# **Small Enterprises Development and Using Cloud Computing Concept**

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**Abstract**: This paper presents the financial behavior adjustment of small entrepreneurs by using mental model as a tool. The application of the model starts from employing the left-hand column in preparing questionnaires and then the balance inquiry and advocacy in analysis. It results in a tool in form of cloud computing finance, which is suitable for small enterprises to assist the decision analysis. The results from the research show that it is possible to adjust the behavior because the mental model will be adjusted from the content of used data. The small enterprises where the entrepreneurs are the second generation will be used as a case study. The ladder of inference is introduced as the measuring approach to measure the mental model of entrepreneurs and to compare the presently used financial data and the cloud computing finance. The cloud computing finance is obtained from the analysis of mental model for decision analysis. It is found that the cloud computing finance can adjust the unfavorable behavior for financial data to become the favorable one.

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#### 1. Introduction

Under economic development, the importance of Small and Medium Enterprises (SMEs) is at their roles of creating tremendous economic values including job creation, value adding, and revenue creation. However, SMEs are still lack of their competitiveness development in terms of entrepreneurial results, marketing, management system, capital, product and service development, and personal skill development. They also face limitations of enterprise size, business opportunity, changing and likely occurring situations in the future like natural disasters or AEC integration. All of these may result in SMEs difficulty or even closure. It has been found that the SMEs in Thailand are mostly of small enterprises that are more active than the medium enterprises both in terms of new establishment and business closure in each year.

The report of the SMEs situation in 2010 from the office of SMEs promotion shows that the total number of the enterprise in Thailand was 2,924,912 as of the end of 2010. The number of medium and small enterprises was 2,913,167 which were 2,894,780 small enterprises and 18,387 medium enterprises. The number of large enterprise was 9,140. The number of medium and small enterprises was 99.6% of the total number of enterprise.

When the classification is made according to enterprise groups, it is found that 1,383,391 medium and small enterprises are in the group of trading and maintenance, which is 99.7% of the trading and maintenance enterprises in Thailand. 983,610 medium and small enterprises were in the service sector, which

was 99.7% of the service enterprises in the country. 545,098 medium and small enterprises were in the manufacturing sector, which was 99.2% of the manufacturing enterprises in Thailand. With respect to the size of enterprise, it is found that 1,378,060 small enterprises were in the sector of trading and maintenance or 47.6%. The 976,503 small enterprises were in the service sector, which was 33.7%. The 539,152 small enterprises were in the manufacturing sector which was 18.6%. The 5,331 medium enterprises were in the sector of trading and maintenance, which was 29.0%. The 7,107 medium enterprises were in the sector of service, which was 38.7%. The 5,946 medium enterprises were in the sector of manufacturing, which was 32.3% With respect to the sectors, 1,383,391 SMEs or 47.5% were in the sector of trading and maintenance. The 983,610 SMEs or 33.8% were in the sector of service. The 545,098 SMEs or 18.7% are in the sector of manufacturing.

When classification is done with regarding to provinces, it is found that Bangkok had the highest number of SMEs in 2010 which consisted of 573,634 SMEs or 19.7% of the total number. The second next province is Cholburi which had 92,605 SMEs or 3.2%.

With respect to the provincial group, it is found that the middle north-eastern provincial group consisting of Kalasin, Konkaen, Mahasarakam, and Roi-ed had highest number of SME which was 220,628 or 7.6 of the total number of SMEs. The next group was the lower north-eastern provincial group

which included Chaiyapoom, Nakorn Ratchasima, Buriram, and Surin had 214,665 SMEs or 7.4% of the total number.

In terms of job hiring in Thai enterprise as of 2010, the total number of job hiring was 13,496,173 which included 2,988,581 large enterprises and 10,507,507 SMEs or 77.86% of the total number. The small enterprises had the highest proportion of 66.72% and comprised 85.70% of SMEs.

When the job hiring in SME is classified according to crucial economic activities in 2010, the highest number of job hiring was in the service sector, which was comprised of 3,764,118 SMEs, then the manufacturing sector, and the trading and maintenance sector, respectively. However, when considering the job hiring of SMEs in 2010, it can be seen that the trading and maintenance sector accounted for 30.03% of all SMEs job hiring while the service sector has the highest number of job hiring which was 35.82% of the total number.

In addition, it is found that there were 50,776 newly established enterprises in 2010, which increased by 9,556 from the year of 2009 or 23.2%. With respect to the enterprise closure in 2010, the number was 40,887 which reduced from the year of 2009 by 22,120 or 35.1%. For newly registered legal entities, the top 5 business sectors in 2010 are service entertainment sector with 5,637 legal entities having registration capital of 3,580 million baht, then general contractor sector with 4,855 legal entities having registration capital of 42,984 million baht, and property sector with 2,650 legal entities having registration capital of 27,434 million baht, respectively. The top 5 closing business sectors include general building construction with 1,768 legal entities having registration capital of 3,854 million baht, then property sector with 640 legal entities having registration capital of 7,664 million baht, and other business service sectors with 771 legal entities having registration capital of 1,502 million baht), respectively.

Table 1. Established and closing enterprises from 2008 – 2010.

SMEs Role in Thai Economy	2008	2009	2010
Number of SMEs (Unit)	2,827,633	2,896,106	2,913,167
New SMEs Startup (Unit)	42,745	41,220	50,776
SMEs Business Dissolution(Unit)	30,810	63,007	40,887

From Table 1, it is found that SMEs have been increasing in the number every year from 2008 to 2010 because there were newly established enterprises. However, there is a number of closing enterprises every year too. When comparing among the closing enterprises in those 3 years, the highest number of closing enterprise is in 2009, which is 63,007(OSMEP, 2011).

The importance of SMEs for Thai economy and society is at their role of creating tremendous economic values including job creation, value adding, and revenue creation. The roles are versatile, which includes manufacturers, distributors, and service providers. SMEs are the entrepreneurs that are responsible for creative and facilitating activities to economic transaction. SMEs, however, faces several problems as follows:

Marketing problem: SMEs mostly response only the demand of local or domestic markets. They are lack of marketing knowledge in open markets, especially foreign markets.

Financial accounting problem: SMEs face the problems of loan from financial institutions for investing or expanding their investments, or managing their cash flows. These are due to the lack of systematic accounting.

Labor problems: There are high rates of turn-over of labor forces. The quality of labor forces is not uniform and the development is not continuous. Consequently, the efficiency of production and the quality of goods are affected.

Management problems: SMEs are lack of management knowledge or systematic management. The management is based on the experience of trial-and-error.

Manufacturing technology problem: SMEs apply simple manufacturing technology because the investment is low and the entrepreneurs as well as workers are lack of basic knowledge which supports modern technology. The development of product forms and of good quality standard is thus affected (OSMEP, 2010).

Definition of SMEs according to the regulation of industry minister, dated September 11, 2002, defines the size of SMEs based on job hiring or fixed assets, whichever lower. SMEs are divided into 4 types as follows.

The manufacturing business with labor forces not more than 50 persons or fixed assets excluding land not more than 50 million baht is small enterprises. The manufacturing business with labor forces from 51 to 200 persons or fixed assets

excluding land more than 50 million baht but not more than 200 million baht is medium enterprises.

The whole-sale business with labor forces not more than 25 persons or fixed assets excluding land not more than 50 million baht is small enterprises. The whole-sale business with labor forces from 26 to 50 persons or fixed assets excluding land more than 50 million baht but not more than 100 million baht is medium enterprises.

The retail business with labor forces not more than 15 persons or fixed assets excluding land not more than 30 million baht is small enterprises. The retail business with labor forces from 16 to 30 persons or fixed assets excluding land more than 30 million baht but not more than 60 million baht is medium enterprises.

The service business with labor forces not more than 50 persons or fixed assets excluding land not more than 50 million baht is small enterprises. The manufacturing business with labor forces from 51 to 200 persons or fixed assets excluding land more than 50 but not more than 200 million baht is medium enterprises (OSMEP, 2001).

From the introductory part addressed above, SMEs introduces the framework of knowledge management to analyze the problem in financial accounting which is one of the SMEs problem and affect the enterprise management as well as the accessibility to financial sources. The questionnaires focusing on the application of financial data to the decision analysis of 20 SMEs in Bangkok and Greater Bangkok indicate that 4 enterprises have employed the data for the purpose. All of these 4 enterprises are of medium enterprises the remaining 16 ones are of small enterprises. The data of small enterprises that do no employ the financial data in their decision analysis. It is found that the owners are the second generation graduating in MBA with technology knowledge. The ages are not more than 40 years.

There are presently organizations from government, private sectors, and financial institutions that assist and promote the transfer of knowledge about financial tools and programs. Purposely, it is for small enterprises to apply these facilities in their decision analysis for solving the business problems. When the framework of knowledge management is applied to analyze the problems, it is found that the cause of not using the financial data is the mental model of the entrepreneurs.

The theory and research related to the solution of the financial accounting problems in Thai small enterprises will be next introduced. Then the form and tool that are employed to adjust the behaviors of small enterprise entrepreneurs so that they use the financial data in decision analysis will be

described. The case study and conclusion of the research will be next explained, respectively.

#### 2. Theory and Literature Review

Knowledge Management (KM) is referred to as the collection of knowledge bodies that exist in an organization. The knowledge bodies which are distributed in persons or document. The collected knowledge is then developed into a system so that everyone in the organization can access it and developed oneself to be knowledgeable and to be able to efficiently work. Consequently, the organization is highly competitive (Drucker, 2001).

The process of knowledge development in an organization starts from processing all data from its operation. The IT system will process numeric or strings to be information in order to use for operating, solving problems, and making decision. The workers will screen the information and look at the details. Such an application leads to knowledge of causes and effects in the work and to efficiency in working. The most suitable approaches can be selected for efficient working (Senge, 1994).

The proof of mental model will start from changing internal thinking, learning to perceive fact in order to examine it, accept right things, to make use of it. It is performed by separating the meanings of data from the data used in work. Tests are carried out to validate whether they are true or not. The ice breaking is performed by the method of left-hand column. New principles are established, including the principles for separating beliefs from explainable and provable matters, the principles of ordering and reasoning, the principles of balance inquiry and advocacy for arguing or performing and applying essences (William and Brandt, 2013).

Left hand column is a tool to search thinking and feeling in communication participating. The technique can be used to reflect past communication or to prepare for future communication. The right hand side is the viewpoint of conversation. The left hand one is the viewpoint of thought or feeling of the writer (Isee System, 2006).

Balance inquiry and advocacy is the tool that efficiently makes a person reveal his/her thought. It can be used with other people for such a purpose too. The balance inquiry and advocacy that are balanced in both parts will have details as follows. The method can explain thinking, give examples, seek other viewpoints, probes thinking, and encourage challeges (Isee System, 2006).

The ladder of inference which depends on the individual internal belief such that the map of the reality is the truth, and the truth is obvious (Senge, 1990). The sequence in the ladder of inference is as follows:

- Data perception from sensory organs.
- Select the data from the observations.
- Extend the meaning of data.
- Hypothesize the selected data.
- Make conclusion from hypothesis.
- Introduce belief in order to select the corresponding data.
- Applying the obtained data.

Cloud computing is a type of working by computer users via an internet. The internet will provide a kind of service to users. The service provider will allocate its resources to the users. Cloud computing is an extensive development from the concept of virtualization and web service, which the users are not necessarily knowledgeable in terms of technical subjects for its application (Baburajan, Rajani, 2011).

The financial problems of small entrepreneurs have been alleviated by several authorities as follows:

Government authorities have initiated a number of assisting projects. For example, the department of industry promotion, minister of industry introduces a pilot project, namely "The project of industrial competitiveness development using IT", based on the budget in the fiscal year of 2009 (from October 2008 to September 2009). The objective of the project is to stimulate the use of web-based application software for the management of enterprises (DIP, 2011).

The project of New Entrepreneur Creation is hosted by the department of industry promotion and is in collaboration with other government authorities. The project combines the expertise in promoting the development of entrepreneurs with the marketing, finance, investment and other related activities. It is aimed to support the educated and experienced persons as well as capable persons to become new entrepreneurs that they can successfully establish and continuously run their business (DIP, 2012).

Kasikorn Thai Bank organizes a K-SME Care project, namely the project of sustainable management of SME entrepreneurs, based on the importance of SME. The project is aimed at developing Thai SME entrepreneurs to be capable and to have a robust and sustainable growth.

The project is collaborated by country-wide leading academic institutions. The focus of the project is at promoting knowledge and creating business networks for SME entrepreneurs apart from providing only financial support. This is because of the desire to take part in the fostering and development of SME

capabilities, thus leading to limitless growth of business.

The project organizes the learning in form of lecture and experience sharing by leading businessmen and reputable lecturers in various areas including tax management, human resource management, out-of-box thinking, and leadership with organization management, as well as the learning by doing. The learning by doing is focused on case studies and business games, with the emphasis to enhance the decision making skill (K-SME, 2012)

The description above shows that the government authorities provide support in terms of policy. However, the policy is not successful. The integration of private sectors, e.g. financial to promote and institutions. support entrepreneurs in terms of consultancy, training, or providing service of financial accounting software, is still not convincing them in employing their financial data to support the decision making. It is due to the problems of behaviors and mental models of small entrepreneurs against financial data. The KM of this research proposes cloud computing finance as a means of problem solution by adjusting the mental models of small entrepreneurs.

### 3. Research Methodology

The literature review above can be concluded to a conceptual framework as shown in Figure 1, which shows the conceptual framework as depicted in Figure 1 shows that whether an entrepreneur of small enterprise will make use of financial knowledge in the decision analysis or not depends on the mental model. The left hand column is introduced as a technique to search for the entrepreneur requirement about the financial data. The balance inquiry and advocacy is then applied to build the cloud computing finance which is suitable to the small enterprise. The result is verified by the ladder of inference in such a way that the cloud computing finance can adjust the unfavorable behavior of the entrepreneur to the favorable one and the knowledge about the financial data is then used in the decision analysis.

The left hand column is used in the questionnaire from which the results indicate that the entrepreneurs of small enterprises do not use the financial data in the decision analysis. The decision in business is made based on their experiences and habits. The reasons of such behaviors, which obtained via the questionnaires, are the lack of knowledge, the financial matters are too difficult, the lack of tools, the high cost of tools, the lack of knowledgeable personnel in finance.

#### 7. actions SE Owner 6. beliefs Balance 5. conclusions Left Hand Inquiry Cloud Column & 4. assumptions computing Advocacy 3. meanings Architecture Think Do 2. data 1. observable

Ladder of Inference

Figure 1. Concepttual Framework

Regarding to the financial activities, the entrepreneurs are simply the checking of account balance, which is not enough for the information about the present financial status of the enterprise. Such data is not useful for the organization decision. They know that they must be at least informed of financial data and use the data for the decision analysis of the income-expense of the enterprises, the results of doing business (profit or loss), the costs, the cash flows, and the business liquidities. It also finds out that the entrepreneurs want to know the financial models which must be simple, convenient, rapid, and correct in using.

The data from the questionnaire is analyzed by the balance inquiry and advocacy, and then is used in constructing the Knowledge Management System, which is suitable for the entrepreneurs of small business. The balance inquiry and advocacy is applied via an application software that contains the following

- It explains thinking in form of table, graph, chart, and information.
- It gives examples that explain what are good and bad, and how to do good things.
- It seeks the other viewpoints. Knowledge and interesting subjects are provided in the knowledge base.
- It probes thinking from the received data from which the users can make use of and thus improve their activities.
- It encourages challenges by using notification agent, color warning, sound and picture.

The KMS based on the answers from the questionnaires are used for constructing the application software with the following features.

- It must be simple and provides problem aspects, solutions, and explainations.
- It must be convenient and applicable to any device, e.g. PC, notebooks, tablets, and mobiles.
- Cloud computing stores data and KMS process it.
- It must be useful and correct in decision analysis.
- It must support investment, e.g. loan making from banks, seeking new shareholders, etc.

The requirements are summarized in Table 4.

Table 2 shows the requirements of small-enterprise owners in terms of financial data. In the first part, it is the requirement of the financial data for analysis of business decision. The second part is the requirement of the financial data in view of financial institutions. The last part is the requirement of other functions in the application software, e.g. webboard, chat, PR news, knowledge base, and links to financial units. The constructed KMS is the cloud computing finance and it is an application software which is applicable to PC, notebooks, tablets, and mobiles. The application software can present data in form of notification agent, digital, information, graph, chart, note, color warning, sound and picture. KMS provides the financial models of incomes, expenses, costs, profit and loss account, financial status account, and cash flow account, as well as financial analysis. The constructed KMS is the cloud computing finance and it is an application software which is applicable to PC, notebooks, tablets, and mobiles. The application software can present data in form of notification agent, digital, information, graph, chart, note, color warning, sound and picture. KMS provides the financial models of incomes, expenses, costs, profit and loss account, financial status account, and cash flow account, as well as financial analysis.

Table 2. Configuration of cloud computing finance according to the desire of the entrepreneurs of small enterprises.

Requirements from Questionnaires	Function	Behavior Adjustment Methodology
What kind of financial data do you wan	t to use for the analysis and decision makir	ng of your business?
Actual Income and Expenditure	Revenue – Expense Record	Numerical data with explanation helps
	Cash	understand easily. There is an alert to
	Cheque	stimulate the perception.
Profit or Defictit of Business	Income Statement	Numerical data, graph with monthly,
	Sales	quarterly, mid-year, and annual
	Costs	comparison. The comparison in
	Outgoings	every three years is also needed. The
		explanation is desired.
Utilization of assets, liabilities, and	Balance sheet	Numerical data, graph with monthly,
capital	Assets	quarterly, mid-year, and annual
	Inventories	comparison. The comparison in
	Liabilities	every three years is also needed. The
	Debtor	explanation is desired.
	Creditor	
	Equity	
Liquidity	Cash Flows Statement	Numerical data, graph with monthly,
	Operating activities	quarterly, mid-year, and annual
	Investing activities	comparison. The comparison in
	Financing activities	every three years is also needed. The
		explanation is desired.
Requirements for Loan from Bank		I .
Financial Analysis	Ratio analysis	Numerical data, graph with monthly,
	Liquidity	quarterly, mid-year, and annual
	Asset Management	comparison. The comparison in
	Debt Management	every three years is also needed. The
	Profitability	explanation is desired.
	Market Value	
Requirements for Other Functions	1	1
Wabboard	Question&Answer (Guru)	Knowledge Transfer and Sharing
Chat	Communication between Small-	Data Communication
	Enterprise Owner and Cloud Agent	
PR News	News about Finance and SME	Interesting and Updating News
Knowledge Base	Finance and Loan Knowledge	Knowledge Transfer
Link	Financial Units like Banks and	Links to Interesting Units
Lille	Financial Institutions	Lanes to interesting Onits
	I mancial historichis	

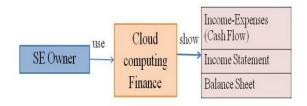


Figure 2. Financial Report For Small Enterprise

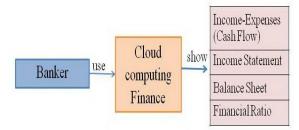


Figure 3. Financial Report for Loan

## 4. Case Study

The first case study verifies what small enterprises require from the financial data in decision analysis. Figure 2 shows the format of the financial report which is necessary for the entrepreneurs of small enterprises. This format is applied to the report format on the cloud computing finance. Accordingly, the entrepreneurs must know the data of income-expense of business (which can be read from the daily record or from the

statement), sales, costs, expenses(cash Flow) and profit-loss, and liquidity. The second case verifies what small enterprises require in order to make loans from financial.

Figure 3 shows the format of the financial report which is necessary for making loan from financial institutions. This format is applied to the report format on the cloud computing finance. Accordingly, it must contain the data of incomeexpense (cash flow) of business, profit-loss, and liquidity. In addition, the financial status and analysis are required. The use of the cloud computing finance in the decision analysis is analyzed via the ladder of inference methodology. The ladder of methodology is used in verifying the mental model of the entrepreneurs of small enterprises by comparing the existing use of financial data and the use of cloud computing finance. The results from the left hand column-based questionnaire are analyzed. The balance inquiry and advocacy is used to construct the KMS which is suitable for the entrepreneurs of small enterprises. The KMS is aimed at adjust the unfavorable mental model of the entrepreneurs. It is an application of inquiry and advocacy in form of software. The analysis behavior follows the ladder of inference. The ladder of inference, analyzes the use of financial report in small enterprises, the results of which are shown in Table 3-

Table 3. Ladder of inference for analysis of behavior in using income-expense report in small enterprises.

Ladder of Inference	Income-Expense(Cash Flow)	
Small Enterprise	Unfavorable Behavior	Favorable Behavior
		(Basic Accounting)
Observable	Book bank, Statement	Report of income-expense voucher
Select data	List of Daily Income-Expense	List of Daily Income-Expense
Add meaning	Balance in Account (High-Low)	Balance in Account (High-Low)
	Frequency of Flow in Income-Expense	Amount of Income-Expense
Make assumption	None	Basis Amount of Money in
		Account
Develop conclusion	There is money in account.	There is enough money for
		expense.
Create/support beliefs	Payable	Payable
Take action	Payment Action	Payment Action

The analysis of unfavorable behavior according to Table 3, based on the ladder of inference reveals the details in each step as follows:

- The step of observable is that the entrepreneurs look into the book bank or statement in each day.
- The step of data selection is that the entrepreneurs look into the list of daily income-expense.
- The step of adding meaning is that the entrepreneurs look into the amount of money in the accounts (high-low) and the frequency of the flow in income-expense.
- There is no step of making assumptions.
- The step of developing conclusion is that there is money in accounts.
- The step of creating/supporting beliefs is that it is payable.
- The last step is the step of taking action. The entrepreneurs will make payment or allow the cheque payment.

It is found that there is no assumption made at the step of making assumption in case of unfavorable behavior.

The analysis of favorable behavior according to Table 3, based on the ladder of inference, reveals the details in each step as follows:

- The step of observable is that the entrepreneurs look into Report of income-expense voucher.
- The step of data selection is that the entrepreneurs look into the list of daily income-expense.
- The step of adding meaning is that the entrepreneurs look into the amount of money in the accounts (high-low) and the amount of income-expense money.
- The step of making assumptions is that the entrepreneurs can make the assumption about the basis amount of money required in the accounts. For examples, there must be the basis amount more than the amount waiting for payment at least two times.
- The step of developing conclusion is there is money enough for the required payment..
- The step of creating/supporting beliefs is that it is payable.
- The last step is the step of taking action. The entrepreneurs will make payment or allow the cheque payment.

The step of making assumption in the favorable behavior certainly affects the business. If there is no such basis amount of money in the account, it is not possible to make payment. The money must be urgently deposited to the account, otherwise the problem of not enough money for payment can happen.

Table 4: Ladder of inference for analysis of behavior in using results of business operation (profit-loss) in small enterprises

Ladder of Inference	Results of Business Oper	Results of Business Operation (Profit-Loss)	
Small Enterprise	Unfavorable Behavior	Favorable Behavior	
		(Basic Accounting)	
Observable	None	Income Statement	
Select data	None	Sale, Cost, and Expense	
Add meaning	None	Analysis of Sale, Cost, and Expense	
Make assumption	None	Business has profit and no loss.	
Develop conclusion	None	Profit	
Create/support beliefs	None	Good Business Operation Results.	
Take action	None	Use of Data in Decision Analysis	

The analysis of unfavorable behavior according to Table 4, based on the ladder of inference reveals the details in each step as follows:

- There is no step of observable.
- There is no step of data selection.
- There is no step of adding meaning.

- There is no step of making assumptions.
- There is no step of developing conclusion.
- There is no step of creating/supporting beliefs.
- There is no step of taking action.

It is not possible to know whether the business has profit or loss in case of such an unfavorable

behavior. On contrary, the analysis in case of favorable behavior, confer Table 4, finds that:

- The step of observable is that there is a report of profit-loss statement.
- The step of data selection is that the entrepreneurs can selectively look into the data of sale, cost, or expense.
- The step of adding meaning is that the sale, cost, and expense are analyzed.
- The step of making assumptions is that the entrepreneurs make the assumption that the business has only profit, i.e. no loss.

- The step of developing conclusion is there is profit from operating the business.
- The step of creating/supporting beliefs is that the business has good operation results.
- The last step is the step of taking action. The entrepreneurs can utilize all summaries in the reports to analyze the decision regarding the enterprise operation.

Table 5: Ladder of inference for analysis of behavior in using balance sheet in small enterprises.

Ladder of Inference	Balance Sheet	Balance Sheet	
Small Enterprise	Unfavorable Behavior	Favorable Behavior	
		(Basic Accounting)	
Observable	None	Balance Sheet Report	
Select data	None	Asset, Liability, and Equity	
Add meaning	None	Analysis of Asset, Liability, and Equity	
Make assumption	None	Equity > Liability	
Develop conclusion	None	Business has liquidity	
Create/support beliefs	None	Inverstment	
Take action	None	Use of Data in Decision anlysis	

The analysis of unfavorable behavior according to Table 5, based on the ladder of inference reveals the details in each step as follows:

- There is no step of observable.
- There is no step of data selection.
- There is no step of adding meaning.
- There is no step of making assumptions.
- There is no step of developing conclusion.
- There is no step of creating/supporting beliefs.
- There is no step of taking action.

It is not possible to know the actual balance sheet of business in case of such an unfavorable behavior. On contrary, the analysis in case of favorable behavior, confer Table 5, finds that:

- The step of observable is that there is a report of balance sheet.
- The step of data selection is that the details of data in asset, liability, and equity.
- The step of adding meaning is that the balance sheet in business can be viewed.
- The step of making assumptions is that the balance in business must be positive.
- The step of developing conclusion is the business has liquidity.

- The step of creating/supporting beliefs is that it is believed that the business has a good investment.
- The last step is the step of taking action. The entrepreneurs can utilize the good balance sheet in the analysis of the decision regarding the enterprise operation.

The entrepreneurs nowadays mostly use smart phones as a communication tool. Consequently, the cloud computing finance which is applicable to smart phone is introduced for the convenience of accessing the data.

The configuration of the cloud computing finance, which is design based on the ladder of inference, helps adjust the mental model of the entrepreneurs of small enterprise to become a good metal model. The configuration is designed to facilitate the utilization of financial data in small enterprises with the following features:

 The step of observable is that the push-pull information is introduced to stimulate the review of financial data in a more convenient, rapid, and simple manner via the smart phones.

- The step of data selection is that the data necessary to know or important to the business will be shown with the warning system, when there are changes.
- The step of adding meaning is that the color, numerical data, and graph indicating status are used.
- The step of making assumptions is that the values or things favorable to good business results will be defined.
- The step of developing conclusion is the business operation results are summarized.
- The step of creating/supporting beliefs is that there are comparative numerical data and graph to support the conclusion of business operation.
- The last step is the step of taking action. There are analysis and solution guidelines.

### 5. Conclusion

The present research shows that the utilization of financial data by the entrepreneurs of small enterprise in decision analysis is principally dependent on the mental model. Correspondingly, the balance inquiry and advocacy is introduced in form of the cloud computing finance to adjust the mental model. The ladder of inference is employed to analyze the unfavorable and existing behavior of the entrepreneurs to the favorable one, i.e. from no interest in utilizing the financial data to use of the data in decision analysis. It is found that small enterprises are established every year but there is a high number of closing ones too. The support from the government sectors is just only in term of policy. The integration of private sectors as well as the assistance from financial institutions still cannot definitely solve the problem. The cloud computing finance is thus a financial tool to help entrepreneurs in decision analysis for small enterprises. It is a tool that makes the enterprises viable and supports them in loan making from the financial institutions too. In addition, it is possible to support the financial data for other government projects such as the business establishment project.

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