 | $100 \%$ |
| Purchases Report | 9 | $12.00 \%$ | 66 | $88.00 \%$ | 75 | $100 \%$ |
| Inventory Report | 9 | $12.00 \%$ | 66 | $88.00 \%$ | 75 | $100 \%$ |
| Account Receivables Report | 7 | $9.33 \%$ | 68 | $90.67 \%$ | 75 | $100 \%$ |
| Account Payables Report | 7 | $9.33 \%$ | 68 | $90.67 \%$ | 75 | $100 \%$ |

[^1]The results showed that most of SMEs only have record of cash inflows/ outflows and/or cash report, it means that they can get information about cash availability that usually provided by Statement of Cash Flows. However the results showed that most of SMEs do not have Income Statement, Balance Sheet, and Statement of Changes in Equity, but they can get accounting information for daily business management. Based on the research, SMEs which do not have Income Statement, they get information of profit from record of sales in comparison with record of expenses, including purchases. Some of SMEs which have only cash transaction they estimate the profit from record of receipts in comparison with record of disbursements. SMEs which do not have Balance Sheet, they get information of asset from record of cash flows, inventory and list of equipment, they also get information of liabilities from record of account payables and bank loan document. SMEs which do not have Statement of Changes in Equity, they estimate the increased equity by increased cash, inventory, equipment, as long as there is no difficulty to pay their liabilities.

Based on the research, the accounting information owned by SMEs can be classified in to statutory accounting information, budgetary information and additional accounting information (See table 12).

Table 12 SMEs Accounting Information Classification

| Accounting Information Classification | SMEs Accounting Information |
| :---: | :---: |
| 1. Statutory Accounting Information (Accounting information shall be prepared in accordance with existing regulations.) | Income Statement, Balance Sheet, Statement of Changes in Equity, and Statement of Cash Flows. <br> (Valid only for Incorporated Company because they comply with Indonesian Regulation Number 40, 2007 which stated that the Board of Directors shall submit an annual report, including the financial statements to the General Meeting of Shareholders. Financial statements consist of at least balance sheet of the current financial year in comparison with the previous year, the income statement of the relevant financial year, the statement of cash flows, and statement of changes in equity, and notes of the financial statements (Indonesian Regulation Number 40, 2007, Article 66 point 2.a.)) |
| 2. Budgetary Information (Accounting information presented in the form of budget that is useful for internal planning, assessment, and decision making.) | Expenses Record and Customer Order (Sales Order). <br> (The expenses record, further used as the basis for budgeting that useful for planning, assessment and decision making) |
| 3. Additional Accounting Information (Other accounting information prepared by the company in order to increase the effectiveness of decision making.) | Record of Cash inflows/ Outflows, Account Receivables, Account Payables, Inventories, Sales, Salary Expenses (including time card) and Price List. <br> (All these records are prepared in order to increase the effectiveness of decision making) |

source: modified primary data, 2013

## 3. Accounting Information for Business Decision Making in SMEs

SME managers need accounting information to support their daily business decision making. Results showed that business decision mostly decided by the owner (94.67\%) (See table 13).

Table 13 Business Decision Maker in SMEs

| Business Decision Maker | Quantity | Percentage |
| :--- | ---: | ---: |
| Owner | 71 | $94.67 \%$ |
| Employee | 4 | $5.33 \%$ |
| Total | 75 | $100 \%$ |

source: modified primary data, 2013

SME managers use accounting information both written and unwritten as the basis for their business decisions (See table 14).

Table 14 Accounting Information for Business Decisions Making in SMEs

| Business Decision | Written Information |  | Unwritten Information |  | Total |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Information | $\mathbf{Q}$ | $\%$ | Information | $\mathbf{Q}$ | $\%$ | $\mathbf{Q}$ | $\%$ |
| Purchasing (When <br> and How Many) | Record of <br> Inventories | 25 | $33.33 \%$ | Memory of the <br> manager about the rest <br> of the inventories, <br> estimation of business <br> needs, physical checks <br> of the inventory | 50 | $66.67 \%$ | 75 | $100 \%$ |
| Determining COGS | Purchase Notes, <br> Price List | 64 | $85.33 \%$ | Memory of the <br> manager about CoGS, <br> estimation of <br> purchasing prices | 11 | $14.67 \%$ | 75 | $100 \%$ |
| Determining Selling <br> Price | Highest Retail <br> Price <br> Determined, <br> Price List, <br> Record of Sales | 30 | $40.00 \%$ | Percentage of the <br> expected profit margin <br> (10-20\%), estimation <br> of market prices | 45 | $60.00 \%$ | 75 | $100 \%$ |
| Servicing and <br> Producing (When <br> and How Many)* | Sales Order, <br> Production <br> Schedule | 20 | $74.07 \%$ | Memory of the <br> manager about <br> customer order | 7 | $25.93 \%$ | 27 | $100 \%$ |

* Only for service and manufacturing business
source: modified primary data, 2013

Based on the table above, for business decisions related with purchasing, SME managers use written information in the form record of inventories, and unwritten information in the form memory of the manager about the rest of the inventories, estimation of business needs, and physical check of the inventory to decide when and how many inventories/ raw material have to be purchased. For business decisions related with determining Cost of Goods Sold (COGS), SME managers use written information in the form purchase notes and price list, and unwritten information in the form memory of the manager about the COGS and estimation of pricing prices to determine the COGS. Meanwhile, to determine the selling price, the SME managers usually use mark-up pricing method, especially for merchandising business they use market price or cost-plus pricing
method. They use written information in the form highest retail price determined by the supplier, price list, and record of sales, and unwritten information in the form percentage of the expected profit margin (usually 10-20\%) and estimated of market prices to determine selling price. SME managers use written information in the form sales order, and production schedule, and unwritten information in the form memory of the manager about customer order to decide when and how many service/ product have to be made. Specifically for manufacturing companies, usually most of them have documents/ records regarding the details of the schedule and the amount of production.

The results showed that daily business decisions made mostly related to purchasing, sales pricing, sales discount, production and payroll, etc (See table 15).

Table 15 Business Decision of SMEs

| Business Decision | Quantity | Percentage |
| :--- | ---: | ---: |
| Purchasing | 68 | $90.67 \%$ |
| Sales Pricing | 36 | $48.00 \%$ |
| Sales Discount | 30 | $40.00 \%$ |
| Production | 25 | $33.33 \%$ |
| Payroll | 15 | $20.00 \%$ |
| Receiving Customer Order | 7 | $9.33 \%$ |
| Hiring Employees | 5 | $6.67 \%$ |
| Sales Promotion | 3 | $4.00 \%$ |
| Product Innovation | 3 | $4.00 \%$ |
| Giving Bonus | 1 | $1.33 \%$ |
| Sales on Credit | 1 | $1.33 \%$ |

source: modified primary data, 2013

Based on the research, business decisions in SMEs can be classified into unstructured decision, semi structured decision and structured decision (See table 16).

Table 16 Classification of Business Decision in SMEs

| No. | Classification of Business Decision | Business Decision in SMEs |
| :---: | :---: | :---: |
| 1. | Unstructured Decision | a. Business Expansion <br> b. Business Investment |
| 2. | Semi Structured Decision | a. Sales Promotion <br> b. Product Innovation <br> c. Bonus for Employees <br> d. Sales Discount <br> e. Target of Marketing |
| 3. | Structured Decision | a. Order Inventories <br> b. Receive Customer Orders <br> c. Pricing Strategy <br> d. Production <br> e. Sales Discount <br> f. Sales on Credit |

source: modified primary data, 2013

## 4. Accounting Information for Performance Assessment in SMEs

Usually companies evaluate their business performance by using financial ratios. The results showed that only $1.33 \%$ SMEs use the financial ratio for evaluate their business performance, they used Return on Investment (See table 18). They usually used information of sales ( $37.33 \%$ ), profit ( $29.33 \%$ ) and quantity of customer order $(16.00 \%)$ to assess their business performance (See table 17).

Table 17 Accounting Information for Performance Assessment in SMEs

| Accounting Information | Quantity | Percentage |
| :--- | ---: | ---: |
| Sales | 28 | $37.33 \%$ |
| Profit | 22 | $29.33 \%$ |
| Quantity of Customer Orders | 12 | $16.00 \%$ |
| Cash Receipts and Disbursements | 5 | $6.67 \%$ |
| Inventory Turn Over | 5 | $6.67 \%$ |
| Other Information | 3 | $4.00 \%$ |
| Total | 75 | $100 \%$ |

source: modified primary data, 2013

Instead of using financial ratio, SMEs have their own benchmarks for assessing their business performance (See table 18). They use information of increased profit/ revenue, sales, customer order and inventory turnover. Managers of SME also have other benchmarks to help them in assessing performance, such as increased of their equipment and supplies, their ability to pay debt, increased of their investment, production, and purchasing. Performance assessment in SMEs is not only measured by the financial side, but also the nonfinancial side, such as increased customer, fulfillment their own target/capacity, increased number of employees, increased owner welfare, customer satisfaction which is measured by increased repeating customer, increased employee benefits and employee's performance which is measured by their attendance.

Table 18 Financial and Nonfinancial Benchmarks for Performance Assessment in SMEs

| Financial Benchmarks | Quantity | Percentage | Nonfinancial <br> Benchmarks | Quantity | Percentage |
| :--- | ---: | ---: | :--- | :---: | :---: |
| Increased Profit/Revenue | 42 | $56.00 \%$ | Increased Customer | 24 | $32.00 \%$ |
| Increased Sales | 36 | $48.00 \%$ | Fulfillment of <br> Target/Capacity | 11 | $14.67 \%$ |
| Increased Customer Order | 27 | $36.00 \%$ | Increased Number <br> of Employees | 10 | $13.33 \%$ |
| Increased Inventory <br> Turnover | 27 | $36.00 \%$ | Increased Owner <br> Welfare | 9 | $12.00 \%$ |
| Increased Equipment and <br> Supplies | 15 | $20.00 \%$ | Customer <br> Satisfaction | 8 | $10.67 \%$ |
| Ability to Pay Debt | 7 | $9.33 \%$ | Increased <br> Employee Benefits | 2 | $2.67 \%$ |
| Increased Investment | 6 | $8.00 \%$ | Attendance of <br> Employee | 1 | $1.33 \%$ |
| Increased Production | 4 | $5.33 \%$ | $5.33 \%$ |  |  |
| Increased Inventory and <br> Raw Material Purchasing | 4 | 1 | $1.33 \%$ |  |  |
| Return on Investment <br> ROI) | 20 |  |  |  |  |

source: modified primary data, 2013

SME managers use accounting information both written and unwritten as the basis for their performance assessment benchmarks (See table 19). Based on the table, SME managers use written information in the form record of sales, income statement, record of cash inflows/ outflows, sales report, record of account receivables, record of inventory and unwritten information in the form estimated sales, estimated profit, cash on hand, memory of the manager about account receivables, and physical check of inventory.

Table 19 Written and Unwritten Accounting Information for Performance
Assessment Benchmark in SMEs

| Benchmark of <br> Performance <br> Assessment | Written Information |  |  | Unwritten Information |  | Total |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Information | $\mathbf{Q}$ | $\%$ | Information | $\mathbf{Q}$ | $\%$ | $\mathbf{Q}$ | $\%$ |
| Increased Sales | Record of Sales, <br> Income Statement, <br> Record of Cash <br> Inflows/Outflows | 52 | $69.33 \%$ | Estimated Sales | 23 | $30.67 \%$ | 75 | $100 \%$ |
| Increased Profit | Record of Sales, <br> Income Statement, <br> Record of Cash <br> Inflows/Outflows | 35 | $46.67 \%$ | Estimated Sales, <br> Estimated Profit | 40 | $53.33 \%$ | 75 | $100 \%$ |
| Ability to Pay <br> Account Payables | Record of Sales, <br> Sales Report | 18 | $62.07 \%$ | Estimated Sales, <br> Cash on Hand | 11 | $37.93 \%$ | 29 | $100 \%$ |
| Ability to Pay <br> Long Term Debt | Record of Sales, <br> Sales Report | 9 | $90.00 \%$ | Estimated Sales, <br> Cash on Hand | 1 | $10.00 \%$ | 10 | $100 \%$ |
| Account <br> Receivables <br> Turn Over | Record of Account <br> Receivables | 8 | $72.73 \%$ | Memory of the <br> Manager about <br> Account Receivables | 3 | $27.27 \%$ | 11 | $100 \%$ |
| Inventory Turn <br> Over | Record of <br> Inventory | 7 | $28.00 \%$ | Physical Checks of <br> inventory | 18 | $72.00 \%$ | 25 | $100 \%$ |

source: modified primary data, 2013
Usually companies evaluate their business performance by using financial ratios, which can be classified into liquidity, leverage, activity and profitability ratios. Instead of use these ratios, manager of SMEs use other information to measure their performance. The results showed that SMEs use availability of cash and ability to pay account receivables on time for measure their liquidity; benefits of long-term debt for business development, profit is greater than
the long-term debt interest, and ability to repay long-term debt and maintain business continuity for measure their leverage; inventory turnover and account receivables turnover for measure their activity; increased sales, increased profit, and level of business efficiency for measure their profitability (See table 20).

Table 20 Financial Ratio in Comparison with Benchmarks Used by SMEs for
Performance Assessment

| Financial Ratio Classification |  | Benchmarks Used by SMEs | Information used by SMEs |
| :---: | :---: | :---: | :---: |
| Liquidity | To measure a company's ability to meet current liabilities. | - Availability of cash <br> - Ability to pay account receivables on time | - Cash on Hand <br> - Record of Sales and Sales Report <br> - Estimated Sales |
| Leverage | To measures how effectively the company is funded by debt. | - Benefits of long-term debt for business development <br> - Profit is greater than the long-term debt interest <br> - Ability to repay long-term debt and maintain business continuity | - Increased Equipment/ Investment <br> - Estimated profit <br> - Record of Sales and Sales Report <br> - Estimated Sales |
| Activity | To measure company's effectiveness to use its fund resources. | - Inventory turnover <br> - Account receivables turnover | - Record of Inventory <br> - Inventory Physical Checks <br> - Record of Account Receivables Collection - Record of Sales |
| Profitability | To measure the effectiveness of overall management, as shown by profit from the sales and investment. | - Increased sales <br> - Increased profit <br> - Level of business efficiency | - Record of Sales and Sales Report <br> - Estimated Sales <br> - Income Statement <br> - Estimated Profit ( $>10-30 \%$ ) <br> - Record of Cash Inflow/Outflows |

source: modified primary data, 2013

## Obstacles

Based on the results of the study (See table 21), most of SMEs (69.33\%) have no problems in recording because they made simple records according with their needs. However, most of SMEs ( $80 \%$ ) have obstacles in reporting. Respondents argue that reporting is time-consuming, it is very complicated, whereas their ability is limited.

Most SMEs taken as research object are managed by the owners, so they handle their business directly. According to them, their business can keep running without accounting. Though they realize that without accounting they have limitation of information to manage their business. To overcome this situation, they always conduct direct supervision, perform a physical check for cash and inventory periodically, as well as optimizing their memory and estimates based on their experience to manage their business. Recording and reporting is required as a control, especially when the business is managed by employees.

Table 21 Obstacles of SMEs in Recording and Reporting

| Obstacles | Yes |  | No |  | Total | Percentage |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Quantity | Percentage | Quantity | Percentage |  |  |
| Obstacles in Recording | 23 | $30.67 \%$ | 52 | $69.33 \%$ | 75 | $100 \%$ |
| Obstacles in Reporting | 60 | $80.00 \%$ | 15 | $20.00 \%$ | 75 | $100 \%$ |

source: modified primary data, 2013

## V. Closing

## 1. Conclusion

The results of this study explains that the accounting information which owned by SMEs in the form of documents, records, and reports. They have purchase and sale receipt as their document, they have record of cash inflows/ outflows and sales also they have simple operational reports, only few of them made financial statement. The results showed that most of SMEs only have record of cash inflows/ outflows and/or cash report, it means that they can get information about cash availability that usually provided by Statement of Cash

Flows. However the results showed that most of SMEs do not have Income Statement, Balance Sheet, and Statement of Changes in Equity, but they can get accounting information for daily business management. Based on the research, SMEs which do not have Income Statement, they get information of profit from record of sales in comparison with record of expenses, including purchases. Some of SMEs which have only cash transaction they estimate the profit from record of receipts in comparison with record of disbursements. SMEs which do not have Balance Sheet, they get information of asset from record of cash flows, inventory and list of equipment, they also get information of liabilities from record of account payables and bank loan document. SMEs which do not have Statement of Changes in Equity, they estimate the increased equity by increased cash, inventory, equipment, as long as there is no difficulty to pay their liabilities. The accounting information owned by SMEs can be classified as statutory accounting information, budgetary information and additional accounting information.

The results showed that SMEs use both, written information and unwritten information for business decision making and performance assessment. They use their memories, estimation and third party information they earn from the market, their suppliers and customers as unwritten information. Managers of SME also have other benchmarks to help them in assessing performance, such as increased of their equipment and supplies, their ability to pay debt, increased of their investment, production, and purchasing. Performance assessment in SMEs is not only measured by the financial side, but also the non-financial side, such as increased customer, fulfillment their own target/capacity, increased number of employees, increased owner welfare, customer satisfaction which is measured by increased repeating customer, increased employee benefits and employee's performance which is measured by their attendance.

## 2. Suggestion

Based on the research, SMEs using different accounting information depends on their business characteristics. SMEs require documents and records
to provide the accounting information that can be used in business decision making and performance assessment. SMEs require document of sale notes (invoices). Services and manufacturing business require document of customer order, services business also requires document of receipt.

Regarding to the ability limitation of SMEs managers, they need a simple bookkeeping which is suitable and easily applied to their business. The results showed that most of the SMEs do not apply double entry bookkeeping, therefore this study suggests recommends some simple basic records that must be owned by the SMEs in the form of a simple single entry bookkeeping in accordance with their own account. SMEs must have at least seven accounts as their business records: (1) cash inflows/ outflows, (2) sales, (3) expenses including purchases, (4) inventory are useful for daily business management; (5) account payables and (6) account receivables are important for SMEs which are conduct transactions on credit; (7) list of equipment are useful for SMEs to keep their fixed asset, must be accompanied with estimation of depreciation expenses to be allocated in the financial period. Record of customer order is additional record which is important for planning and production or service schedules.

## 3. Research limitation

The research limitation is the lack of respondent's transparency and their understanding in answering the questions. Therefore, this study has limitations in the data accuracy and researcher's subjectivity in interpreting the answer of respondents.

## 4. Future Research

Based on this research, the future research can prove that business decision making and performance assessment of SMEs with accounting information is significantly better than those without accounting information.

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# Accounting Information For Business Decision Making And Performance Assessment In Small And Medium Enterprises (SMEs) 

<Summary>

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Accounting information is an important element for a business which is useful for business decision making and performance assessment. The accounting information is resulted from financial reporting process. However based on previous researches, not all SMEs apply accounting and do financial reporting in their business. Then how SMEs get accounting information and manage their business? This research will explain what kind of accounting information owned by SMEs and how they use it for business decision making and performance assessment.

Data taken in this research were from 75 SME using convenience sampling method. Data were gathered through interview and questionnaire to the manager of SMEs in Central Java, Indonesia. The analysis technique is descriptive quantitative analysis technique.

The results of this study explains that the accounting information which owned by SMEs in the form of documents, records, and reports. They have purchase and sale receipt as their document, they have record of cash inflows/ outflows and sales also they have simple operational reports, only few of them made financial statement. The results showed that most of SMEs only have cash inflows/ outflows report, it means that they can get information about
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with their own account. SMEs must have at least seven accounts as their business records: (1) cash inflows/ outflows, (2) sales, (3) expenses including purchases, (4) inventory, (5) account payables, (6) account receivables, (7) list of equipment, accompanied with estimation of depreciation expenses. Record of customer order is additional record which is important for planning and production or service schedules.


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[^1]:    source: modified primary data, 2013

