A DEVELOPMENT MODEL OF ACCOUNTING SYSTEM FOR COMMUNITY-BASED TOURISM IN THAILAND

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A Dissertation Submitted in Partial
Fulfillment of the Requirements for the Degree of
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ABSTRACT

Title of Dissertation A Development Model of Accounting System for

Community-Based Tourism in Thailand

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This research uses mixed methods to investigate: 1) study the competencies of Thai community-based tourism (CBT) accountants; 2) study the efficiency of the current types of CBT accounting system in Thailand; 3) propose a development model of CBT accounting system in Thailand. The researcher employed purposive sampling. For the quantitative research, the sample group included 150 CBT accountants and 150 CBT executive committee members. The research instrument used was a questionnaire which was distributed via post to 167 communities based tourism which is on the list of registered communities of the Ministry of Tourism and Sports database. For the qualitative research, the sample group included 15 CBT accountants and 15 CBT executive committee members. The research instrument used was a semi-structured interview.

The results from qualitative research and quantitative research can establish a development model of accounting system for community-based tourism in Thailand. It contributes from the literature review of competency, the accounting system, and community-based tourism. Therefore, it is introducing a development model of accounting system for community-based tourism in Thailand which consists of nine processes: 1) the recruitment process of CBT accountants, 2) creating capacity identification, 3) survey and analysis of CBT contexts, 4) accounting training, 5) design of a CBT accounting system, 6) testing of the system, 7) application of the system, 8) follow-up of the use of the system, and 9) improvement of the system.

These nine processes are considered to play a significant role in Thai community-based tourism.

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CHAPTER 1

INTRODUCTION

1.1 Statement of the Problem

Tourism is the industry that plays significant roles in the economic developments of many countries as it is one of the sources of their income; increases the employment rates and brings about progress distribution for other regions of their countries. According to the World Tourism Organization (UNWTO, 2018), the number of tourists worldwide is expected to reach 1.8 billion by 2030, with the highest number of them in Europe (671 millions), East Asia and the Pacific (323 millions), and Americas (207 millions), respectively. In Africa, the number of tourists is expected to grow by 5% above average and that of worldwide at the rate of 4%. In Europe and Americas, however, the number of tourists remain unchanged as the growth rates of tourists are below average compared with the tourist number worldwide (Office of the Permanent Secretary, 2017). The number of tourists worldwide is displayed in Figure 1.1.

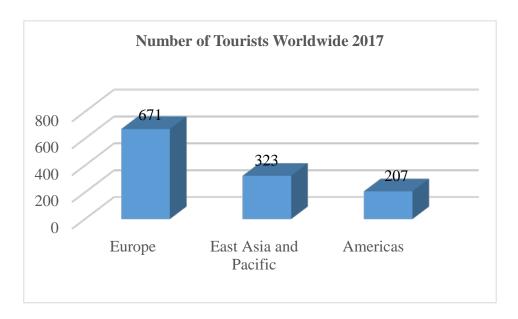


Figure 1.1 International Tourist Arrival, Monthly Evolution

Source: UNWTO, 2017.

According to the Foreign Office, the Government Public Relations Department of Thailand (2015), the ASEAN Community, an international organization of Southeast Asian countries, prioritizes tourism and marketing through the "Visit ASEAN Campaign", which as a result allows for service accessibility and labor mobility across the region as well as helps establish the quality of human resources and tourism services. According to a survey based on 686 foreign tourists in Bangkok, the 10 most interested ASEAN countries are Thailand (58%), Vietnam (34.1%), Cambodia (30.6%), Laos (30.3%), Singapore (26.1%), Malaysia (25.8%), Indonesia (24.3%), Myanmar (20.6%), Philippines (19.5%), and Brunei (3.9%), respectively (Buranasomphob, 2014).

With regard to Thailand's tourism, in 2017 alone, Thailand welcomed 33,081,210 foreign tourists; the number rose 7.26%, which accounts for 551,622 tourists, from that of 2016 (Immigration Bureau & Department of Tourism, 2017), whereas the international tourism grows at the rate of 4%, with expected 1.6 billion tourists in many developing countries. Therefore, it is likely that Thailand's tourism industry between 2009 and 2017 has been grew at the rate of 10%, as seen in Figure 1.2, a chance for Thailand to increase its tourist number and witness its economic

growth. Realizing the importance of tourism as a tool for stabilizing and mobilizing its economy, Thailand has long made used of its good location, abundant natural resources and cultural diversity as its selling points and part of its tourism marketing (Ministry of Tourism and Sports, 2018). Thailand can also benefit from being the center of the ASEAN region, that is to say, it can expect higher income from the tourism industry due to the opening of the ASEAN community and free trade agreements on tourism.

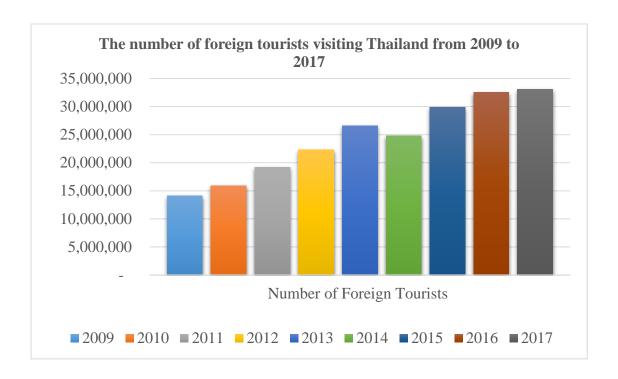


Figure 1.2 The Number of Foreign Tourists Visiting Thailand from 2009 to 2017 **Source:** Immigration Bureau & Department of Tourism, 2017.

Despite Thailand's abundant tourism resources, including natural and manmade ones, there have been more competitions that promote tourism worldwide; as a result, it is necessary for Thailand to promote and provide new types of tourism for its tourists. Choibamroong (2016), similarly pointed out that as more tourists are interested in ecotourism, cultural tourism, health tourism as well as community-based tourism, a special attention should also be paid to this group of tourists, today, for example, with the growing number of tourists who make a long trip in Thailand accounting for 24%. Realizing such growth and new tourism trends, the Tourism Authority of Thailand (TAT) consequently promotes community-based tourism (CBT) more, for example through the "Discover Amazing Stories in Amazing Thailand" campaign, where tourists can explore cultural diversities in each community of Thailand. Such tourism, also called "local experiences", exhibits well unique cultures of each community in Thailand, thereby bringing fascinating and impressive experiences to tourists. Additionally, CBT can strengthen community organizations as regard natural resources and cultural management through participations of those in the communities, that is, everyone is involved in directing the development of their communities and can all benefit from tourism (Mitrchob, 2017).

CBT therefore is considered as alternative tourism for focused/niche tourists. In other words, it is a new type of tourism in that tourists who favored mass tourism in the past changed their interest to alternative tourism. With the CBT, the tourists have alternatives in tourism activities and routes, and everyone in communities becomes involved in the development of direction of their communities and benefits from it. Overall, CBT plays a crucial role in Thailand's tourism industry by bringing more quality to tourism, that is, not only is it concerned with relaxation, pleasure and entertainment, but also it opens new tourism dimensions through idea sharing and exchanging with the locals while, at the same time, maintaining respect to them (Kontokeorgopoulos, Churyen, & Duanseang, 2013). In addition to giving importance to CBT, it is also a form of tourism management; the importance of social connections; and the potential development of human capital in the community. CBT is a great way of promoting sustainable tourism in the community and solving many community problems in the last two decades. The Thailand Community Based Tourism Institute describes the four main components: 1) resources, 2) community organization, 3) management, and 4) learning.

CBT is prevalent in all regions of Thailand. According to the Thailand Community-Based Tourism Institute in 2010, there were approximately 157 community-based attractions, although some of them were in fact not considered as part of CBT (Dolezal, 2011). CBT, however, is different from ecotourism, that is, while communities are the center of operation for CBT, for ecotourism, nature is the

center of operation and communities are just part of it. Further, while ecotourism provides for tourists homestay close to rural cultures, CBT stresses the importance of community participation and is operated through the systematic management of community organizations (Dolezal, 2011). According to the principles of CBT, communities are regarded as the owner of tourism operation, that is, their members can participate in directing the tourism operation and making relevant decisions on it. Such participation thus causes the following to happen: self-pride among the members, the members' better standard of living, environmental sustainability in the communities, identity and cultural conservation of the communities, idea sharing between those from different cultures, respect for different cultures and human dignity, and fair reward and income distribution for the members (Suansri, 2003). CBT consists of four central components: natural resources and community cultures, community organizations, learning, fair income distribution management, community funds for economic, and social developments of the communities (Suansri, 2003). In addition to the mentioned principles, other principles of CBT are that there should be widespread income distribution within each community, tourism development, cooperation between each group of the communities, as well as participations by community members in tourism natural resources and service planning, development, and operation. With all these, fair income distribution for the community members and satisfaction among tourists and entrepreneurs can be ensured (Choibamroong, 2011).

Although CBT has currently become a new image of tourism, it brings a lot of benefits to communities, and is supported by different stakeholders. There is still lack of consideration into certain aspects, i.e. impacts on the society and communities, reliable body of knowledge for CBT development direction, CBT integration, long-term plans, accounting entry, and accounting system (Thongchim, 2015; Sertsri, 2015). Lack of proper accounting entry and accounting system, and lack of information can be used to manage community businesses. The effective operation of community enterprises is rare. Due to the development of business efficiency, it is necessary to have an appropriate accounting system to be used as a tool to supervise and develop the business effectively. Additional aspects worth paying attention to are the participation of community members as well as widespread and fair income

distribution among them, which are the fundamental concepts of community sustainable development. By paying attention to all the aspects, the standard of living of the community members will improve, there will be sufficient working capital for the communities' natural resources and environment conservation, harmonious living takes place in the communities and there will be better preparation for CBT.

For a sustainable tourism management, the accounting information is considered a part of information within the organization that serves to empower the organization to plan, and to make decisions including evaluation and monitoring. Specifically, the managerial accounting information is to provide information to the user within the business to plan and control the operations to be effective and achieve the goals of the organization. However, one of the perceived problems regarding accounting recording for the community enterprise is lack of personnel who are knowledgeable in accountancy. In order to fill this gap, formulating practical accounting model would be suitable for the community enterprise with the participation from the community, as they could join in to think, act, and participate in the accountancy processes. In addition, it would provide the community to have an accurate and practical data that can be used for planning and surviving the community enterprise in healthy and sustainable manner without relying only on the supervising government units like the current ongoing system (Wannalo, 2018). With regard to CBT management, a good accounting system development is believed to facilitate the communities' income distribution management as its operational procedure can bring about accurate, reliable and transparent financial data. Not only communities can use it as a report of their financial status, but also their administrative section will be able to control the communities' operation to be in line with their goals (Prasitbureerak, 2015). Furthermore, the data from the accounting system can be presented the communities' CBT operational outcomes of a certain time period and will be useful for the administrators to estimate the effectiveness of the communities' CBT performances and to decide on CBT future plans. The data can also indicate whether or not each operational section of the communities has completed its plan and can be used as a tool for protecting the communities' assets as well as preventing the misuse of them.

Generally, there have studies about CBT management (Tammapanya, 2013; Kaewmanee, 2014; Pongsakornrungsilp, 2014; Sertsri, 2015), marketing (Thongdee & Boonsak, 2017; Thongdee, Lumwannawong, Bhummisiripaiboon, and Promsen, 2017), managing collaboration in CBT (Thongchim, 2015), and group participation (Songthip 2014; Dokbunnak & Tongkamnuch, 2013). However, there are few people who studied the accounting system. For this reason, the CBT accounting system development is important for professional management and administration because the communities will be able to use it provide fairness and transparent income distribution for all. A good accounting system will also bring to the communities systematic thinking, which enables them to learn things and solve problems themselves. Additionally, with the accurate and reliable accounting system, the communities will be able to increase their potentials in sustainable tourism development and allocate suitable benefits for a successful CBT operation. The accounting system would allow the communities to access actual cost and it is in line with the Philosophy of Sufficiency Economy that makes a significant mechanism mobilizing the communities. When used with strategies for development, the effective accounting system will enable the communities to organize CBT activities holistically, establish the learning process and knowledge management, control the cost of resources, increase their potentials in self-reliance, create harmonious living, boost their immune system for any changes in the future, and eventually play a prominent role in national development. However, for the effectiveness of the CBT accounting system planning, it is important that the communities first of all become aware of the concept of fairness and transparent income distribution for all their members and of member participation. Therefore, the CBT accounting system is to be used in the development of the accounting system to be stable, reliable, accuracy, and can control community tourism assets. The CBT accounting system can help the CBT management team to know the operating results and the financial position. Futhermore, The CBT accounting system can be used in the planning of the operation of the community and controling the CBT management.

According to the Tourism Development Strategic Plan 2012-2016 of the Department of Tourism, Thailand's tourism still lacks a systematic tourism database and tourism satellite account for use in the study of tourism economy. Other areas of

improvement as regards CBT in Thailand are also suggested by the National Tourism Development Plan 2012-2016; according to the Operational Guideline 5.2.2, Strategy 5.2 of the plan, decentralization and tourism-related benefit allocation to local administrative organizations should be implemented to reduce conflicts in communities and create suitable activities that respond to the communities' needs and their ecosystem. These suggestions, however, reveal a concern made by Srichanapun, Khiewrujee, and Siripun (2015) who pointed out that community accounting is still a complicated activity for many communities since their members have to study different types of village funds, the nature of which may be inappropriate for some communities. Strengthening the communities and bringing sustainability to them are important for the building of their self-reliance and the acquisition of CBT knowledge and problem-solving skills. The development of an accounting system is also indispensable for the participation of the communities' members as regards social responsibilities and their communities' poverty. Nonetheless, a lack of thorough accounting knowledge is still problematic for many communities although they have already used different types of accounting. Furthermore, Weeripriya, Leekpai, and Hawat (2010) described that accounting standards usually consist of four processes, including survey and analysis, accounting system design, the use of the accounting system, and a follow-up to use the system. Despite the stated standards, the building of the accounting system in the communities is still ineffective due to the lack of accounting knowledge and understanding of accounting system building of their members that most of the communities' accountants have taken only one accounting training (Hanwiwat, 2011).

In conclusion, the researcher realizes the significance of building an effective CBT accounting system for community-based tourism in Thailand. More importantly, the competencies of the communities' accountants are also significant foundation since the right competencies could bring about accurate and reliable financial data, deliver fair benefit distribution for all community members. It could potentially reduce conflicts in the communities by making an accounting record and updating report of their income by each community's executive committee (Nonsiri, 2012). The results of this research will lead to the development model of accounting system for community-based tourism in Thailand.

1.2 Research Objectives

- 1) To study the competencies of accountants of community-based tourism in Thailand.
- 2) To study the efficiency of the current types of accounting system of community-based tourism in Thailand.
- 3) To propose a development model of accounting system for community-based tourism in Thailand.

1.3 Research Questions

- 1) What are the competencies of accountants of community-based tourism in Thailand?
- 2) What are the efficiency of the current types of accounting system of community-based tourism in Thailand?
- 3) What should be the development model of accounting system for community-based tourism in Thailand?

1.4 Research Outputs

- 1) Recognize the competencies of accountants of community-based tourism in Thailand. The community can use the competency to develop the capacity of community accountants.
- 2) Recognize the efficiency of the current types of accounting system of community-based tourism in Thailand in order to find the strengths and weaknesses of CBT accounting system. Therefore, relevant people can use the information to solve problems and to strengthen the CBT accounting system in the future.
- 3) The development model of accounting system for community-based tourism in Thailand. The communities will be able to increase their potentials in sustainable tourism development and allocate suitable benefits for a successful CBT operation.

1.5 Scope of the Study

1.5.1 Scope of Contents

The content of the study included the competency of accountants and accounting system of CBT in Thailand in relation to tourism industry.

1.5.2 Scope of Area

Community-based tourism - CBT in Thailand that was registered with the Ministry of Tourism and Sports database.

1.5.3 Scope of Demography

The population is divided into 2 groups

- 1) Accountants of CBT in Thailand
- 2) Executive Board of CBT in Thailand

1.5.4 Scope of Time

The research was conducted from May 2016 to May 2018.

1.6 Operational Definitions

Accounting System of Community-based Tourism (CBT) refers to the process or step of accounting records consisting of: 1) context analysis and study 2) system design 3) implementation and 4) monitoring the implementation.

Competency refers to the qualifications of the accountants: 1) knowledge 2) skills 3) self-concept 4) motives and 5) traits

Thai Community-based Tourism (CBT) refers to the community-based tourism which includes homestay registered with the Ministry of Tourism and Sports database in Thailand.

1.7 Hypotheses

Based on the literature review and relevant research studies, this research therefore has proposed the hypotheses as follows:

H₀: Differences in demographic data can result in differences in the competencies of community-based tourism (CBT) accountants.

H₁: Similarities in demographic data can result in differences in the competencies of CBT accountants.

 H_1 : The CBT accountants with gender differences have different competencies.

H₂: The CBT accountants with age differences have different competencies.

H₃: The CBT accountants with monthly income differences have different competencies.

H₄: The CBT accountants with status differences have different competencies.

H₅: The CBT accountants with educational background differences have different competencies.

1.8 Research Variables

The two variables used for this research consist of independent variables and dependent variables.

1) Independent variables are the variables whose variation does not depend on that of another and their values cannot be or are difficult to be changed by the other variables. They represent inputs or causes in the experimental setting (Hayes & Preacher, 2014; Peduzzi, Concato, Feinstein, & Holford, 1995).

According to the literature review, the independent variables of this research include the following:

- (1) Gender
- (2) Age
- (3) Monthly Income
- (4) Status
- (5) Education

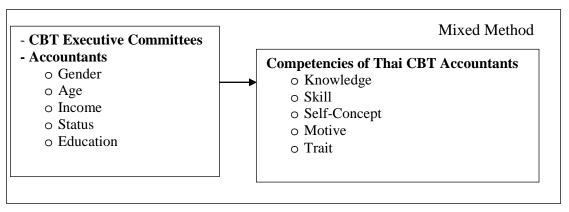
2) Dependent variables are the variables that depend on independent variables; they can also be called "output variables or assigned variables" and represent the output or outcome whose variation is being studied (Norton, 1983; Newey, 1987).

According to the literature review, the dependent variables of this research are thus the competencies of CBT accountants, which are as follows:

- (1) Knowledge
- (2) Skill
- (3) Motive
- (4) Trait
- (5) Self-Concept

1.9 Conceptual Research Framework

Based on the literature review of relevant concepts and research studies, the following conceptual research framework as shown in Figure 1.3 was as consequently formed to prove the hypotheses about the competencies of CBT accountants, current types of CBT accounting in Thailand and the establishment of CBT accounting systems in Thailand.



Quantitative Research

Process of CBT accounting system in Thailand

- 1. Exploring and analyzing contexts
- 2. Designing and establishing accounting systems
- 3. Implementing the systems
- 4. Following up on the implementation and analyzing Results.

Qualitative Research

 $\label{thm:continuous} The \ Development \ Model \ of \ Accounting \ System \ for \ Community-Based \ Tourism \ in \ Thailand$

Figure 1.3 Conceptual Research Framework

CHAPTER 2

LITERATURE REVIEW

This chapter provides a general overview of competencies, components of competencies. The importance of competencies, types of competencies, competency measurement, competency management, use of competency in curriculum improvement, competency model, factors for CBT accountants in Thai context, community accounting system, community-based tourism, hypotheses, and conceptual research framework of the study.

2.1 Competency

2.1.1 Definitions of Competency

A competency is a set of defined behaviors that provide a structured guide enabling the identification, evaluation and development of the behaviors in individual employee. Core competencies are specific business abilities used to create a competitive advantage in the business environment. A competitive advantage is the ability to complete business functions, produce customer products or provide more value to consumers better than other companies (Vitez, 2018). The term "competence" first appeared in an article authored by White in 1959 as a concept for performance motivation. McClelland (1973) defines "competencies" as hidden characteristics of a person which enable him to accomplish assigned tasks better than expected by their goals, whereas Boyatzis (1982) asserts that a person's underlying characteristics consist of motive, trait, skill, self-image, social role as well as body of knowledge, all of which are required to produce better outcomes. Boyatzis's concept of competencies is similar to that of Boam and Sparrow (1992) who point out that "competencies" refer to a group of behavioral characteristics a person must have in order for him to perform any tasks and to achieve goals. Another definition of competency is defined by Spencer and Spencer (1993). To them, "competencies"

refer to underlying characteristics of a person which include motive, trait, selfconcept, knowledge, and skill; all of these characteristics generate causal relationship, which allows the person to complete works better than the criterion-reference or work goals. Further, Nadaillac (2003) emphasizes that to be regarded as having competencies, a person has to take action and uses his abilities in order to produce satisfying outcomes and achieve work goals; when taking action, the abilities he has will especially allow him to acquire additional knowledge, know-how, characteristics as well as attitudes while at the same time to solve actual problems. Dubois and Rothwell (2004) similarly assert that competencies refer to the characteristics that everyone has and must be used properly in order for them to achieve work goals; the characteristics include knowledge, skills, personality, social motivation, behaviors, ways of thinking, feelings as well as action. In other words, it can be said that "competencies" include skills, knowledge, abilities, and behaviors that every staff should have in order to perform work effectively. To complete any assigned work, it is essential that one needs to have relevant knowledge and background information concerning it, know-how to complete it, and possess particular behaviors and characteristics for guaranteed goal achievement. Whenever competencies are demonstrated, an organization will be able to notice those who are superior performers (Dechawatanapaisal, 2006). Some scholars see "competence" as a combination of practical and theoretical knowledge, cognitive skills, behavior and values used to improve performance. In addition to the previous definitions of competencies, Kanjanaket (2000) defined "competencies" as abilities and skills that a person can make use of in order to complete any given work; without competencies, the person however may be unable to complete it. Competencies can be acquired through repeated learning, experiences, training, and practice. Similarly, Narongrit Santhong (2003) assert that "competencies" refer to knowledge, abilities, skills and motivation, all of which are related to and can affect the outcomes of any tasks; each competence however plays a different role depending on a particular task. HAY Group (2004), a global consulting firm on personnel administration system defines "competencies" as behavioral characteristics that enable a staff of an organization to deliver better performance than others. In contrast to his colleagues, the staff with competencies is better at using his behavioral characteristics in more diverse

situations and as a result is able to produce better work outcomes. The last definition of competencies is given by Thailand's Office of the Civil Service Commission (OCSC). Competencies are behavioral characteristics deriving from a combination of knowledge, skills, abilities and other attributes, all of which enable a person to produce better work outcomes than his colleagues. In other words, for a person to have a particular competency, a combination of knowledge, skills, abilities and other attributes such as service competence (having a service mind) is needed. For example, without knowledge and skills related to an assigned task, such as computer literacy or being calm, patient and service-minded, a person will never be able to provide quality services as expected by service receivers.

Academics in Thailand and worldwide define key elements of competencies and underlying characteristics or attributes namely; motive, trait (attitude/abilities), self-concept, social role, knowledge, and skill as can be seen in Table 2.1

Table 2.1 Analysis of Underlying Characteristics of Competencies

Author(s)	Motive	Trait (Attitudes/ Abilities)	Self- Concept	Social Role	Knowledge	Skill
Glockshuber (2005)	-	-	-	✓	✓	✓
Tesone & Ricci (2006)	-	-	-	-	✓	✓
Kay & Russette (2000)	-	-	-	-	✓	\checkmark
Bunruay Napao (2013)		✓			✓	\checkmark
Palmer, Ziegenfuss &	-	✓	✓	-	\checkmark	✓
Pinsker (2004)						
Laurell-Stenlund &	-	\checkmark	-	-	✓	✓
Hörte (1999)						
Duangchang &	-	\checkmark	-	-	✓	✓
Penvutikul (2018)						
Lorenz & Lundvall	-	-	\checkmark	-	✓	✓
(2010)						
Pavitt (1989)	-	✓	\checkmark	-	\checkmark	✓

 Table 2.1 (Continued)

Author(s)	Motive	Trait (Attitudes/ Abilities)	Self- Concept	Social Role	Knowledge	Skill
Dampitak, Jaturat,	✓	✓	✓	✓	✓	✓
Kingkan Moonmuang,						
Duangdara, Bualai, &						
Treammeerit (2009)						
Taiwetchasat & Uon	-	✓	\checkmark	✓	\checkmark	✓
(2018)						
Chaisurach &	-	-	-	-	\checkmark	✓
Manatsanit (2017)						
Khupiateng &	-	✓	✓	✓	✓	✓
Sincharoonsak (2016)						
Cardoso, Neto &	-	✓	✓	-	✓	✓
Oyadomari (2010)						
Ștefan, Sacarin, &	-	-	✓	-	✓	✓
Girbina (2013)						
Sangpho (2012)	✓	✓	-	-	✓	✓
Dankaew & Meemak	-	✓	✓	✓	✓	✓
(2013)						
Meemak (2015)	-	-	✓	✓	✓	✓
Phramsiri, Thawa &	_	_	✓	✓	✓	✓
Prangam (2018)						
Saikon & Phaithun	_	✓	✓	✓	✓	✓
Intakhan (2012)						
Baotham & Wu (2016)	✓	✓	-	-	✓	✓
Jinmon, Yuenyong &	-	-	-	-	✓	✓
Akarak (2017)						
Jackling & Lange (2009)	✓	✓	✓	-	✓	✓
Thonglard, Kuma,	√	✓	✓	✓	✓	✓
Busaba, Suriyasarn &						
Thipwiwatpotjana						
(2017)						

In addition to the previous academics, Samkoses (2011) adds that in this rapidly changing society both at national and international levels, having abundant natural resources is not as important as having the knowledge of administration, labor resource management as well as staff quality. With such knowledge, staff competencies will be developed, thereby allowing them to achieve their organization's goals. Thus, to make use of staff competencies to the greatest extent, human resource management should be a main focus in an organization; in other words, analysis of staff competencies should be done so that the organization can use the competencies to compete with competitors and to achieve its goals.

2.1.2 Components of Competencies

According to McClelland (1973), competencies consist of five components, including knowledge, skill, self-concept, traits, motives or attitudes. The definitions of each component are provided as follows:

- 1) "Knowledge" is defined as the information that one must acquire or essential knowledge in a particular area such as knowledge about engines.
- 2) "Skill" refers to the abilities in a certain area of interest such as computer skills or knowledge-sharing skills. Skills are based on one's knowledge and fluency in practice.
- 3) "Self-concept" includes attitudes, values, and thoughts about one's own sense of identity or what one believes is the construct of himself such as self-confidence.
- 4) "Traits" refer to one's characteristics such as being reliable and trustworthy or having leadership skills.
- 5) "Motives or Attitudes" are the internal drive that pushes a person to reach his goals and success.

The components of competency are shown in the Iceberg Model in Figure 2.1.

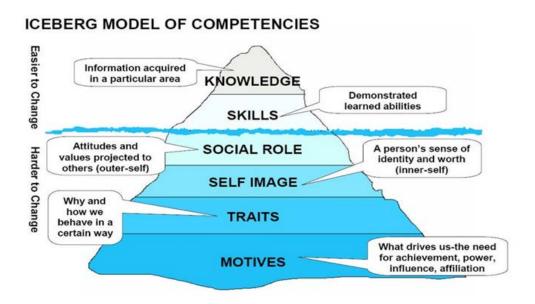


Figure 2.1 Iceberg Model

Source: Trotter and Ellison, 1997.

The iceberg model of competencies helps to explain the concept of competency. An iceberg has just one-ninth of its volume above water and the rest remains beneath the surface in the sea. Similarly, a competency has some components which are visible like knowledge and skills but other behavioural components like attitude, traits, thinking styles, self-image, organizational fit among others are hidden or beneath the surface. According to Figure 2.1, knowledge and skills/abilities are visible or above the surface, whereas the other components are hidden or beneath the surface. The visible components of competencies are:

- "Skills" refer to the knowledge and know-how such as reading skills, listening skills, or driving skills.
- 2) "Knowledge" refers to what one knows about and his comprehension of its principles and specific concepts such as accounting knowledge, marketing knowledge or political knowledge.

There are, however, four components of competencies that are difficult to be noticed since they are beneath the surface (Trotter & Ellison, 1997). The four components are as follows:

- 1) "Social Image" refers to what one wants others or the society to perceive about him, for example his willingness to help others.
- 2) "Self-Image" refers to one's self-identity, for example one seeing himself as a leader or as an artist.
- 3) "Traits" refer to one's personality and behaviors, for example being a good listener, being calm, or being humble.
- 4) "Motives" refer to the drive from within that could affect one's actions. For example, if a person is ambitious and wants to be successful, all of his actions will always target at success.

As can be seen in Figure 2.1, of all the components of competencies, only two appear above the surface and as a result become visible, whereas the other four lie beneath the surface. To be able to notice one's invisible components, it always takes a lot of time and complicated steps, particularly because of individual differences. Therefore, to study competencies, it is indispensable that both visible behaviors of a person and the causes of them be focused on.

Further points regarding competency are added by Rassametummachot (2011). Based on her points of view, competencies are a combination of knowledge, skills and motives/attitudes as presented in Figure 2.2.

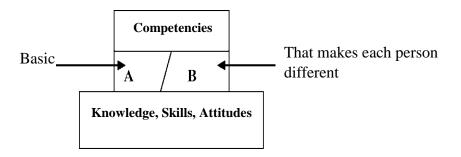


Figure 2.2 Competencies, a Combination of Knowledge, Skills, and Attitudes **Source:** Rassametummachot, 2011.

According to Figure 2.2, knowledge, skills and attitudes are not in fact competencies but part of the construction of them. In other words, knowledge alone is not considered as competencies, but if it is used for undertaking any activities until one achieves success, then the knowledge will become part of competencies. Therefore, competencies in this case involve behaviors that cause best work outcomes to happen. For example, one knows how to drive means that he has knowledge about driving, but if he uses it by giving driving lessons to interested people and earns income from it, then his knowledge will be regarded as his competencies. Another example is when one uses his skills about house-building to provide different and better services than his competitors, his skills are then considered as competencies. Likewise, motives or attitudes alone are not competencies; however, if they enable one to complete any assigned tasks according to deadlines or better than required standards, the motives or attitudes then become competencies. According to the descriptions, competencies can be categorized into two groups as follows (Rassametummachot, 2011):

- 1) "Threshold Competencies" refer to basic knowledge or skills that one must have in order to perform more difficult or complicated tasks such as speaking and writing competencies.
- 2) "Differentiating Competencies" refer to factors that enable one to produce better work outcomes than required standards or others.

Another description of competencies is given by Parry (1996). He asserts that competencies are the cluster of knowledge, skills and attitudes of individuals, all of which affect the efficiency of work outcomes. In other words, competencies are a relationship between a person's role and responsibilities and work outcomes, and competencies can be evaluated by established standards and developed through training. Competencies can also be seen as behavioral characteristics deriving from knowledge, skills, abilities and other attributes that enable a person to produce better work performances than his colleagues. That is to say, for a person to demonstrate a particular competency, a solid combination of knowledge, skills/abilities as well as other attributes, e.g. service competency (the ability to provide quality service) is highly needed. On the contrary, if a person lacks work-related knowledge or skills, e.g. computer skills for information searching, being calm, being patient, or being

helpful, he will be unable to demonstrate his competencies as a good service provider for his service receivers.

As can be seen, there are a lot of definitions as regard competencies. Certain descriptions state that competencies are concerned with work such as the work itself, work results and consequences while according to other descriptions, competencies refer to one's characteristics and commitments. Regardless of the different descriptions, different competencies are generally expected by each organization, depending on its business type, culture, structure, and value.

In conclusion, the components of competencies are knowledge, skill, self-concept, traits, and motives that can drive business to create a competitive advantage in the business environment.

2.1.3 The Importance of Competencies

Research on business competitions reveal that for an organization to overcome its competitors in area of staff development, it could take up to seven years, whereas it takes only one year to catch up with its competitors in area of technology development. Hence, competencies are important for the operations of both the state and private sectors in the following areas (Dechawatanapaisal, 2000):

- Competencies help indicate a person's knowledge, skills and abilities that are suitable for assigned tasks, consequently resulting in his organization's success.
- 2) Competencies help a staff to become aware of his current ability level and areas of improvement, which ultimately can lead to his self-study abilities.
 - 3) Competencies can be used for staff trainings.
- 4) Competencies help support key performance indicators (KPIs) of an organization. That is to say, in order to reach the goals according to KPIs, the right competencies will have to be used.
- 5) Competencies can prevent accidental luck in many cases. For instance, a rise in sales can be possible despite a lack of dedication of a salesperson; the possible sales rise is in fact influenced by the market's high demand that causes the sales to rise automatically. By measuring competencies, however, a company will

be able to identify whether the staff's success is purely because of his luck or competencies.

6) Competencies of staff can result in their organization's improved competency. In other words, if all staffs can adjust their competencies to suit their organization's expectations, in the long run the organization will have its own unique competency. For example, an organization can be regarded as the organization of creative thinking because its staff have creative thinking competency.

As demonstrated by Sakworawich (2004), not only can the concept of competencies be used directly for staff development, but also it can be used for staff development in many more dimensions as follows:

- 1) With regard to recruitment and selection, an organization can design a written test or a set of questions for interview to select applicants who are the most suitable for required positions, i.e. having relevant knowledge and skills. By focusing on the applicants' competencies, work outcomes as expected by the organization can be guaranteed in the future.
- 2) Organization executives can make use of the competency gap of their staffs for performance appraisal and consider whether there is any improvement among them according to the organization's individual development plan.
- 3) In addition to a salary increase, modern administration also embraces the concept of reward and compensation system which can help increase staffs' motivation, self-development and better work outcomes. By using the reward and compensation system, the staff will be aware of the importance of self-development and eventually receive better reward and compensation while at the same time the overall competencies of their organization will be at a higher level. Further, by using competencies as criteria for a salary increase, the reward and compensation system of the organization will become more transparent and fair to all of its staff.
- 4) The competency system is necessary for the career planning and succession plans of organizations. In other words, based on the system, the organizations will be able to identify strengths and weaknesses of their staff as well as their skills and abilities to be required by their target positions in the future.

5) As the organizations of both the state and private sectors are part of the nation's development mechanism, they play significant roles in adopting national policies into practice, which are expected to respond to people's needs and bring changes to the society and national economy. In order to achieve such success, the organizations thus can make use of positive strategies – i.e. the competency system. Although today the result-based management (RBM) is mainly based on the organizations' strategies, including KPIs, the competency system can be supplemented to the management to bring about satisfying work outcomes, bring out staffs' competencies, and prevent them from causing problems to the organizations. Not only can the competency system be used in the state and private sectors to ensure their operational success, but also it is believed to help eliminate corruptions, one of the deep-rooted problems in the Thai society, particularly when people have competencies and morality at higher levels.

Regarding the CBT context, the accounting industry often contains several core competencies that the CBT can establish in their organization. CBT accountants can also learn a few accounting core competencies to enhance their understanding of financial information in the business environment. The importance of competencies for CBT accounting is therefore, the technical competencies of the profession that add value to business and contribute to a prosperous society.

2.1.4 Types of Competencies

Competencies can be divided into three following types (Santhong, 2003):

- 1) "Personal Competencies" are specific abilities of a person or a group of people and are generally difficult to be acquired. Examples of those who have personal competencies are drawing artists, acrobats, and inventors.
- 2) "Job Competencies" refer to the abilities in relation to a particular position or role and are required for the completion of an assigned task. Examples of job competencies include the leadership skills of supervisors or the analytical abilities of those in academic fields. Unlike personal competencies, job competencies can be trained and acquired.
- 3) "Organization Competencies" are specific abilities especially required by each organization and will lead the organization to success and be the

leader in a particular field. An outstanding example of an organization with a unique competency is Mahidol Wittayanusorn School in Thailand, which is widely known for its excellence in the instruction of science.

Further ideas about types of competencies are also provided by Rassametummachot (2005). According to her, competencies can be divided into five types as follows:

- 1) "Personal Competencies" are the competencies or specific abilities that each person has and cannot be easily emulated. A good example of personal competencies is the martial arts skills that Tony Jaa demonstrated in Tom-Yum-Goong, a famous 2005 Thai action movie. Other personal competencies also include those possessed by musicians, acrobats, athletes, etc. Such personal competencies are difficult to be acquired and could take a lot of attempt to acquire them.
- 2) "Job Competencies" are the competencies that staffs have for a particular position or role in an organization. For example, an accountant is expected to have numeracy, calculating and accounting skills.
- 3) "Organization Competencies" are the special abilities that each organization has. Examples of organization competencies are the electronic production competency of National Electrical Company Limited, the automobile production competency of Ford Motor Company Limited, and the paint production competency of TOA Paint (Thailand) Limited.
- 4) "Core Competencies" refer to the abilities that one must have in order to reach work goals. For example, a secretary's core competencies should consist of computer and coordinating skills, whereas a manager's core competencies should cover communicative, planning, administrative as well as team-working skills.
- 5) "Functional Competencies" are the abilities that one must have according to his areas of responsibility. A lot of staff can have the same position in an organization but their areas of responsibility may differ, depending on their abilities. For example, while some police officers specialize in investigation, others may have exceptional competencies in crime suppression.

To sum up, the types of competencies are 1) personal competencies, 2) job competencies, 3) organization competencies, 4) core competencies, and 5) functional competencies. To the CBT accountants, the types of competencies should be job

competencies that an accountant is expected to have such as numeracy, calculating, and accounting skills.

2.1.5 Competency Measurement

According to Parry (1997), competencies can be measured by the three following tests:

- 1) Tests of Performance they are the tests that require test-takers to do certain tasks by writing down their answers, selecting the best answer to each item, or deciding on the geometric shape result as soon as a spinning geometric shape they see on the computer screen stops. These tests are especially designed to measure what test-takers can do under test conditions. Examples of this test type include the general mental ability test, the spatial ability test, the test that measures knowledge about engines and mechanism as well as the test that measures skills and physical fitness.
- 2) Behavior Observations these tests are intended to observe test-takers' behaviors in certain situations. Unlike the first test type, these tests only measure the test-takers' behaviors through observations and evaluation of their behaviors in certain situations such as socializing behaviors and working behaviors. Interview can also be part of the behavior observation tests.
- 3) Self-Reports these tests require test-takers to write a report about themselves, which includes accounts of their feelings, attitudes, beliefs and interests. This test of type also includes personality tests, questionnaires as well as surveys. However, the answers to these test questions may not be related to real feelings of the test-takers. For this reason, a test such as interview can be constructed, with a combination of behavior observations and self-reports. That is, while answers from the interviewees can reflect their real feelings, thoughts and attitudes, the interview will allow interviewers to observe the interviewees' behaviors at the same time.

In addition to Parry (1997)'s competency measurement concept, Tongkeo (2007) asserts that since competencies are behavioral characteristics, they should be best measured through observations. To make the observations, two criteria should be established: 1) an observer and an evaluator should always make a trustworthy observation and evaluation, and 2) an observer and an evaluator should be close enough to those who are observed to be able to see their behaviors accurately. Further,

the evaluation made on the observed staff should also follow their organization's criteria. After the evaluation, their supervisor will make an overall evaluation of the staffs' performances and decide on their level of competencies. To effectively do that, the supervisor has to make a regular observation on his staff and record their work behaviors periodically. This way, the supervisor will also have evidence of their performances in case that they disagree with their competency level result made by his evaluation.

Despite the suggestions by the previous academics, Prahalad and Hamel (1990) point out that it is still difficult to measure competencies. Instead, they suggest using other methods of measurement as follows:

- 1) Record of work history, which lists a staff's skills, abilities and experiences.
- 2) Performance appraisal, which details a staff's task performances and contextual performances such as his generosity and willingness to help others.
- 3) Interview results based on structured interviews (with questions prepared in advance) and unstructured interviews (with questions based on situations such as ones similar to small talks that allow an interviewee to give real information about himself).
- 4) Assessment center, which consists of different psychological measuring techniques, including the leaderless group discussion.
- 5) 360 degree feedback or evaluation from all sides, including colleagues, supervisors, subordinates, and customers in order for a staff's knowledge, skills and characteristics to be examined.

However, competency measurement is somewhat difficult to conduct. Therefore, it relies on methods or uses some tools to measure a person's competencies (Prahalad & Hamel, 1990).

- 1) Work history of an individual: What have they been doing? Do they have any knowledge, skills, or abilities? What have they experienced? From work history, personal data can be obtained.
- 2) Performance appraisal: It will be information about the work performance in two characteristics:

- (1) Task performance is what an individual really does for his or her particular job.
- (2) Non-work performance means whatever a person does during their work but it is not related to the content of his or her job. It can be called a contextual performance which includes the behavior of the worker such as his kindness by sacrificing and helping others, and so on.
- (3) Interview results which include the data obtained from an interview. It may be a structured interview in which questions have been determined, and the interview is conducted according to the issues determined or it may be an unstructured interview which is a situational inquiry. It is similar to everyday conversation, but the interviewer has to prepare the questions in his or her mind, using the interview process that makes interviewees feel comfortable. Also, the interviewees need to provide the most accurate information that matches the reality.
- (4) The assessment center is regarded as a center for many psychological measurement techniques. Also, there is a group discussion in this center without a group leader.
- (5) 360 degree feedback means assessment conducted in every aspect, including evaluation or assessment from co-workers, commanders, subordinates, and customers in order to check knowledge, skills and attributes.

It is related to personal competencies that demonstrate direction of actions, behavior, or thinking. These basic features will expand to other situations and remain within an individual for a long time. In other words, the question "what characteristics or attributes should a person have?" shall be asked. The basic characteristics or attributes of a person consist of 5 aspects: 1) motivation, 2) knowledge, 3) skill, 4) trait, (attitude/abilities), 5) self-concept.

2.1.6 Competency Management

As for competency management for employees in a work environment of an organization, there are certainly executives and workers, or chiefs and subordinates who will rely on each other as in the saying "Success depends on the team, and failures lie with the executive." This means both parts/parties are equally important. If each party does their duties as good as possible, the work performance shall then be

good. This is in accordance with the Royal Demand of the King Rama 9 in 1985 "In order for the work to be accomplished, it depends on two abilities, namely: 1) the capability to practice the knowledge and 2) the capability to create a relationship with others. Both abilities must accompany each other, and individuals need to act or think with honesty, good faith, independent opinions and without prejudice but with accuracy according to causes and results. This way, work shall be truly and completely accomplished and benefits are obtained as expected."

Nevertheless, competency is an important issue to the organization's success. Therefore, some scholars have identified an equation "Intellectual capital = Competency x Commitment." With the provided information, it can be seen that competency is a key element in building success in business organization.

2.1.7 Application of Competency to Human Resources Management

Spencer and Spencer (1993) stated that competency can be applied to every process of human resources management (HR) as follows:

- 1) Human resources planning: This is a process of planning and involving needs related to positions. This will include determining the competency for each position in order to know who a suitable candidate for each position is, what abilities or competency they must have in accordance with the organizational strategy.
- 2) Job evaluation and wage and salary administration: Competency can be used in specifying compensable factors, for example, the point method which will determine factors and give points to each factor to see how each factor is needed in a particular position.
- 3) Recruitment and selection: When competencies are already determined, the recruitment process must be in line with the competencies and the job specified in order to be able to hire the right person for the right position.
- 4) Placement: The HR should consider the competencies of the qualified individual or his or her abilities which need to match the desired position.
- 5) Training and development: Training and development should be carried out in accordance with the competencies of the personnel in order to bring out the best in them.

- 6) Occupation preparation and succession development: A business must design career routes for each individual path on which each employee is taking. An organization must identify, in each process, competencies required. It should also determine how it can help the progress on career for employees. Also, each employee must know what the competencies that they need to improve. In an organization, successors for executive positions must be determined. And the organization should know how these successors can be developed in terms of competencies and their competencies must be evaluated in order to know how development can be done which will take individuals to the training procedure.
- 7) Replacement, termination, and advancement: Knowing the competencies of each individual simplifies steps for the HR to work on rotation, termination, and promotion appropriately.
- 8) Performance management: This refers to the implementation of quality management principle which is a quality cycle in human resources planning. This cycle starts from planning in which competencies of each person must be taken into account, putting the right people for the right job, capability and work performance tracking to evaluate which is based on competencies. In the end, results are used for further improvement.

In the meantime, Yotyingyong (2005) has classified competency into three categories: 1) core competency, 2) functional competency, and 3) role competency. Each category has the details as follows.

- 1) Core competency is the ability of personnel in an organization. All workers are required to possess core competency. It is true that everyone has only one core competency, for example creative personnel or volunteering-minded personnel (Arnold, 2000).
- 2) Functional competency refers to skills and knowledge required in a particular path of jobs. It is used only for specific work such as accountants who can manage the budget and make list of incomes and expenses, and so on (Stanley, Guido, & Garvin, 1988).
- 3) Role competency refers to competencies performed according to roles and duties, for example, the position of an executive which needs to demonstrate

leadership, strategic thinking, and job coaching which are all used as part of the job (Grüninger & Fox, 1995).

To apply the competencies into the CBT accounting, the CBT should concern about 1) plan for the organization; this will include determining the competency for each position in order to know who a suitable candidate for each position; 2) job evaluation, wage, and salary administration; 3) recruitment and selection suitable for CBT accountants; 4) CBT should consider the competencies of the qualified individual or his or her abilities which need to match the desired position; 5) training and development; 6) occupation preparation and succession development; 7) replacement; and 8) performance management.

2.1.8 Use of Competency in Curriculum Improvement

Rules for implementing competency into curriculum improvement can be divided into 7 steps as follows: 1) appoint or designate a responsible individual; 2) select experts, especially the stakeholders; 3) determine core competencies; 4) design a curriculum that will support the competencies; 6) determine teaching based largely on competencies; and 7) apply the curriculum to teaching and evaluate it. The details are shown below:

- 1) Appoint or determine a group of individuals who will be responsible for the development of the curriculum and call this group as competency-based curriculum development committee. The committee is responsible for monitoring the improvement of core competency and core produces.
- 2) Select experts, especially persons who are the stakeholders, entrepreneurs, and academics. Also, select persons who are experts in curriculum development, and experts in competency setting. These individuals are needed in order to determine competencies related to duties by brainstorming for functional analysis to select the main duties and purposes of the work based on the content of the work.
- 3) Methods employed in serious problem analysis, or may be called critical incident techniques; refer to assigning individuals to identify problems during the operation and to find an answer for each question related to the problems. After that, answers will be summarized and turned into the main functions.

- 4) Determine core competencies which refer to main abilities that can be knowledge, skills, characteristics, as well as innovations which create a distinctive identity of the organization. In order to determine core competencies, the top executives will come up with strategies and define important characteristics, skills, and knowledge which will lead to the determination of career attributes in order for the curriculum to be designed for supporting the competencies.
- 5) Plan a course to back capability which will lead to assessment of the curriculum by experts or scholars, according to the curriculum principles outline by the Ministry of Education in Thailand.
- 6) Determine teaching guidelines based on the consideration of competency.
 - 7) Implement the curriculum and evaluate it.

To use competency in curriculum improvement, the CBT should follow the 7 steps namely; 1) appoint or designate a responsible individual; 2) select experts, especially the stakeholders; 3) determine core competencies; 4) design a curriculum that will support the competencies; 6) determine teaching based largely on competencies; and 7) apply the curriculum to teaching and evaluate it.

2.1.9 Competency Model

Competency model creating or specifying competency can be defined as follows (Ratsamithammachot, 2005; Sakworawich, 2004):

In specifying competencies, it will start from bringing vision, mission, and value of the organization as a guideline for determining competency, in the order of vision, mission, and value, respectively. The three sequences must be consistent with one another or they are going in one similar direction in order to reach the goals of the organization. They are all defined as an organizational strategy. After that, the consideration of core competencies of the organization shall take place. The consideration can involve questions such as what do the organization have? What will be the knowledge, skills, and attributes that the organization uses in order to push and move towards the organization's goals? After considering the core competencies, the functional competencies of each individual's duties in the organization according to the position, which must be consistent with the core competencies of each person,

shall be considered. The core competency of the individual will be in line with his or her functional policy. So, every piece of work will go in the same way. This can be displayed as shown in Figure 2.3.

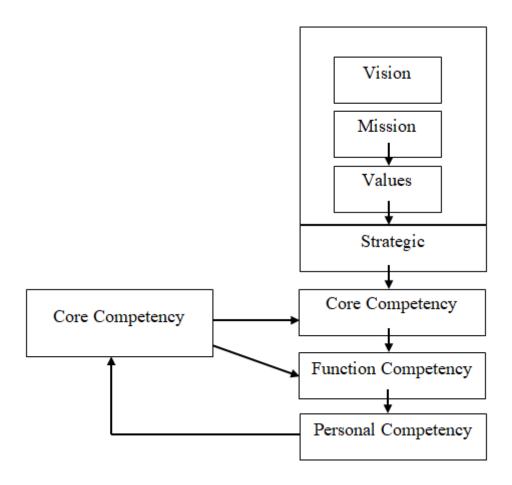


Figure 2.3 Specifying Organizational Competencies

Source: Tongkeo, 2007.

On the other hand, the core competencies will come from individual competencies of each person. Therefore, in order to describe the details and put them into action, balanced scorecard and the principles of determination as well as the KPI shall be used to build relationships as shown in Figure 2.4.

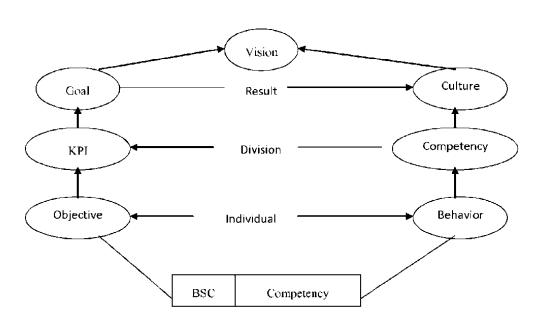


Figure 2.4 Performance Management System

Source: Hollenbeck and Gerhart, 2018.

Meanwhile, Lawler (2003) states that in determining competencies, there may be more ways of determining them as follows:

- 1) The employment of research results as a competency such as the survey of what a person who is in charge of a particular position must have or do in terms of the core competencies. The result of this type of research will give a competency called Generic Model or General Model.
- 2) Determining competencies from job/task analysis refers to determining competencies by analyzing different positions and then design the competencies. This type of determining is suitable for selecting people for particular jobs or new productivity improvements. This will help determine the competencies of a person who will work towards the desired output. Determining competencies with this main approach is considered to be quick and easy, but it will not show any relationships, compared to the first model from which the linkage can be seen but it is extremely time-consuming, and those who conduct the determining may be lost.

2.2 Factors for CBT Accountants in Thai Context

2.2.1 Knowledge

Knowledge refers to understanding of concepts and principles that are needed in professional field. Briefly, it can be stated as, "What kind of knowledge does a person need?" A person for example must have knowledge of HR principles and knowledge of labor law.

2.2.1.1 Types of Knowledge

Panich (2006) stated that knowledge can be divided into two broad categories: explicit knowledge and tacit knowledge. Tacit knowledge is a knowledge that is written as a letter, such as a handbook, books, blogs, and blogs among others. Knowledge that is latent knowledge embedded in people, or sometimes it cannot be removed in writing. The most important knowledge is known as the latent knowledge. This knowledge needs mechanism to exchange learning among people and build trust and transfer knowledge between each other. The details are as follows.

1) Tacit Knowledge

Tacit knowledge is a type of knowledge that cannot be explained by words. It is based on action and experience. It is a belief, a skill, and subjective which needs training to gain expertise. It is also context-specific, informal and difficult to communicate, such as judgment or trade secrets, corporate culture, skills, expertise in various matters, corporate learning, ability to taste wine, or even skills to observe the smoke from the factory chimney to see if there are problems in the production process.

2) Explicit Knowledge

Explicit knowledge is the knowledge that is easily gathered, organize and transfer using digital methods. It is objective which can be converted into codes. There is no need to interact with others to convey knowledge, such as corporate policies. It shows processes, software, documents and strategies, goals and capabilities of the organization.

There is also knowledge is not very clear and transferring it is complicated and difficult. Some people call this knowledge as "sticky knowledge" or "embedded knowledge." On the other hand, clear knowledge can easily be transferred

and shared. The relationship between the two types of knowledge is not separate, they are mutually constituted (Tsoukas, 1996), since deep knowledge is a component of all knowledge (Grant, 1996) and can be transformed into explicit knowledge by verbal communication. Both explicit and explicit knowledge are transformed into mechanisms such as exchange of knowledge, transcription integration of knowledge, and the absorption of knowledge. Knowledge management has many forms. There are a variety of models. It is knowledge management model that believes that everyone has the knowledge to perform at a different level of expertise and respect the knowledge that is in people. It means that someone who do not study will lack knowledge. The knowledge transformations from tacit knowledge to explicit knowledge illustrates as Figure 2.5.

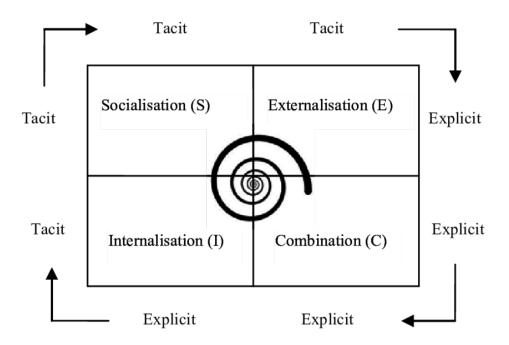


Figure 2.5 Knowledge Transformations from Tacit Knowledge to Explicit Knowledge

Source: Małgorzata Sliwa, Justyna Patalas-Maliszewska, 2015.

2.2.1.2 Level of Knowledge

Knowledge levels can be divided into 4 levels

- 1) Know-What knowledge is what is to be found in new graduates. The only knowledge that is recognized is the knowledge gained from the study.
- 2) Theoretical and contextual knowledge (know-how) is knowledge linked to the world of reality. Under complex conditions, knowledge can be brought into context and often found in people who work for many years. The knowledge is embedded deep into the skills or experience.
- 3) Knowledge at the level of reason (know-why) is the rational knowledge between stories or events. It shows the result of complex problem solving and experience sharing with others. They can take their own deep knowledge, exchange it with others, or transmit it to others, and take the knowledge from others to use in their own context.
- 4) Knowledge of the value of belief (care-why) is knowledge of the nature of the initiative. Self-motivated creativity is the ability to extract and analyze the knowledge that they have. With the knowledge, they have been created as a new models, theories or innovations.

However, accountants must meet the qualifications of the CBT accountant. It also requires a full knowledge of how to be a quality accountant, working quickly and accurately, this knowledge is very important to the accountant. Being an accountant is not easy because they have to have the patience to learn accounting. In order to be a good and quality accountant, he/she must have high responsibility for the assigned duties. As an accountant, there are also many elements that can be brought together. The basic properties can be summarized as follows:

- Have integrity to self and keep the information well because the accountant will recognize the financial well and it should not be revealed to anyone else.
- 2) Knowledge of accounting is the principle of accounting both their learning and work experience.
- 3) Have a responsibility to the profession. The accountant must present accounting information throughout and it must be done quickly and accurately.

- 4) Have work experience. It should be about the inspection of their own work throughout. Because they have to make financial documents correct and keep the customer information as well.
- 5) Develop the work to be updated. The enhancement of the skills of accountants in order to be updated.

From the review, the factors determining the knowledge of the accountant include; record transactions in the account correctly, maintain accounting and accounting documents as required by law, can prepare financial information in a structured way, analyze and interpret financial data, apply knowledge of law, practice well business and regulations, expertise in computer use with accounting, and accuracy in numerical calculations as shown in Table 2.2.

 Table 2.2 Factors Related to Knowledge for CBT Accountants in Thai Context

Author (s)	Record transactions in the account correctly	Maintain accounting and accounting documents as required by law	Can prepare financial information in a structured way	Analyze and interpret financial data	Apply knowledge of law, practice business and regulations to practice well	Expertise in computer use with accounting	Accuracy in numerical calculations
Lee & Blaszczynski	✓	✓	✓	✓	✓	✓	✓
(1999)							
Mohamed & Lashine	✓	-	-	✓	✓	✓	✓
(2003)							
Waller & Gallun	✓	✓	-	✓	✓	✓	-
(1985)							
Sharifi, McCombs,	✓	✓	✓	✓	✓	✓	✓
Fraser & McCabe							
(2009)							
Thorbjørnsen &	✓	✓	✓	✓	✓	✓	✓
Mouritsen (2003)							
Awayiga, Onumah &	✓		✓	✓	✓	✓	✓
Tsamenyi (2010)							

Table 2.2 (Continued)

Author (s)	Record transactions in the account correctly	Maintain accounting and accounting documents as required by law	Can prepare financial information in a structured way	Analyze and interpret financial data	Apply knowledge of law, practice business and regulations to practice well	Expertise in computer use with accounting	Accuracy in numerical calculations
Hardy & Deppe	✓	-	✓	✓	-	✓	-
(1995)							
Abbasi (2013)	✓		✓	✓	✓	✓	-
Mouritsen & Thrane (2006)	✓	✓	✓	✓	✓	✓	✓
Foster & Bolt-Lee (2002)	✓	-	✓	✓	-	-	
Hansen (2006)	✓	✓	✓	✓	✓	✓	✓
Shoenthal (1989)	✓	-		✓	-	-	✓

2.2.2 Skills

The word skill is defined in the Dictionary of the Royal Institute Year 2009 as the skill or ability to perform or practice. This may be the physical, intellectual, or social skills that arise from the practice. Skills are defined in terms of clarity and expertise. Individuals can be developed through learning, including professional skills, sports, working with others, reading, teaching, management, mathematical skills, language skills, and technology skills among others. From this meaning, it can be concluded that skills mean ability of persons in one matter which may be a physical skill. Skills can be learned from the practice of working with others. Like for example, students have skills in listening, speaking, reading, writing, mathematical or social skills. According to McClelland (1973), skills refer to ability, skill or maneuverability, work on the use of any parts of the body, or use the brain to think things or say in a short "What can a person do?" "Expertise in diagnosis and treatment of medical diseases", psychiatrists must have the capacity, "Expertise in the

examination diagnosis and treatment of psychiatric and substance abuse". The level or type of this capacity can be applied to planning and human resource management.

Skills often come from practice: 1) management skills and 2) technical skills, which are detailed as follows:

- 1) Management Skills means the skills to manage the work. This is related to the thought system.
- 2) Technical Skills means the skills needed to work in different work areas or groups. Therefore, the skills of the people who work in each group are different.

Level 1: Listening, speaking, writing and reading skills are the basic skills that everyone should develop. To be able to communicate with other people, accurate listening and listening skills are important skills. Listening and hearing are different. To listen to the need and to concentrate, many people do not have listening skills. They do not listen to others so that can create many problems. They need to practice listening skill. This is a great way to get to know each other. The communication is good and different. For writing skills, some do not think that it is important, specifically, formal writing, official correspondence, writing a conference record, how to use words, choosing words, and summarizing issues. To develop reading skill, it is necessary to practice. Practice reading and summarizing like a person who loves reading.

Level 2: Learning how to learn from the need to know themselves and know others in the learning process can develop and apply learning in life and work to achieve the set goals by focusing on self-learning as much as possible. In order to know how to learn, one must study and improve skills in the following five elements, which will help to develop the ability to learn.

1) Self-awareness: It is important to understand clearly what people are going through. They have the ability or aptitude. What do they want to do? Are they paying enough attention to our studies? How much time do they spend in education? Do they have enough self-responsibility? Do they want to be successful like some of the favorite people? These questions should be answered first.

- 2) Controlling their learning process is about creating positive traits in learning, including positive thinking, systematic thinking and hierarchy. Thinking and creative thinking also involve controlling learning process. Determine what the best learning style is. Identify the best learning style. Control and improve the learning skills. Choose the right environment that will make learning the best. In addition, the learning cycle is based on the learning cycle, i.e. survey, search, retrieval, data collection, analysis. Synthesis is a kind of meaningful knowledge.
- 3) The development of learning skills is the intellectual process that leads to learning and can create new knowledge by itself. Sawatdee (2006) proposed 10 things as shown below:
- (1) Practice observing what we find or see in an environment, such as bird watching, butterflies, or at work. Observation training will give rise to intelligence, globalization, and thinking mindfulness and concentration. It will affect the observation.
- (2) By practicing notetaking when you notice something you should save it to draw and make notes, photos, video, which may be less detailed as we age and recording the situation is a development of intelligence.
- (3) Practice the presentation. When doing group work, learn what notes should be presented to a friend or supervisor. Good practice of presentation is the development of the wisdom of the presenters and the group.
- (4) Practice listening if you listen to others, it will make you smarter. The ancients called it the polymath. Some people do not hear what others say because they are obsessed with their own thoughts or have a passion for something, hence, they cannot concentrate but having concentration will help to listen faster.
- (5) Catechesis. A sermon during presentation and listening. Practice-Catechism or Question-Answer is the practice of reasoning, synthesis, making it clear in that matter. If we listen without asking the answer will not be clear.
- (6) Practice hypotheses and ask questions. What time is it? We need to be able to ask what this is. What is it? What are the benefits? How do you accomplish that? and the practice of asking questions. If the group helps to think of valuable and important questions, they will be interested with answers.

- (7) Practice finding answers. When you have questions, you should find answers from books, internet ask old people or ask someone who has knowledge/expertise depending on the nature of the question. Try to find answers to key questions. It is fun and knowledge will surely be gained, unlike book browsing, when there are no questions asked. When searching for answers all the way to the end was not found, and questions remain, and it is important to find the answer through research.
- 4) Research to find answers: It is part of the learning process at every level. Research will make discovering new knowledge that will make you proud. It is fun and very useful.
- 5) Link integrity: To see the whole and see themselves. The nature of all things is interconnected. When learning what to do, do not let the knowledge be divided into parts, it should be linked as a whole. In all honesty there will be beauty and other dimensions are born out of respect and in it, you will see yourself.
- 6) Practice writing academic compilations: The learning process and new knowledge acquired. The academic compilation is a refreshing idea. The academic compilation is an important development of one's self-knowledge, and it is useful for the broader learning of others.
- 7) Development of information and communication technology skills learners are more likely to have access to the information they need to know, so they need to improve their skills or abilities. The importance of information is to choose a variety of sources to access to information resources by means of information technology and media, information accuracy and reliability. This is a new knowledge, and the information can be effectively.
- 8) Use tools to help make learning more effective. A tool that can help us to understand the information that is commonly used today is the graphic organizer, which provides information or knowledge to write a relationship in the form of diagrams through this learner understand better.
- Level 3: Active learning: If the practitioner is a person who has the skills to learn all the time, it will keep developing itself as it is a new knowledge. If it does not develop, it means backwards and the former knowledge is not updated. If the learner wants to know and keep asking questions to find answers; it is fun to learn things. For

example, if it is knowledge about sports and entertainment news around the subject, people are very interested to know. Learning is known by many as it is an attractive form of learning using group chat.

Level 4: Computational skills: It refers to the abilities to calculate basic addition, subtraction, multiplication, and division problems quickly and accurately using mental methods such paper-and-pencil method and using calculator. Counting means counting the number of items correctly and calculates the number of counts correctly. It helps to have logical thinking. Even some people complain that they do not like the calculation, but it is necessary to develop and learn.

Level 5: Skills of self-development: The practitioner must be ready to accept the opinions of others to improve themselves. They can improve this skill by changing the view, having a good attitude, acceptance of listening to other people's opinions, and "receive criticisms" to enhance their development. There are also words that are similar to the word development and often used interchangeably: self-improvement, self-management, and self-modification, meaning self-change to suit their needs and goals or to be consistent with what the society expects. They must be committed to change or improve themselves, to have faith or basic concepts to develop. This will help promote self-development. The key ideas are as follows:

- 1) All human beings have valuable potential in themselves. It can be practiced and developed in almost every subject.
 - 2) No one is perfect on all sides. Everyone has a room for improvement.
- 3) Even the person who knows himself best cannot be changed in some ways. They also need help from others in their development. It is to the control of thoughts, feelings and actions. It is as important aspect as the external environment.
- 4) The major obstacle of self-improvement is that the person has the idea but they do not change the way they think and act, as a result they do not acquire new skill.
- 5) Self-improvement and development can be carried out at any time and continuously when encountering problems or defects about themselves.
- 6) The self-improvement of leaders is very necessary. There must be one step ahead of the staff, both in the knowledge of the work and the idea of a good attitude, as the teacher must read over the students. To be taught and convey

knowledge, especially learning about human behavior and to be a role model are suggested.

Level 6: Analytical thinking skills can be developed and trained. This is a simple belief that people are fooled because they do not think or do not often trusted by individuals such as senior citizens, scholars, journalists among others or even believers by fate. What is doubtful is that sometimes they decide what is wrong because of their wrong thinking, neglect, lack of integrated thinking, and future thinking makes result to making mistakes. Sometimes they see what other people are doing and, they always think that they are right. Analytical thinking is the cornerstone of learning. People who have analytical thinking are superior to others. In terms of level of development and use of intelligence, in the development of critical thinking skills, they can be classified and categorized. It can apply knowledge to solve problems in different situations. The results are analyzed. The development of critical thinking skills is a strategic. The only thing that matters is the theoretical focus, by neglecting the practice of critical thinking. When they learn, they will lack the ability to bring knowledge into their own careers because critical thinking is fundamental to thinking. Therefore, they need to train and develop logical thinking and reasoning. On the quest for truth, feelings must not be included. Analytical thinking is deep thinking. There is no doubt it is an important skill. This is a skill can be developed when we apply this skill frequently. Thinking and decision making are the solution is to have more logic.

Level 7: Scientific skills: The practitioner needs to develop a variety of tools and methods. Therefore, they need to practice and develop scientific thinking processes such as investigating knowledge, problem solving, or problem-oriented learning. In the development of scientific thinking processes, there are changes in intelligence and permanent behavior. As a seeker, knowledge is a discerning discoverer. The problem can be solved using the quest process is completed by seeking knowledge and/or using the problem-solving process. This will help us to have more information and to present them in a clearer way.

Therefore, the factors of skill for CBT accountants in Thai context are; record transactions in the account correctly, maintain accounting and accounting documents as required by law, prepare financial information in a structured way, analyze and

interpret financial data, apply knowledge of law, business and regulations to practice well, expertise in computer use with accounting, and accuracy in numerical calculations, see Table 2.3.

 Table 2.3 Factors Related to Skill for CBT Accountants in Thai Context

Author (s)	Record transactions in the account correctly	Maintain accounting and accounting documents as required by law	Can prepare financial information in a structured way	Analyze and interpret financial data	Apply knowledge of law, business and regulations to practice well	Expertise in computer use with accounting	Accuracy in numerical calculations
Hancock,	✓	✓		✓	✓	✓	✓
Howieson,							
Kavanagh, Kent,							
Tempone, &							
Segal (2009)							
Cates, Schaefle,	\checkmark	\checkmark	✓	\checkmark	\checkmark	\checkmark	\checkmark
Smaby, Maddux,							
& Le Beauf							
(2007)							
Cohen, Morgan,	\checkmark		✓	\checkmark	✓	\checkmark	\checkmark
Plotnikoff,							
Barnett, & Lubans							
(2015)							
Logan & Medford	\checkmark	\checkmark	✓	\checkmark		\checkmark	\checkmark
(2011)							
Murray & Gerhart	✓	✓	✓	\checkmark	✓	\checkmark	\checkmark
(1998)							

 Table 2.3 (Continued)

Author (s)	Record transactions in the account correctly	Maintain accounting and accounting documents as required by law	Can prepare financial information in a structured way	Analyze and interpret financial data	Apply knowledge of law, business and regulations to practice well	Expertise in computer use with accounting	Accuracy in numerical calculations
Stodden,	✓		✓	✓	-	✓	-
Goodway,							
Langendorfer,							
Roberton,							
Rudisill, Garcia,							
& Garcia (2008)							
Edmonds,	\checkmark	✓	✓	\checkmark	✓	\checkmark	\checkmark
Edmonds, &							
Mulig (2003)							
Pan & Perera	\checkmark	-	✓	\checkmark	✓	\checkmark	\checkmark
(2012)							
Waller & Gallun	\checkmark	✓	✓	\checkmark	✓	\checkmark	\checkmark
(1985).							
Johnson & Halabi	\checkmark		✓	-	-	\checkmark	\checkmark
(2011)							
Abbasi (2013)	-	✓	✓	✓	-	✓	-
Aly & Islam	\checkmark	\checkmark	✓	\checkmark	✓	\checkmark	\checkmark
(2003)							

2.2.3 Self-Concept

Self-Concept refers to attitude, value, self-image, and development of self-concept. Likewise, Siriwat (2002) states that behavioralists define the key factors that contributes to development.

- 1) Inborn potentialities are innate: This may be due to genetics and influences to the baby. These make people look different in strength and intelligence.
- 2) Environment and Learning: Every baby has different experiences. It is in society and the stimulus that affect the development of life, the learning and the role of the self in society, where the experience is divided into two categories.
- (1) Cultural experiences: Individuals in the same society experience the same traditions, values, beliefs, attitudes, and teachings in the societies we grow.
- (2) Specific experience; It is an experience that an individual encounters or gains during his or her life, such as the parenting of a parent or caretaker. It may include other incidents, such as disappointment from university entrance examination, and loss of love. Social role refers to what people want to communicate to others in society and see how he/she has a role in society as a team leader. Bong and Skaalvik (2003) classifies self-concepts into four categories.
- 3) Ideal Self: It is the image that people want to see and want to be in the future. For some people the picture is clear because he felt the change, what he wants in life and how to do it. For some people it may be unclear, and some may have inconsistent images. The truth or impossible thing usually causes a person to have a problem and might think that they may accomplish their image. Some parents make a picture of the child wishing they should be or be accepted to children. This will make the child unhappy because these expectations may not match with what they want. They want to be perfect and the four parts of their imagination must be the same. However, sometimes the image comes close and overlap, it makes the person happy. If practiced, individuals will feel proud and have self-esteem, if not, people may feel depressed, perhaps upset, self-depressed or desperate.
- 4) Looking- Glass Self: It is a self-image that people think about others. Also, there is an image of self, values, beliefs, and social requirements (other people or society wants to be) that is required by the society. It is a part of the process of adapting the values or the needs of the society. This concept is similar to public-self.
- 5) Self-based-image perception: It refers to the self-perception on the recognition of something may be true or not. If someone has positive self-perception, it will result to positive thinking, thus having good life and happiness; otherwise, it will result to sadness.

6) Real-self or actual-self: It actually or conventionally refers to the identity that is really not about being recognized or recognized by other people. It takes time to find out what kind of person he or she is. How does someone feel toward life? What is his/her ability? This process of knowing oneself may take a long time. This process will also develop self-awareness.

Self-awareness is divided into four types.

- 1) Self-concept is an important element in the development of a person's personality by saying that self-concept is an important element of identity-based representation. Individuals exhibit behaviors or personality traits according to their perception, each of which has different behaviors or personality.
- 2) Self-concept affects confidence: If the person has a positive attitude towards themselves. This will result in a person feeling proud. This will result in living life confidently as well as doing things in the right way.
- 3) Self-concept affects the success of a person's activities. A person's self-concept will impact the result of his/her performance. It could lead to high performance and success in his/her endeavours in life. The result of self-motivation or self-expectation is that there is confidence and motivation in performing activities.
- 4) Self-concept changes with the age of the person. Differences and changes affect self-esteem and self-esteem as a result of the person's comparison of behaviors in certain situations. The age of an individual affects how he/she perceives things. It is a standard practice and compared with other people.
- 5) Self-concept is complex and multi-dimensional: From the study of the structure and composition of the self-concept, it is known that self-concept is selfperception in many aspects.

Additionally, Wells (1978) divided the self-concept into three categories.

- 1) Cognitive competence is the ability to learn and practice one's self.
- 2) Social competence is the perception of the belief that they have relationships with others in any way.
- 3) Physical competence is the perception associated with the ability to express physical skills.

Therefore, factors related to self-concept for CBT accountants in Thai context are 1) patience to work; 2) responsibility in duty, do not leave the job without a

reason; 3) creative and develop the work always; 4) ability to learn; 5) enthusiasm; and 6) discipline in work (finish work as scheduled). These can be seen in Table 2.4 below:

 Table 2.4 Factors Related to Self-Concept for CBT Accountants in Thai Context

Author (s)	Patience to work	Responsibility in duty, Do not leave the job without reason	Creative and develop the work continuously	Ability to learn.	Enthusiasm	Discipline in work (Finish work as scheduled)
Betz & Hackett (1981)	✓	✓	-	✓	\checkmark	✓
Byrne (1996)	✓	✓	✓	\checkmark	✓	✓
Sirgy (1982)	\checkmark	\checkmark	\checkmark	\checkmark	-	-
Markus & Wurf (1987)	\checkmark	\checkmark	\checkmark	✓	\checkmark	✓
Grubb & Grathwohl	-	✓	\checkmark	✓	✓	✓
(1967)						
Greenwald & Farnham	\checkmark	✓	✓	\checkmark	\checkmark	✓
(2000)						
Greenwald, Banaji,	\checkmark	-	✓	-	\checkmark	✓
Rudman, Farnham,						
Nosek & Mellott (2002)						
Pajares & Schunk (2001)	\checkmark	✓	\checkmark	-	\checkmark	-
Hattie (2014)	\checkmark	✓	\checkmark	\checkmark	\checkmark	✓
Alfermann & Stoll (2000)	✓	✓	\checkmark	\checkmark	\checkmark	✓
Guay, Marsh & Boivin	✓	✓	\checkmark	-	-	-
(2003)						
Marsh, Trautwein,	\checkmark	✓	✓	✓	\checkmark	✓
Lüdtke, Köller &						
Baumert (2005)						
Marsh & Hau (2003)	✓	✓	✓	✓	✓	✓

2.2.4 Motivation

Motivation is an attribute that controls human behavior which arises from needs, drives, or desires in order to achieve goals and objectives. The motivation may occur naturally or from learning. Motivation comes from both internal and external stimuli of a person. The internal stimuli include feelings, desires, or lack of something which create influencing power or stimulating a person to act or create actions to replace what is missing or needed. As for external stimuli, these include anything that stimulates, leads, and supports the desires in a person to involve in activities. This motivation may be caused by either internal or external stimuli or be caused by both simultaneously. It can be said that motivation leads to behaviors that have been caused by human needs, and human needs are important internal stimuli for creation of behavior. Moreover, there are other stimuli such as social acceptance, friendly atmosphere, forcing, rewards or encouragement, or gratification. All these could be stimuli for motivation (Atkinson & Feather, 1996).

While Robbins, Judge, and Breward (2007) claim that motivation means a willingness to make unlimited strides in attaining organizational goals with the ability to meet individual needs as a condition.

The process begins with the physiological or psychological moves or needs to stimulate the behavior or the drive moving towards the goal or the motive. These three essential elements are the basic processes of motivation as seen in Figure 2.6.



Figure 2.6 The Basic Motivation Process

Source: Robbins, Judge, and Breward, 2007.

However, most scholars prefer to employ Maslow's Hierarchy of Needs in their study, which consists of five levels of needs that motivate drive and influence. These levels are physical needs, security needs, needs for love, needs for respect, and needs for success in life. These five needs will occur in order, no randomization or one preceding another. for the hierarchy includes 1) physiological needs 2) sanctuary or security needs 3) social needs, 4) esteem needs, and 5) self-actualization, with the following details:

- 1) Physical needs are elementary human requirements for survival such as food, clothing, housing, medicine, air, drinking water, relaxation, etc.
- 2) Sanctuary or security needs: When humans have met their corporal needs, they will raise the needs of higher levels, for example, life plus belongings safety as well as the need for stability in life and work.
- 3) Needs for commitment or acceptance or social needs (affiliation or acceptance needs) are needs that occur as part of society. This is one of human nature. This type of needs includes the desire to give and receive love, needs to become part of a group, needs to be accepted, and needs to get appreciated by others.
- 4) Esteem needs refer to needs for self-pride, needs for praise, respect, and status from society, such as the need for being respected and needs to be accepted as knowledgeable.
- 5) Self-actualization needs are the highest level of needs of an individual such as the needs to do everything successfully and needs to do everything to meet their own needs.

Motivation is something that a person needs. Motivation will drive or motivate people to behave or do something or will determine a direction or an alternate for actions or behavior in order to respond to goals or to escape from something undesirable, for example, when a person has set a challenging goal, he or she will automatically be responsible, enthusiastic, and committed. He or she will work hard for success and will refer to the goals as motivation for keep working for successful work performance. Geen, Beatty, and Arkin (1984) and Matlin (1995) has divided motivation according to its sources into two categories: 1) intrinsic motives and 2) extrinsic motives. The details are as follows:

1) Intrinsic motives are internal motivations which have been pushed from within an individual, which may be attitudes, thoughts, interests, intentions, visions, values, preferences, needs, and so on. These things are likely to be influential to the behavior permanently, for example, a worker who sees an organization as a

place for his life and his family will be loyal to the organization, and when some organizations lose money from their operations, and they cannot pay well, with the commitment of the employees, they understand the organization's problem and are willing to reduce costs and work together.

2) Extrinsic motives are motives from outside that motivate a person's behavior. This type of motives may be a reward, an honor or reputation, praise or respect. This type of motivation is not permanent. Individuals only exhibit behaviors in response to such motives when they want a reward which was the source of motivation.

Nevertheless, motive in human resource management is a factor that leads to the success of a job which results in job satisfaction. However, job satisfaction and motivation are different. When a person is satisfied with a job, it does not mean that the person is always motivated to work. But if one is motivated to work, he or she will work well.

The literature review on motivation found that most researchers have studied about motivation which is divided into monetary motivation which is an important factor that can motivate employees to change their work habits as well as to motivate the CBT accountants in Thai context to work in appropriate ways. This type of motivation is divided into salary, welfare, training to increase knowledge, health insurance, progress in career, environment at work, work facilities, and friendship between colleagues, as shown in Table 2.5.

 Table 2.5
 Factors Related to Motivation for CBT Accountants in Thai Context

	Factors Related to Motivation for CBT Accountants in Thai Context								
		Moneta	ry Motivatio	n	Non-monetary Motivation				
Author (s)	Salary	Welfare	Training for More Knowledge	Life And Health Insurance	Progress in Career	Workplace Environme nt	Facilities at Work	Friendship among Colleagues	
Boxall & Purcell (2011)	✓	✓	-	✓	✓	✓	✓	-	
Yahya & Goh (2002)	\checkmark	✓	-	✓	✓	-	✓	-	
Gangani, McLean & Braden (2006)	\checkmark	\checkmark	✓	✓	✓	✓	✓	✓	
Swanepoel, Erasmus & Van Wyk (2003)	✓	✓	-	✓	✓	-	✓	-	
Heffernan & Flood (2000)	✓	✓	-	\checkmark	\checkmark	-	-	-	
Koys (1991)	\checkmark	✓	-	-	✓	✓	-	✓	
Kamoche (1994)	✓	✓	✓	✓	✓	-	✓	-	
Schuler, Tarique & Jackson (2004)	\checkmark	✓	-	✓	✓	-	-	-	
Riley (2014)	\checkmark	\checkmark	-	✓	\checkmark	\checkmark	-	-	
Hunter, Beaumont & Sinclair (1996)	\checkmark	✓	-	\checkmark	\checkmark	✓	-	✓	
Dalbert (2001)	✓	\checkmark	-	-	\checkmark	✓	-	-	

 Table 2.5 (Continued)

	Factors Related to Motivation for CBT Accountants in Thai Context								
Author (s)		Moneta	ry Motivatio	n	Non-monetary Motivation				
	Salary	Welfare	Training for More Knowledge	Life And Health Insurance	Progress in Career	Workplace Environme nt	Facilities at Work	Friendship among Colleagues	
Shane, Locke & Collins (2003)	✓	✓	-	✓	✓	✓	✓	-	
Boyatzis (2008)	✓	✓	✓	✓	✓	✓	-	-	
Wu & Callahan (2005)	✓	✓	-	✓	-	✓	-	-	
Konovsky (2000)	✓	\checkmark	-	✓	✓	-	-	-	
Lerner & Lerner (2013)	✓	✓	-	✓	✓	✓	-	-	

2.2.5 Traits

Trait is the physical feature of a person which will usually show up as a response to data or situations. Character is derived from education, parenting, experience, and personal learning. The competencies in terms of character are emotional control under pressure, and initiatives (Gehring, 2007; Nafukho, Hairston, & Brooks, 2004).

According to Allport (1966), there are three types of individuals' personal traits: 1) central traits, 2) cardinal traits, and 3) secondary traits. The details of each type of traits are as follows:

- 1) Central trait is a group of unique characteristics of an individual. In general, people will have this important characteristic. This feature can be used to predict the behavioral characteristics of a person's life, beliefs, attitudes, and ideas.
- 2) Cardinal traits are the distinguishing characteristics of individuals which appear clearly above other personalities. They will be dominant over the behavior and all kinds of expressions by the person, such as when we think of one person, this type of traits is always the case.
- 3) Secondary traits are the traits determined by experience and the environment around us since childhood and later in life. Those features will become an important part of the person.

Meanwhile, Eysenck (1992) describes that personality structure consists of traits, ergs, meta-ergs, subsidiation, and the self. Traits refer to the "mental structure". which makes the behavior of a person fixed. Cattell believes that each person has common traits shared with other people, for example, having the same social experience. As for unique traits, they mean the particular habits that exist in each person. It is similar to common habits. It is a feature found in everyone, for example, the ability to live together in a group. But for unique traits, they are characteristics that appear in the section of an individual's attitudes and interests. There are two types of physical traits:

1) Surface traits or external traits are the external personalities of a person which appears and can be observed clearly. It is a characteristic of the person which can be expressed openly.

2) Source traits are hidden traits in people. There are 16 types of traits divided into 3 types based on expression which are:

Dynamic traits are habits that are related to motivation and interests of a person leading him to any point he wanted.

Ability traits are physical attributes that determine the ability of a person to work to the goal. Meanwhile, temperament traits are physical traits which are related to response in terms of structure: it is the speed of power. In the expression of any behavior, it may be due to these three physical traits, but the dynamic trait will have more propulsion and is related to ability. It can be flexible and can change the majority of behavior (Jackson, Atkins, Fletcher, & Stillman, 2005; Judge, Higgins, Thoresen, & Barrick, 1999).

Meanwhile, Yu, Lin, and Tang (2018) divides the types of human personality into five categories: 1) extroversion, 2) friendliness or agreeableness, 3) conscientiousness, 4) neuroticism, and 5) openness to experience.

- 1) Extroversion: It is sometimes called surgery, broadly means people who like to talk, are very energetic and aggressive. People with this kind of character have: quick-temperedness, amiability, loquaciousness, decisiveness, and emotional expressiveness.
- 2) Agreeableness: This personality presents dependability, self-sacrifice, kind-heartedness, friendliness, and sociable behavior.
- 3) Conscientiousness: The basic characteristics of individuals in this dimension are those with high level of thinking (thoughtfulness), full of prudence and plan with good impulse control and target oriented behavior (Goal-Directed Behaviors). People with this personality are often manipulated and prepared mentally very well.
- 4) Neuroticism: People with this personality are sometimes reversed and regarded as having emotional stability. Individuals with this trait are emotionally insecure (anxiety), moodiness, irritability, and depression (sadness).
- 5) Openness to experience (sometimes called intellect/imagination): It is the nature of people who can pay attention to the world and can see through/understand easily. Having imagination and insight and broad range of interests is an example.

This dimension is an overview of personality traits. Many studies have shown that the grouping of individuals lead to other, mutually dependent characteristics. For example, people who are socially inclined are more likely to be talkative. This is complicated and varied and each person may show different behaviors, come out through these dimensions (Ehrler, Evans, & McGhee, 1999).

Personality of the person was laid out since birth from the potential that comes with the baby as a result of genetics, physical appearance, intellectual ability, other talent, and some emotional traits. From the study of newborns, infants have certain characteristics that differ in a reliable way in which expression level range from interest to the ability to adapt to the changing environment and mood in general. Some children may be agitated, annoying, interested in new people and objects. While some people are quiet, they are not interested in new things. These different styles have the effect of allowing parents to raise their children in a different way, which is equal to the molding and decorating of the personality. The origin is in the form. Therefore, the personality model of a person, in addition to being influenced by the genetic basis is also dependent on the experience of the individual in later life. In general, we can divide our experience into two categories: 1) common experiences, which are personal experiences in that culture, and 2) unique experiences which is unlike others, even in the same group. The details are as follows (Hinton, 1973).

1) Common Experiences: Every person who grows up in the same culture experiences the same beliefs, customs and values. As children grow, children must learn the ways of behaving socially or culturally. Culture influences the behavior of the person. One of the visible influences is the gender role. Most cultures define or expect men and women to have different sexual roles. Sexual roles may change from one culture to another. However, in each culture, we can broadly predict the personality of men and women. Based on expectations of the sexual role of culture, society is not complicated and influenced by many cultures.

Some of the options we can choose from, such as career, people can choose the career they want. But having the knowledge and skills to work alone is not enough to succeed. People need to behave and behave like people in their profession. Police must wear uniforms and behave in a manner that the police do. Medical professionals must be fluent in the language and physician-specific. The person must

follow the example of a professional. These show that society has a role to play in this regard.

In addition to gender roles and professional roles, the influence of society also makes it possible for us to expect that in certain social situations, individuals will behave, for example, in funerals, marriages, and football matches.

Although culture influences people similarly, cultural studies alone cannot predict a person's personality completely because of two reasons: 1) cultural influence is not the only form because culture is influenced by parents and other people, each person has different values and training methods, 2) individuals have their own unique experiences, which is different from others (Coxon, 2005).

2) Unique Experiences: Individuals have their own way of responding to social pressures. The differences in individual methods may be due to their biological differences, for example, it is different in body strength, endurance, sensitivity, and sensory perception. This may be the result of parental training by means of reward and punishment, and by imitation. But what is obvious is, the parents' experience of having children is different. It can cause different effects in rearing each child. We will notice that in similar environments, fraternal children may respond differently (Cacciatore, 2010; Lin & Wu, 2012).

Cacciatore (2010) points out that the unique experience also includes a person's special experience, such as long-term illness and well-cared for the death of parents, which may be the cause of gender role imitation.

However, the characteristics of each employee can be different depending on their responsibilities in each career (Stevens & Campion 1994). As for the physical characteristics of accountants, namely: having good eyesight, dressing cleanly and appropriately, self-confidence, and reliable personalities such as not drinking alcohol, not smoking, or not gambling, they have been reported by scholars as in Table 2.6 below.

Table 2.6 Factors Related to Traits for CBT Accountants in Thai Context

Author (s)	Having good eyesight	Dressing cleanly and appropriately	Self confidence	Reliable personalities, such as not drinking alcohol, not smoking, not gambling.	Others
Ducrot, UsseglioPolatera, Péry,	✓	✓	-	✓	-
Mouthon, Lafont, Roger, & Férard					
(2005)					
Levy, Richardson, Lounsbury, Stewart,	-	✓	✓	-	-
Gibson & Drost (2011)					
Naragon-Gainey & Watson (2011)	-	✓	✓	✓	-
Tan (2010)	-	✓	✓	✓	✓
Durai, Kobayashi & Searchfield (2015)		\checkmark	\checkmark	✓	\checkmark
Gottesman (1966)	-	\checkmark	\checkmark	-	\checkmark
Santos, Mustafa, & Chern (2016)		\checkmark	✓	✓	✓
Etter, Pélissolo, Pomerleau, &		\checkmark	✓	✓	✓
De Saint-Hilaire (2003)					
Kaewsan & Rungchot (2015)	✓		✓	✓	\checkmark
Musiksut (2013)	✓	✓	✓	✓	
Ruecha, Som Ratchanat, Chiraro, Phing	✓	✓	✓	✓	✓
Thep, Lila, & Somsak (2016)					
Chiwaphatthanaphan (2015)	-	✓	✓	-	✓
Duaingam & Penwut (2017)		✓	✓	✓	✓

2.3 Community Accounting System

An accounting system is a financial information system consisting of a form or documents, accounting records, reporting, as well as methods and equipment. It is used to gather information about the operation and financial management of a particular business to the management in order to help the management fulfill their duties properly and to provide information to third parties involved in the business (Wild & Shaw, 2012). While Detzen, (2018) describes the sequence of steps as follows:

- 1) Steps of selection and collection are activities considered as a transaction (whether it is an economic event that the business must record or not). In these steps, documentary evidence must be collected for accounting purposes.
- 2) Taking notes and measuring: The first step is to document the transaction and the event. This is a list or event that is recorded in the book called "Journal." The record will be measured in the relevant value. Value refers to the value of the item. It varies depending on what kind of item, such as measured at cost (price at date of acquisition) or measured at fair price. The price that buyers and sellers are willing to trade but no one has power over anyone.
- 3) Using currency units: accounting transactions must use currency such as US Dollars, etc., and the number of records to each unit is fixed. Even the value of money will change.
- 4) Categorization: to find out the balance of all items by classifying accounts as assets, liabilities, capital, income and expenses. In the classification, companies will use the so-called book "Ledger."
- 5) Summary and reporting of financial information: when recording for a period. The categorized items must be categorized, summed up, and processed. The "Financial Statement" consists of five parts:

- (1) Income Statement
- (2) Balance Sheet
- (3) Statements of Changes in Shareholders' Equity
- (4) Statement of Cash Flows
- (5) Accounting policies and notes: The accounting policies are the accounting principles used by the entity. Presentation of financial statements and the accompanying notes are an integral part of these financial statements. The accounting principles used by the entity to prepare and present the financial statements are disclosed in the financial statements.

2.4 Accounting System

2.4.1 Importance of Accounting System

The accounting system is necessary and relevant to the various organizations in every organization. As a result, we focus on the accounting system, the techniques, and practices of corporate accounting in order to apply the criteria derived from those studies. The correct accounting information is useful and can respond to the needs of the user. That is, users can make various decisions correctly and at the appropriate time, accounts are important to the business as follows (Hendriksen, 1977):

- 1) The accounting system will allow for the recording to be completed.
- 2) The accounting system provides accurate and reliable financial figures.
- 3) The information obtained from the accounting system can be used in planning correctly.
- 4) Data from the accounting system is used to control the operation of the plan.
- 5) Data from the accounting system helps managers make financial decisions.

2.4.2 User Account Information

We can divide the users of accounting data into 2 types.

- 1) External users are much more diverse than internal users. It can be divided into six major categories: customers, vendors, shareholders, employees, lenders, and governments. These external user needs are limited to information and publications that the organization provides, makes and prints publicly for the purpose which goes by the regulations as required by law, for example, the statement of comprehensive income and statements of financial position of the company. The accounting data required by external users is often called financial accounting.
- 2) Internal users are small and not as diverse as external users. For senior management, the need to use most of the information is intended to maximize the benefits of the business. The accountant calls for internal information and takes this information into account.

However, Horngren, Sundem, Stratton, Burgstahler, and Schatzberg (2002) state that executives want to use these financial data to achieve the objectives. There are at least 3 basic objectives: 1) for effective planning, it is used to analyze the variance arising from differences in the operational plan that is placed on the actual operation; ad 2) to motivate and guide the daily operation of the employees by finding and making sensible decisions.

2.4.3 Components of the Accounting System

Due to the different nature of the business, the purpose of accounting is different, for example, in the industrial sector that manufactures its own products. The accounting system needs to consider the information about the cost of production of goods in the business sector and the banking information required from the accounting system which is different types of deposits, investments and loans among others, regardless of the nature of the business. The accounting system consists of the following key parts:

- 1) Documentation of accounting includes the following:
- (1) Forms such as invoices, vouchers, receipts, and receipts. These forms are required for the day-to-day business and are used as evidence in the accounting records.
- (2) The entry book is the book that records the transaction. They will be recorded in the order preceding the date of the transaction. Then, accountants go through the list to save in the next tip book. The book is divided into two categories.
- a) A specific journal is a book that is used to record only a specific item. It is suitable for activities with items. The daily journal will help facilitate the recording of a specific subject quickly and easily, such as purchase journal, daily journal, journal of money, and journal of payroll.
- b) General journals are books that are used to record all transactions. If it is a small business, it will use the journal to record every transaction that occurred. But if it is a large business, it may use a specific journal, and the journal goes together.
- (3) Ending Book or Ledger Book: The book is used to classify items or to collect items from the list of items as in 1.2 to separate entries by account name and by category account. It is easy to summarize at the end of the accounting period.
- (4) Preparation of financial reports which will be proposed to management, shareholders, creditors and government agencies such as sales reports, cash receipts, cash statements, financial statements, statements of comprehensive income, retained earnings, and statements of financial position.
- 2) Steps and Methods: In practice, company must use the journal entry form, and classification of items as a ledger and reporting.
- 3) Machinery: To save time and reduce errors caused by operations, these machines are typewriters, copiers, calculators, computers, and other related machines. They are important for accounting of any business. It is the competent officer who is qualified to implement the accounting system effectively. The appropriate qualification in this area is knowledge of accounting, and experience in specific business operations which require a different approach. Without such a

competent officer, even if there is a well-placed accounting system, it cannot be used to achieve its intended purpose (Weerapariya & Leekphai, 1997).

Mero, Guidice, and Brownlee (2007) state that what happened in business must be recorded to keep up with the event to use as evidence to be taken into account. Note taking is done using various forms. Some categories make it and use it in business itself. Some types are sent to outsiders. And some of them are derived from outsiders. Forms to be discussed here are forms that are made for internal use and sent to outsiders. The form is made to be used as an aid in the operation and control as follows (Weerapariya & Leekphai, 1997).

- 1) To record the event in writing about what happens, when, and who is responsible for something. Some of these forms are used as evidence in accounting, such as bill of lading, raw materials, and payment certificates among others. Some forms are not used as evidence in accounting records. It is used in operations such as purchase orders, purchase orders, and other related forms.
- 2) To help eliminate errors caused by memory recall. This will happen in case it is not recorded.
- 3) To increase the efficiency of operations, it may be used as a medium of communication with both parties involved in the business and outsiders to be notified. Notification by form will cause the message to be sent to each other clearly and prevent counter-arguments and misunderstandings.
- 4) It is a record of the transaction, such as sales invoices, receipt, and report. In some cases, a copy of this form may be part of an accounting memorandum if the business has a non-Ledgerless Bookkeeping method by keeping a copy of the invoice in the file. A copy of this invoice will be used to represent the individual accounts receivable.
 - 5) Reduce the cost of contact or note taking in the following ways:
- (1) The messages that you want to use regularly will be pre-printed. This reduces the work involved in recording these items into the form.
- (2) In cases where multiple parties need the same message, they may be provided. There are several copies using carbon paper. This will reduce the time it takes to complete the form.

2.4.4 Types of Accounting Forms

2.4.4.1 Defining Styles and Types of Forms

Considerations to determine the type of form that should be used are as follows (Weerapariya & Leekphai, 1997):

- 1) Use the original form as little as possible, use as substitute copy as possible. In order to define type, the required form is based on experience, decision makers, accountants and surveyors. Any form that is not worth the benefit should be discontinued.
- 2) The multiple forms are required with duplicate text in the accounting system available carbon paper or self-contained documents. This will allow you to save the item in one place.
- 3) The form should be designed with a simple and compact text. The form should be a convenient form for collecting information. It is used to record and post items in journals and registers.
- 4) The form should be in line with the internal check, which is an important part of the operation. Employees who check each other use the same copy of the form. Therefore, it is important to take into account this design.
- 5) Document design: In addition to the information to be used in accounting, the information provided by the form should be useful for statistical compilation.
- 6) Provide the facility for annual auditing, in a limited company business, an independent auditor will need to be audited every year. Therefore, the form that needs to be inspected must be designed so that it is easy to detect. This is a good way to keep the auditor accountable.

2.4.4.2 Types of Accounting Forms

Forms may be used at the beginning or for a record of events or items that have already occurred (Weerapariya & Leekphai, 1997).

- 1) Purchase requisition is the initiation of purchase order processing.
- 2) Payroll notification is to inform the payroll and payroll department that there is a new employee recruitment to be prepared for salary and wages.

- 3) Work order is an initiative where the production department conducts a production of a form, which records the event or transaction.
 - (1) Sales invoice is to record the transaction after delivery.
- (2) Purchase invoice to indicate the value of goods ordered and that the seller has shipped it.
- (3) Receiving reports shows how many products are received.
- (4) In-and-out time clock-cards show the number of hours (workers' hours). This will be used to calculate the wages.

2.4.4.3 Chart of Account

Chart of account is the number of accounts and the name of each account which diagram is showing the details of the code used to replace the account and statements of comprehensive income. These codes are designated as numbers for each of the accounts by using this account flow chart is important for processing and reporting data in the accounting data processing which is processed by people and using the computer chart almost everything. Numeric codes are used in coding, and the technique of coding a series of encoding, and sort codes are used together. (Yu, Lin, and Tang, 2018).

Phothisawat (2010) explained the classification of accounts. Normally, they are classified according to the category of accounts shown in the statement of financial position and in the statement of comprehensive income. Examples of classification of accounts for an entity selling goods or services may be as follows: 1) assets 2) liabilities 3) capital or shareholders 4) revenues and 5) expenses.

2.4.4.4 Accounting Systems Involved in Business

Business-related accounting systems consist of 5 systems: 1) purchase accounting system, 2) sales accounting system, 3) accounts receivable system, 4) accounts payable system, and 5) production accounting system. The results are as follows. (Davies & Crawford, 2005; Anandarajan, Anandarajan, & Srinivasan, 2012)

1) Purchase Account System

Purchasing accounting systems are related to business events related to the processing of information related to the purchase of raw materials, materials, and services. These activities will include a decision about the amount and

time to buy, selecting a supplier, transportation scheduling, and warehouse receipt. There are two ways to make a purchase: the purchase is believed to be the purchase of goods or service with the condition of payment as agreed, the company has a complete, accurate and timely database will result in effective procurement. By having good information which is complete and timely, it can make decisions about price, quality, quantity, and vendor-related information. At the right time, there is flexibility to use and cost savings in purchasing. If the purchasing department does not have the correct and incorrect information, it will cause them to find ways in a routine work, such as:

- (1) The user does not provide full details of the material required. The procurement department acknowledges, this may cause misplacement or have to contact several individuals.
- (2) The user does not plan to use. When the material is withdrawn and no items, there is a need to buy quickly and often buy too often and causing overpayment of procurement costs unnecessarily.
- (3) Purchasing department does not know vendor source, so there are repurchases from the seller. This will eliminate any of these issues that will arise in the purchasing process and to achieve the efficiency of procurement. This will have a direct impact on production costs. There should be a way to store data of the accounting system relating to procurement, documentation and internal control. The accounting system that deals with purchasing effectively will have the following consequences:
- a) Purchasing finished goods: Materials used in production as well as tools, utensils must be approved for purchase, and the procurement method will be implemented as required now and follow the rules laid down.
- b) When receiving the purchased goods, the quantity must be checked for quality and price to ensure that the receipt meets the purchase.
- c) Make a payment voucher and pay the purchase price is sure to belong already mentioned in verses 1 and 2.
- d) The received must have a proper control to prevent damage caused by corruption and natural disasters.

Procurement for manufacturing, procurement and procurement services, which has a practical way of buying should include:

- (1) Each purchase request: The purchase requisition must be made in the purchase requisition or the tender offer's purchase requisition.
- (2) When the purchase request is approved, the purchasing department must make a purchase decision based on quality and price. The purchase order is for purchase approval.
- (3) Upon receipt of the purchased goods, the company shall check the quality of the quantity of the goods on the certificate bought and match the documents received at the reception and make a receipt (receiving report) to be useful to check if there is error.
- (4) When the goods are in the warehouse, it must be verified that the goods received correspond to receipts and invoices. A stock card must be provided to control the number and the price of the product.

Internal control of procurement: the internal control system will be a good way to enhance the internal control system to ensure that the procurement process meets the objectives set by the management and to be in line with the principle of good purchasing. The key internal controls are as follows.

- (1) A clear purchasing policy should be established. It is important for the responsible officer to adopt the most economical order (EOQ: Economic Order Quantity) and the amount required. The time is set to buy a lot to have the power to negotiate with the seller and encourage the purchase of locally produced products.
- (2) There is a regulation on how to buy for the rotation of the procurement officer in a timely manner.
- (3) Separation of duties: procurement, maintenance and accounting.
- (4) Consider proper filtering and approval in procurement principles to ensure that they want to use it and do not put too much stock in the warehouse.
- (5) Authorize purchase to appropriate staff at each level to make procurement work not in the power of any single person.

- (6) It is required to have a full count of the agreement, the contract of sale and testing of the quality of every inspection.
- (7) Follow up the purchase: To ensure the correct number and quality at the time set and pay for goods only after the receipt of the complete.
- (8) Documentation is provided as evidence and episode of purchasing, and all documents should be assigned a document number. This can be verified later.

Material and inventory, management in industry

Inventory refers to raw materials and materials used in the production of goods, inventory items, and finished goods. Only the goods purchased for sale will be sold.

Material and inventory management plays an important role in the operation. Because of in the case of materials, if there are too few, the risk of material will become shortage. This will affect the production plan and marketing plan. While keeping small amounts of material in stock is a good investment and low cost of storage. In the opposite case, if there are too many inventory materials, the business loses the opportunity of sinking investment in the material and also has to bear the cost of maintaining it. Therefore, the company has to plan and study the quantity of the appropriate inventory by considering the material department and the amount of purchase by EOQ.

The price is based on the time it takes to procure and deliver the materials from each procurement.

In order to obtain the amount of inventory that results in the lowest maintenance costs. There are 3 ways to control the inventory system:

(1) Continuous Inventory System (Perpetual System) is an inventory system with all accounting methods with the receipt and pay of making a balance sheet showing the actual balance of inventory. It is essential to control the inventory of important items that are left unreachable. However, this system is a very expensive way of documenting. It also takes a lot of staff to take care of the payroll. At the moment, bringing the computer to apply for office and accounting can be corrected by using a bar code or universal product code (UPC), close the product and

use a laser scanner. It can also be used as a basis for inventory management in other cases, such as supply chain management.

(2) Inventory Periodic Inventory System is an inventory system that only accounts for the specified period of time, such as counting and posting at the end of the week or at the end of the month. When the item is withdrawn, it will be dropped. The system is suitable for all products that are available to buy and use at certain times, such as the SE-ED bookstores and at the end of the month to see the volume of open books in stores and warehouses and see the book that must be prepared for delivery to the shop that you want to buy. Inventory systems at the end of the period often have higher inventory levels than inventory systems. There will be an unexpected lack of anticipation beforehand. Additionally, this system will adjust the amount of purchase when the demand changes. For continuous inventory system and inventory system at the end of period, there are advantages of a continuous inventory system are: 1) less inventory available, 2) purchase fixed, which will make the volume discounts easy, and 3) can check individual inventory independently. Advantages of the inventory system at the end of the period:

- a) Takes less time and less control over system costs
- b) Reduce document costs. Reduced cost of purchase and easy to count inventory
 - c) Inventory costs are lower.
- (3) Inventory classification system is ABC. This system is a way to classify inventory into categories by considering the quantity and value of each inventory as criteria. To reduce the burden of oversight and control of inventory, which is strictly controlled, all items equally. It is not wasting time and money on unnecessary expenses. Good inventory management should avoid over-wareing. In a business that has a turnover of goods or objects in a short period of time, such as clothing or chemicals with an expiry date, these items have a demand period. Avoid over-storing unnecessary items.

Some businesses that sell long-term products such as office supplies, measurement tools or obsolete items can store more and longer. However, no matter what kind of business it is, keeping too much inventory is something that should be avoided because it will cost more and more storage costs for loan interest, the loans to invest in those goods and additional insurance costs. In addition, having too much inventory will cause the business to lack liquidity, assuming that the company can buy the winter jacket at a very cheap price.

In case of buying up to 10,000 units, because they buy a lot, so they get a great discount. If the business cannot sell all the shirts this winter, of course, the business can be resold in the next year. In addition to wasting space in storage, the money that sinks in the winter coat instead of the business will bring this money to invest. Other products can be sold and profitable before the next winter.

How to count inventory

Counting products to achieve: Make sure the product is available and meets the following requirements:

- (1) How to close the check account is to choose one day to close the account, then no additional withdrawal or move all inventory. You have to stop buying selling normally. This method will show the value of the inventory at the exact date of counting, yet it is a waste of days on the count.
- (2) How to check the counter: It closes the inventory movement into parts. To check when any count is finished, open the sales or disbursement as usual and to close all other departments to count all the departments. This way, you will not lose sales revenue, but you will have high chance of error.

2) Sales Account System

For sales of goods, if the business is sold, it will have a trade account if the sales system is not effective. The company has many debtors and cannot be charged. It became a bad account in the event of payment receipts or live sales, money can be easily obtained, resulting in fraud. Whether a business is sold live or sold, it is important to have a strong internal control system by selling the product or service. It can be divided into three types of sales:

(1) Retail

The retailing style is selling specific items such as clothing stores and department store. Most are sold by cash and using cash registers. For retail sales systems, most will use cash registers if they are sold in large quantities each day.

(2) Wholesale

Wholesale, it sells products or services to businesses that are resold or used in factories. The nature of the wholesale will be individual sales in a lot and high value. Wholesale businesses may not have a regular contact with customers, Most of the sales are usually on credits for repayment to customers

(3) Sale of Installment or Sale of Credits

The sale is when the seller has delivered the goods to the buyer by installments, one or several installments in various periods. This is the time of the year, retail sales tend to be more expensive. Therefore, it is necessary to have control over individual receivables to show details about the installment, purchase price, down payment, installment, time to install, payment date and the value of receivables. To track the payment is convenient, fast and accurate

3) The Purpose of the Sales Account System

The purpose of the sales accounting system is to control sales and receivables arising from sales. This will have the following effect:

- (1) Sell items: whether it is selling cash or selling it. It has been recorded accurately and timely.
- (2) Removing goods from the warehouse: Whether it is for sale or for any purpose, it must be well controlled to prevent fraud.
- (3) Amount of debt received from the sale: To see whether the account been properly taken care of.
- (4) Return of goods: Follow rules to prevent fraud and errors.
- (5) There is a separation of duties regarding the sale and receipt of money by checking each other and make sure you get paid for every sale.
- (6) There is sufficient control over the sale of this trust for regular verification, good internal control of the debtor.

4) Internal Control about the Sale

The sales system is the beginning of the revenue cycle. Each sale is related to other systems. It can be a debtor, shipping, invoicing and debt settlement, so the accuracy of the sales system. It is important to affect the accuracy of the system. It is relevant internal control regarding the sale. The method is controlled.

- (1) Separation of duties in loan consideration and repayment and recording receivables.
 - (2) Credit limit is set and credit approval authority.
- (3) There is a separate account receivable from the accounts receivable manager.
 - (4) Have control and keep the evidence of debt.
 - (5) Have control over the repayment by check in advance.
- (6) There is an analysis of outstanding debt aging and monthly debt status.
- (7) Make a debt reduction approval with a return or a special discount before any action.
 - (8) Write offs appropriate approval is required.
- (9) The documents related to the sales system should be published and predefined numbers to prevent fraud and control the repayment.

5) Account Receivable System

In the revenue accounting system, the end of the term when the goods are shipped to the customer and the accounts receivable and sales are recorded. In billing, cash collection or bank check will be in the receiving account. In addition, the payroll system also includes the sale of goods received cash, including all other receipts of the organization 1) receiving money from the account receivable, 2) receiving money from the sale of cash, 3) receiving money, such as getting a loan, receiving money, borrowing money from other income.

- (1) Receipt of goods or services from the debtor
- a) Accounts receivable is on payment due, the accounts receivable department collects the documents of each debtor, balances the invoice/tax invoice/invoice and send summary and copy of documents and send to the financial department.
- b) When receiving the documents from the accounting department, a billing slip with a copy of the billing slip and a copy of the tax invoice will be sent to the customer's financial department to make a payment. If the bill is found out about the sale of any item can be checked from a copy of the invoice/invoice/invoice prepared with. The billing person will sign in the billing

statement with the date of receipt of the check and return the original invoice back to the finance department. A copy of the billing slip and a copy of the tax invoice will be available to the customer upon receipt. The cashier will withdraw the original bill to collect money. The finance department will prepare a receipt. This receipt will be made up of three vouchers, the first and the second. The cashier will give it to the customer upon receipt of the check or cash and will sign the receipt on the receipt in front of the customer. In some cases, if the money was not paid or the customer defaulted or missed the appointment or documentation required and prepared to get money back to the finance department to prevent cashiers from committing improper conduct, the cashier will take cash or checks. To check the amount to match the document, save it in the cash register and check. Then stamp "Receive" in the document, then make a deposit (Pay-in) two copies. Then bring the cash or checks that have been deposited. Once a copy of the deposit has been received, it will be included in the document. Set up a bank statement, cash and check should be deposited at the bank daily or late the next day and should not be cashed in with cash. Financial staff will prepare a receipt and cover the set of documents to forward to the next accounting department. In some cases, the accounting department will prepare a receipt because the accounting department will issue the accounting code related.

c) Accounting Department: Once the documents have been received by the accounting department, it is processed by computer, using the documentation. Debt settlement seduce total accounts receivable in consolidated accounts in ledger. A person receives money in the journal. If only one employee serves all of this, only one document will be used. However, if two employees should be split in two, two receipts are required: a copy of receipt number. 3 at the finance department and a copy of receipt copy of bank deposit slip copy of billing slip and a copy of the invoice/tax invoice/invoice will be used to record the journal receipt. When used, store in a file sorted by voucher number. The second set consists of a copy of the receipt and a copy of the receipt used to reduce the amount of debt on the transaction and verify that it is complete. It will prepare financial statements and reports associated.

(2) Cash Receipt System

When customers check and sign in the documents, after that, they will be sent the original tax invoice with another copy to the customer. As customers purchase cash, the transport staff must sign the receipt. And if it is paid by check must fill out the details. The check on the receipt and then the cashier or check will be sent with a copy of the receipt/tax invoice. It will be back to the financial department.

a) Financial department when bringing cash or checks. To check the amount to match the document, save it in the cash register and check. Then stamp "Receive" in the document, then make a deposit (Pay-in) two copies. After receiving a copy of the deposit slip, it will be combined with the entire document for the bank statement, cash and check should be deposited daily or not. The next day and should not bring cash to pay. Financial staff will prepare voucher copies for submission to the accounting department. In some cases, the accounting department will issue a receipt because the accounting department has various accounts.

b) Accounting Department

Once the documents have been received by the accounting department, it is processed by computer and use the documentation. Receive money in the journal, receive money, record sales, and prepare sales tax report, go to the ledgers, prepare vouchers and attach supporting documents, and the file is sorted by voucher number. The file may be parsed between cash sales to be able to check at the end of the month, the staff involved in the G/L account will be posted. When posting and verifying that it is complete, it will prepare the financial statements and reports.

- (3) General principles of internal control regarding the system of receiving money
- a) The person responsible for receiving the money should not have the obligation to pay. Account receivable prepare bank statements and approve payment.
- b) Must have proof of receipt of all funds and a copy to keep as evidence.

- c) Using the receipt to use the number. If any of the cards are canceled, attach the original receipt to the receipt, and write the word "cancel".
- d) If the check is paid for legal benefits, it should be noted on the receipt of the money. "The payment will be completed when the business receives the check."
- e) It is required to bring the cash or checks received to the bank on the day of receipt or at the latest on the next business day and not to pay the expenses or pay the payables.
- f) The receipt must be properly documented and is present every day.
- g) Compare the balance in the bank account with the details in the bank statement.
- h) In case of receiving the check in advance, the check register must be made in advance so that the check can be deposited into the bank.

6) Payroll Accounting System

The business has good control. The payment system is used to control the payment by cash or pay by check the payment will be made on the due date. When the check is due, write a check. The voucher is sent to the authorized person for payment, then the check in the check or cash register. In addition, write the number and date of the check into the box. The "payment" of the payment voucher and the payment voucher with the need to send the voucher and the documents to the authorized signatory. Pay with the check to make sure that the check has been submitted and the documentation has been checked. If all vouchers have been paid, with the documents, the stamp must be stamped or marked to show that the payment has been made. It could prevent duplication and provide a better understand in the method of accounting. To summarize the functions of the various departments, the related details are shown as follows:

The finance department is responsible for:

- (1) Check the payment documents
- (2) Prepare the check for proposed signing
- (3) Make details about the check in the check register

- (4) Bring the signed check
- (5) Give the check to the payee and receive receipts
- (6) Keep the voucher attached to the receipt in the finance

department

(7) The stamp is paid in all types of documents before returning to the accounting department

The accounting department has the following responsibilities:

- (1) Check the payment documents
- (2) Prepare payment voucher
- (3) Prepare the details of the payment voucher
- (4) Send voucher and payment documents to relevant

department

payment.

- (5) Bookkeeping in the paid journal
- (6) Bookkeeping in the ledger
- (7) Record the accounts in the payroll

General principles of internal control regarding pay systems

- (1) The payer should not be paid cash account and approve
- (2) All payments will be made in the check payable to the payee name. There is a small amount of cash for a small amount of money. The responsibility is called "sub-cashier" who is responsible for keeping the money, checks the accuracy of the costs that the regulations are beneficial to the business.
 - (3) Approved by every designated authority.
 - (4) If possible, assign two signatures to pay each check.
- (5) Use numbered check. In case of canceling the check, attach the canceled check in the checkbook and cross out the word "cancel" on the check.
- (6) Make a "pay out" stamp on all supporting documents, including date of payment and check number.
 - (7) Prepare statement of bank statement at the end of month.

7) Production Accounting System

The production system is a system that transforms raw materials into finished products. It is the responsibility of the relevant departments to ensure that the work is carried out in a timely manner. Purchases from customers in the event of a work order or the sale of future business will affect the sale. Produce finished goods of the business to wait for sale as well as related employees in the production department. Calculation of the cost of finished goods produced in a given period. The production accounting department is established for the purposes of:

- (1) Prepare enough raw materials to be used in the production process.
- (2) Reduce production costs while labor costs are high. The plant and equipment can be fully utilized in the production process. There is a lot of waste and scrap, including a factory floor layout and proper handling of machinery and equipment throughout the production process.
- (3) Finished goods are complete products. The warehouse will be transported to the customer on time.
 - (4) The quality level of products and after sales service.
- (5) The cost of each production or production process will be accumulated and calculated the cost properly.
- (6) Useful information for the decision will be collected and kept it in a format that is ready to provide that information. As required by the management to make decisions in the production business, the raw materials will be used to produce finished goods.
 - a) Direct Materials
 - b) Direct labor
 - c) Overhead Cost

Direct raw materials are the most important components of a finished product. It is easy to distinguish the quantity used in the production of goods for distribution. Direct labor refers to the direct labor of the raw materials to be converted into finished goods. Whether it is manual production or control of production machinery, the direct labor cost can be tracked as the cost of the product. Cost of production means the cost incurred in the factory. Likewise, direct labor is

difficult to calculate clearly whether the cost is a component of the product, such as labor, raw material, janitor, and head of labor. In addition, direct raw materials and indirect labor include depreciation related to the factory. Therefore, the production accounting system is related to the data and related to the production of raw materials. Directing labor the cost of production is indirect into the production process and collecting data in the form of documents. Inventories are stated at historical cost less accumulated depreciation and allowance for loss on diminution in value of finished goods and finished goods as at the statement of financial position date or as at the beginning of the period. It can be demonstrated as the following items:

- (1) Raw material is the key element of the product to be translated by the production process to be finished goods.
- (2) Work in progress means raw materials and components. Cost of finished goods are wages, production costs remaining in the production process during the preparation of financial statements, and continuation to produce the finished goods.
- (3) Finished goods means finished and finished goods and ready to be sold or delivered to customers.
- (4) Factory materials are parts or sub-components used in the production process that are stored and recorded in the warehouse which is separated from office supplies. They are used in the production process and the balance is kept current and presented in the financial statements as of the end of the period.
 - 8) Two Parts of Accounting System for Business
- (1) Financial accounting. The recording of the financial information of the business is a number and has occurred in the past and based on the generally accepted accounting principles or accounting standards. To prepare financial statements or financial statements, it needs to be submitted to related parties both inside and outside the business. The format is standard. The general purpose is to account the financial position of the business. This will allow the management and outsiders to use the information provided in the financial statements for further decision making. This includes accounting systems for sales, cash purchases, cash payments and payroll salaries.

(2) Cost accounting is an accounting method that collects information on the cost of a business. The basic purpose is to prepare financial reports as well as analysis. The identification of information can be used in cost management. This is not the only industry. There are also many other types of businesses such as hotels, hospitals, schools, universities, banks, and finance companies. Airline companies and many other businesses have adopted cost accounting methods to apply for executive decision. However, there are the important purposes of cost accounting data (Horngren, Datar, & Foster, 2003).

9) Procedure of Accounting System

The procedure of accounting system can be divided into 9 steps:

1) identifying and analyzing business transactions, 2) logging into journals, 3) submitting to general ledger, 4) experimental statements before updating accounts, 5) account, 6) trial balance after adjustment, 7) financial statement, 8) closing, and 9) trial balance after closing (Anthony, & Ramesh, 1992; Johnson, Phillips, & Chase, 2009). The details are as follows:

(1) Identifying and analyzing business transactions

The accounting process starts with identifying and analyzing transactions and events. Transactions and events are not recorded in all accounting systems. Only relevant businesses will be included in this process.

(2) Recordings in Journal

Journal is a paper or electronic book. Every transaction will be recorded. Business transactions are recorded using a dual accounting system. The data is recorded in a journal entry with at least two accounts, one debit account and another credit, in order to simplify the data logging process.

(3) Submitting items to a ledger

It is also known as "Final Entry Book" by ledger. It is a series of accounts that shows changes made to each account as a result of past transactions and current balance after sending all transactions to the ledger. Balance of each account it can be defined, for example. Debt recording and credit in cash journal will be transferred to the cash account in the ledger. We can calculate the increase and decrease of cash. Therefore, it is possible to determine the cash balance.

(4) Statement of Cash Flow before Adjustment

Experimental budgets are prepared to test the balance of debit and credit. All account balances are excluded from the ledger and included as a single report. After that, all debit amounts will be added, and credit will be added and total debit must be equal to the total amount of credit.

(5) Adjustment of accounting entries

It is the account adjustment at the end of period to get the right financial statement. The accounting standard is generally updated at the end of the accounting period or completed to close the account or recorded improvement in the general journal. The item will, then, be sent to the ledger to correct the balance before closing and issuing the financial statements.

(6) Trial Balance after Adjustment

This is an experimental statement made after the completion of the recording and must be done at the end of the accounting period to prove that the business has the correct accounting accounts. This is a trial statement after the update. This will result in the balance in the accounts of the original test changes. So, after the update, it is necessary to make one trial statement to prove the accuracy of the account. It is called "trial statement after adjustment."

(7) Financial Statements

A financial report presents information to show the financial position, performance, and cash flow of the business. It should be appropriate for each accounting period or during the accounting period. The financial statements provide accurate information only when the company has complied with the accounting standards and include additional information when needed. The financial statements will be useful to the users of economic decision making. It can show management results of management. Financial statements must be prepared at least once a year and must include the following information: assets, liabilities, ownership, income, and cash flow. The composition of the financial statements should include:

a) Balance sheet is a report prepared to show the financial position of the business.

- b) Income statement is a report prepared to show the performance of an entity during the accounting period at the end of each accounting period.
 - c) Statement of changes in owner equity.
- d) Cash flow statement is a statement showing the receipt and spending of cash and cash equivalents.
- e) Note to financial statement is a description and detailed analysis of the amount shown in the balance sheet.

(8) Closing

It is the transfer of the balance of accounts, income types and accounts of all expenses incurred by going to the account that opens. This is the profit account. This is the owner type's account and a temporary account to profit from the operation and transferred to the owner's account at the end of the accounting period.

(9) Statements after the closing of the account

This is a trial statement made after the closing of the account to prove the equivalent of debit and credit balance. The account that appears in the post-closure statement is accounts receivable, balance, and capital. In the trial after the closure of this account, the criteria for doing the same as before the closing of the account are shown in Figure 2.7.



Figure 2.7 The Accounting Cycle

Source: Johnson, Phillips, and Chase, 2008.

2.5 Accounting System in Organization

The accounting system is to provide an accounting system in the organization. This may be a financial accounting system or management accounts covering the cost accounting system depending on the nature of the business. In addition to using accounting information as a measure of operating performance in the past period, business needs a good accounting system (Bouwens & Abernethy, 2000; Reid & Smith, 2000).

2.5.1 Type of System

The system can be divided into 3 categories: 1) new accounting system, 2) account system to expand to cover new activities, and 3) accounting system to improve the accounting system, currently in a particular section (only for improvement), details are as follows:

- 1) Set up a new accounting system is to set up the accounting system in the newly established business, set up a new accounting system in a long established business if the organization does not have an accounting system. Previously, this may happen with the founding organization or just have an accounting system after running a business for a while.
- 2) Put the accounting system to expand and cover emerging activities: (new segmentation only) expansion of current accounting system means to cover upcoming events. This type of work is similar to the whole accounting system of a new business, but has a finite band. Account holder is a particular interest to determine the method of accounting and control a branch.
- 3) Accounting system is used to update the current account and the parts that should be improved regarding accounting system updates and accounting methods used today. This may only be a partial improvement to the accounting system that is not yet concise, for example, changes to purchase forms, improvements to the way sales records and sales controls work, study of the use of machinery or machines in the use of salaries and wages, why or when there is a defect in the accounting system used today.

2.5.2 Purpose of Accounting System

Weerapariya, Leekphai, and Hawat (2010) indicated that the accounting system of the business should be organized. This is to achieve the following objectives:

- 1) Items that are recorded are to be actual items.
- 2) All actual transactions must be recorded in full.
- 3) The value of the item is accurately measured.
- 4) Assets, liabilities, owners' equity and expenses are appropriately classified.
 - 5) The account has been properly accounted and summed up.
- 6) Information must meet the needs of the user, for example, the production department must receive information on raw material costs, labor costs, factory costs and the output of each work.

2.5.3 Accounting System Process

The process of accounting system must have adequate structure to adequately address accounting changes and appropriate internal controls in the future (Kanjanapipatkul, 2016, which can be divided into four categories: 1) previous information, 2) the drafting of the new accounting system, 3) the introduction of a new accounting system, and 4) the follow-up (Åhlström & Karlsson 1996; Spathis & Constantinides, 2004).

1) Analytical Survey

When the accountant wants to design a document system a little bit, planning, surveying, and analyzing the operation of the business must be planned to ensure that the design is accurate and effective. The design of the document should be considered as follows:

- (1) Organization chart of company: An accountant must know the management of the organization or agency, the level of employees, chief, manager, director or director of the business. It is important to know the management policies and approval from authority.
- (2) Product / service details: Survey of product related information or production process of finished goods or services to customers must be done using calculation of inventory.
- (3) Classification of financial accounting. The financial statements define the accounting model of the type of operations. Preparation of financial statements, such as balance sheets, income statements, and retained earnings statements, must be prepared.
- (4) Documentation Trip: Map and traveling documents are considered as well as have a trip to the right source, such as parties, customers, creditors completely from the beginning of the document to the end of the process. Whether it is a bill of lading, receipt, bill, cash or documented computer, system of the document layout should be easy to understand.
- (5) Operational details: Whether it is to pay in the implementation of the related goods, property, other expenses, including the purchase or depreciation and repayment to the creditors under agreed conditions. It also takes into account

revenue. A business that receives from the sale of goods and services or it may be the payment to the debtor.

- (6) Marketing information includes sales, public relations, the design of the document to be consistent with the marketing plan, steps to sell, commission payment, advertising and public relations (PR) promotion or the cost of the salesman, including conditions for disbursement and billing.
- (7) Details of the loan: The document system designer must consider the loan agreement, agreement on interest rates, interest payment or principal repayment, credit line or overdraft.

Meanwhile, Weerapariya, Leekphai, & Hawat (2010) has identified the issues and benefits derived from the study of the characteristics of the business. The three main issues that need to be studied are: 1) the type of business, 2) organizational chart, and 3) the list of businesses as shown in Table 2.7.

Table 2.7 The Nature of the Business and the Benefits of the Study

Study Issues	Benefits
1. Form of business	To know whether a business is in the form of a
	partnership, a public company, or a non-profit
	organization. Each business requires a different accounting
	approach
2. Organizational chart	To know the division of work, responsibility and
	authorization
3. List of businesses	The reclassification of trade transactions. To determine
	how to take notes and internal control for a business listing
	appropriately.

Source: Weerapariya, Leekphai, and Hawat, 2010.

However, Vasasiri and Prangam (2018) stated that if the accounting system assignment was to improve the existing accounting system. At this stage of the survey, various forms of accounting books should be studied, along with the internal control that is used in practice, and considered with the flaws and finding of solutions.

2) Design the Accounting System

- (1) Chart of accounts and account ID are a tool that makes accountants easy to consider. Trade items are more accurate and concise. If you can explain the account name in each account, it will make the accountant faster.
- (2) Book of accounts is used in accounting in determining the format of the book. It must be complied with the accounting law. The face of the book in practice is often used to use the correct journal. Designers must comply with the policy of the business, and take into account the check and internal control as well.
- (3) Documentation of accounting: design payroll get paid to assist in recording the account correctly. Designers must comply with the policy of the business and take into account the check and internal control as well.
- (4) Reporting: The design of the report to be presented to the management or the person concerned must be taken into account and gone through consideration or analysis for administrative purposes.
- (5) Value added tax (VAT) system supports specific business tax and other taxes in case the enterprise has to enter the VAT system. For specific business tax or non-VAT, the tax invoice must be considered as well as report on tax, purchase, sales tax, and report on goods and raw materials.

3) Implement the System

- (1) Try to use the document and set the path of the document. When designing and setting the path of the document up, it will be the format of the documents. This is used to determine whether a document has been tampered with. You have to write or use the documents correctly for the purpose and have caution in the design of financial documents. You should be prepared to walk the document, to read and make them easy for understanding of the parties. They must be completely correct.
- (2) To list items in a book, document, or computer, import financial documents into trade items. The book or computer must be prepared to record

information in various books to see whether it is correct or is there an error and what documents are lost on the way and not according to the system placed.

(3) Experimental Report Design: One problem is that the report has not been able to provide sufficient information to the executives. Thus, when a financial report is released, designers must provide the parties related by suggesting or specifying additional requirements. The report will be used to maximize the benefit of doing the accounting.

4) Monitor the System

- (1) Reducing unnecessary steps: As for procedures for issuance of approval documents for disbursement, document entry, and postings, if any redundant or unnecessary steps are found, it is time consuming. It is appropriate to cut the item or step away.
- (2) Impact on performance: Accounting system design often affects the work in the initial stage. Practitioners are not familiar with the revised documentation. Designers must explain to the concerned person that it takes a certain amount of time to delay or waste time. Accounting system planning process is shown in Figure 2.8.

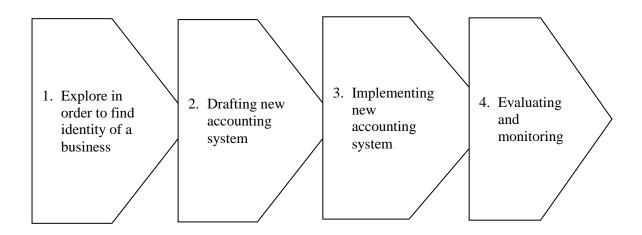


Figure 2.8 Accounting System Planning Process

Source: Weerapariya, Leekphai, and Hawat, 2010.

 Table 2.8 Accounting System

	System	Implem	entation	Acc	count Tra	acking
Author(s)	Registration	Organization Chart	Costing	Report Inventory	Rrecords as Evidence	Forms used as Record
Phramsiri, Thawa & Prangam	✓	✓	✓	✓	-	✓
(2018)						
Munwandi, Worarit, & Karin	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-
(2015)						
Khongsak (2003)	\checkmark	✓	\checkmark	✓	\checkmark	\checkmark
Village Funds & National	✓	✓	\checkmark	✓	\checkmark	\checkmark
Community Office (2011)						
Thira-akanit & Nimtalung	\checkmark	\checkmark	-	\checkmark	\checkmark	\checkmark
(2010)						
Manotham (2017)	✓	✓	\checkmark	✓		✓
Ninkan, Tinnam, Thongphan,	\checkmark	✓	-	✓	\checkmark	\checkmark
& Mani (2018)						
Khongkaew (2011)	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Kunsu (2002)	✓	✓	\checkmark	✓	\checkmark	✓
Diawkun (2002)	✓	✓	\checkmark	-	-	✓
Phramsiri, Thawa & Prangam	✓	✓	\checkmark	✓	\checkmark	✓
(2018)						
Munwandi, Worarit, & Karin	\checkmark		\checkmark	✓	\checkmark	\checkmark
(2015)						
Khongsak (2003)		\checkmark	✓ ✓	\checkmark	\checkmark	✓
Village Funds & National	✓	\checkmark	✓	✓	\checkmark	-
Community Office (2011)						

Table 2.8 (Continued)

	System	Implem	entation	Account Tracking		
Author(s)	Registration	Organization Chart	Costing	Report Inventory	Records as Evidence	Forms used as Record
Thira-akanit & Nimtalung	✓	✓	✓	✓	✓	✓
(2010)						
Manotham (2017)	\checkmark	\checkmark	-	\checkmark	-	\checkmark
Ninkan, Tinnam, Thongphan,	\checkmark	✓	✓	\checkmark	\checkmark	\checkmark
& Mani (2018)						
Khongkaew (2011)	✓	\checkmark	✓	\checkmark	\checkmark	-
Kunsu (2002)	✓	\checkmark	✓	\checkmark	\checkmark	✓
Diawkun (2002)	\checkmark	✓	✓	\checkmark	✓	\checkmark

2.6 Community-Based Tourism

Community-based tourism was defined by the Thailand Community Based Tourism Institute (2012) as the tourism that focuses on the sustainability of the environment, society, and culture. Setting direction and owing the tourism, the community has the right to manage learning for the visitors. Likewise, Suasri and Yihor (2013) stated that community-based tourism concerns the sustainability of the environment, society, and culture. The community has the right to manage the learning for the visitor.

Community-based tourism is the process of creating alternative ways to manage tourist areas in which local people can come to set the direction and style of tourism regarding the concept that they are resources owners and tourism stakeholders. As for tourism management, the local resources, such as, its nature, history, cultural tradition, way of life, and community product, can be brought as a

cost or a factor. In addition, there is a strengthening in local peoples' potential in order to emphasize their roles in cost reviewing, information search for making decision, planning, analyzing, and summarizing the assessment and failure as well as developing the sustainable local tourism model for benefit in the future and indicating the limit in serving natural-based tourism activities (Sarobol, 2003). Community-based tourism is a tool for strengthening local people's organizations in managing natural resources and culture through the process of community participation where they can take part in determining the direction of development and the benefits of tourism.

2.6.1 Community Travel Forms

There are three forms of community-based tourism (The Thailand Community Based Tourism Institute, 2012):

- 1) Learning Exchange is a regular tour program of the community.
- 2) Study Visit is a management of learning processes including the lecture and idea exchange that can bring understanding and can be applied to the context or purpose of the study visit.
- 3) Volunteer is an additional activity for volunteers who want to do charitable activities that meet the needs of the community.

2.6.2 Elements of Community-Based Tourism Management

There are four elements of CBT's core community-based tourism management as follows:

- 1) Natural Resources and Culture: It is considered a rich natural resource base, sustainable production process that relies on natural resources and unique tradition in the community.
- 2) Community Organization: With a decent social system, there should have a philosopher or a resourceful person as a story teller as well as an engagement of everyone in community's development process.
- 3) Management: To manage tourism, it is required rules to organize the environment, culture, and tourism. An organization or mechanism, which links tourism to community development in holistic way, will distribute fair benefits and

contribute the fund that help developing economy and society of the community through learning activities. This can create the understanding of the way of life and the difference between locals and the visitor which helps raising awareness about the conservation of natural resources and culture for both locals and the visitor.

4) Learning: The nature of tourism activities is to create awareness and understanding of the different lifestyles and cultures. The system manages learning processes between villagers and visitors. Raising awareness about natural resources and culture especially for both the villagers and the visitors.

2.6.3 The Difference between Community-Based Tourism and other Forms of Tourism

Ecotourism is also called by many communities or organizations as conservative tourism. The difference between ecotourism and CBT is that CBT focuses on the community as a center for working while the center of ecotourism is nature with community is counted as just one element.

Regarding homestay which is considered as a rural-touch accommodation, the difference from CBT is that its center is a home while CBT emphasize on community participation with clear management in the community organization.

CBT is a tool for strengthening local people's organizations in managing natural resources and culture. The community is involved in directing the improvement and benefits of tourism.

Meanwhile, the community-based tourism has initiated a better quality of overall picture of tourism industry with the new dimension that it is not considered only as a recreation but also a learning and respecting exchange to the locals.

2.6.4 The Principles of Community-Based Tourism

The principles of community-based tourism are divided into ten categories as follows (Mitrchob, 2017):

- 1) The community is the owner.
- 2) Local people take part in setting and making decision.

- 3) Promote self-esteem.
- 4) Raise the life quality.
- 5) Sustain the environment.
- 6) Maintain local identity and cultures.
- 7) Create learning from different people and cultures.
- 8) Respect in cultures difference and human dignity.
- 9) Return reasonably to the locals.
- 10) Distribute income for community benefit.

Tourism has holistic relationship towards community development because they share the same resources basis. Culture and society are the driving forces behind the community spirit in building relationships within the community and with the outside. It should be linked to tourism as a holistic development as shown in Figure 2.9.

Social

- Development of quality of life
- Self-esteem
- Role distributing
- community in management

Economic

- Fund for local development
- Create a job related to tourism
 - Make money for the locals

Culture

- Respect different cultures
- Interchange Learning
- Growing from the foundation of self-culture

Politics

- The locals are involved
- Can negotiate with the outside
- Has the right to manage community resources

Environmental

- Consider capacity
- Waste management
- Create Consciousness,

Conservation and Environment

Figure 2.9 CBT and Holistic Community Development

Source: The Thailand Community Based Tourism Institute, 2012.

After it is launched to the public in the dimension of tourism products, the community-based tourism is expected to be available at least four aspects including:

- 1) Program /Tourism Activities: The tourists have a chance to meet the real life of local people, activities in their way of learning, the bond between people and resources, and courtesy of the locals. This is the heart of CBT tourism. Examples of activities are hiking, nature trails, walking in the village, and lifestyle activities.
- 2) Travel Services: A charge for community tourism means to the readiness, and credibility of the system. It also presents a deeper dimension of locality because of the interaction between local people rather than the use of service. Instead, it comes from the inside through analysis and conducted by a community-based tourism service such as meaning communicator, accommodation, food, vehicles, games or folk performances.
- 3) Facilities: Preparation of infrastructure to accommodate and provide tourist services can create convenience and safety in tourism. At the same time, it must not affect the environment. Components in facilities planning are as follows:

- (1) The layout of the building must be in harmony with the local landscape and art.
- (2) Focus on environmental and cultural impacts, such as waste management systems, zoning of service areas that may disturb the religious places of the community.
- (3) There is a protection system against the harm that may happen to tourists.
- (4) There is a sign or map that provides basic information to tourists.
- 4) Management System: To measure whether the organization can administer community-based tourism and represents a real benefit to the community, organizations must focus on these following components:
 - (1) Participation
 - (2) The role distribution
 - (3) Equitable distribution of benefits
 - (4) A transparent/audit system
- (5) A steady income distributed to the public interest of the community
- (6) Measurement of controlling and preventing social impacts, culture and environment in a standard and fair rate, such as transportation, telephone, food and beverages, and souvenirs fee that can be statistically recorded and processed for continuous development as the result of community-based tourism.
- a) Social and Cultural Aspect: Cultural exchanges between homeowners and visitors can create respect for different cultures. Interest of outside people simulates the pride leading to the development of CBT's knowledge, ability, and skill to work with the members. It also gives confidence to people in a community where it can empower them to interact with the outside with pride. Moreover, it creates opportunities for women and elderly to show their full potential. This can distribute the working roles and create harmony within the community.
- b) Environmental Aspect: Raising awareness of the environment in both locals and visitors, it can lead to community's resources management where there are rules for maintenance and sustainable use. A system to

allocate income for maintaining, such as environmental funds, should be available as well.

c) The Economic Aspect: An extra income or funds from the progressive work can be distributed to various parts of the community as well as stimulate the economy where they create continuously jobs or business from tourism.

2.6.5 Key Factors for CBT's Success

- 1) Strong Community Base: Community has self-reliant productions, abundant natural resources, and self-reliant economy lying within harmony.
- 2) Rich Natural Resources: Abundance of forest, coastal resources, natural water, and adequate soil for consumption.
- 3) A Person of Faith and Capacity: Being able to manage the resources, navigate the idea, and continuously make concrete outcome, the leader must have mental stability and respect for colleagues. It is also required that the power should be held balance, constantly monitored, and ready for inheritance.
- 4) Strong Cultural Base: The unique culture has been inherited continuously.
- 5) Participation: Women, men, youth, elders, official and unofficial leaders should participate the developing processes in the community.
- 6) Continuity of Work: Constant tourism visits and result analyses are necessary.

2.7 Participation

Participation contributes positive result to the organization or network because the participants are psychologically proud to be part of the administration. Comments were taken and implemented for network development, and most importantly, participant will have a sense of ownership of the network which is considered the best power to drive the network.

2.7.1 Definition of Participation

Definitions of participation include an active participation of individuals in various stages of an activity, a participation from the support of participants where they are not only a decision maker but also an outcome conductor, a participation of developing activities where local people have full potential to develop their very own community, a participation where locals or communities can participate in adjudicating for development policies that are the primary process of community development planning in the residential part of their livelihood. Moreover, the objectives setting and co-planning are considered the participation in development according to the plan of the project. Other definitions are a participation in gaining the benefits of the service as well as a participation in the control of community projects which may be done through representative participatory or the involvement of their own.

The Thailand Community Based Tourism Institute (2012) has given the definition of participation as the opportunity to let people participate in every stage which helps both solving and preventing problems through the joint conducting policy as well as creating, deciding, and following plan. Besides, they must investigate the use of state power at all levels as well as follow up, evaluate, and take responsibility for matters that affect the people in community and all networks in the area.

2.7.2 Participation Forms

Cohen and Uphoff (1980) has divided participation forms into four categories:

1) joint adjudication for exchange information and plan activity; 2) performing activities that support resources, administration, and participation; 3) benefits receiving materialistically, socially or psychologically; and 4) evaluation for further activities.

2.7.3 Participatory Management

Management is the planning process, organizing, commanding and controlling operations in the organization. It also means the use of other resources to achieve organizational goals. Another meaning is the process of working to achieve successful

work by using the person and resources efficiently and achieve the goals of the demand.

Participation is the resource for administrating individually at each level. It is composed of the process of planning, organizing, directing and controlling each part of the action with full capacity both in the one-sided practice and the presentation of ideas to implement the processes.

Participatory management then refers to the way in which people in organizations work altogether to achieve the desired goals effectively and successfully. Participation, at any stage, depends on the knowledge, ability, experience, and constraints of each process of administrative execution.

2.7.4 Principles of Participatory Management

Principles of participatory management have been divided into four categories (Prabhakaran, Nai, & Ramachandran, 2014):

- 1) Allocate the duties and powers to everyone in the organization so that they can participate in the process of making decision.
- 2) Create good relationships among people and organizations. This will push people in the organization to their fullest potential and help supporting the adjudication of the organization.
 - 3) Recognize problems and reduce conflicts occurred in the workplace.
- 4) Make everyone in the organization grouped up as teamwork to use their potentials in solving problem or creating something new. The nature of the work will be based on the principles of learning organization.

2.7.5 Person in Participation for Community Management

Person in participation for administration or management can be divided into two main parts (Schlozman, Verba, & Brady, 1995) including:

1) Within the organization: This consists of commander (executives), middle managers (groups of workers), and workers (lower level workers). In general, their relationship is clearly defined according to hierarchy. All levels must always achieve the desired goal. Participation for organizational management is therefore defined in the direction of improving or resolving operational problems in each

component. The need for participation may not require all levels but can be found only in the same level or at one upper level. The participation for management within organization can be varied according to situation. The initial form is to offer such a comment as a document through the inquiry process or the sending document.

2) Different organizations: This is composed in many ways and it is based on the activities performed in the executive level. Participation will be in the form of an opinion exchange or the support for management. As for lower level, the participation will be in the direction of joint management from the same activity. The benefits of the two organizations must not conflict or lose any in any form.

2.7.6 The Importance of Participatory Management

The importance of participatory management is a necessary reason for the administration or management of the organization as follows (Zheng, Guo, Yang, Xu, Bao, Su, & Yu, 2011):

- 1) Create mutual understanding in the goal of work.
- 2) A process of adjudication that can broadly accommodate the behavior of individuals in the organization which is acceptable.
- 3) The principle of administration resulted from the analytical reasoning for evolution of thoughts (openness) and brainstorming which leads to an adjudication.
- 4) Reduce communication gaps in the organization and eliminate conflict.

2.7.7 Levels of Participation

The principle of local people's participation in the community is to give the people and all stakeholders of the community the opportunity to participate. The International Association for Public Participation (2017) has divided the levels of public participation into five levels as follows:

1) Providing Information: Although it is the lowest level of public participation, it is the most important level because this is government's first efforts to let people participate in the process. There are various channels to provide

information such as printed publications, information dissemination through exhibitions, newsletters, press conferences, posting and information posted online.

- 2) Hearing People's Voices: It is a process that enables people to provide their information and give opinions upon government direction through various ways such as the polls, public stage, and comments on the website for instance.
- 3) Relevance: This can let people participate or suggest a way that leads to the decision and ensure them that their information, opinions and needs of the public are taken into consideration as an alternative to the public administration such as a workshop to consider public policy issues.
- 4) Cooperation: The representative from the public sectors can associate with the government by joining the making decision periods. Also, there are ongoing joint activities such as the board of directors with the public as a director.
- 5) Empowerment to People: This is the stage that gives people the highest level of the decision makers such as referendums on the public issues, village fund projects that permit all power the public to make all decisions, and project activities that meet the needs of the people.

As Mallikamarl (2010) mentioned, the participation of the community is divided into 6 levels: 1) joint precognition, 2) joint opinion expression, 3) joint adjudication, 4) joint operation, 5) joint monitoring and evaluation, and 6) gaining results.

- 1) Joint recognition refers to the fact that the state that has provided information related to a project or activity to the public. When the state has the initiative or policy of the projects or activities, they will be launched to the people for recognition. The provision of such information from the government is considered as the beginning where people can have opportunity to participate because they can understand the significance of the project or activity, its status, the ongoing plan as well as the action that will be performed in case of preventing and fixing the natural effect caused such project or activity. Access to this information is one of the rights of people to participate in the management of natural resources and the environment.
- 2) Joint opinion expression means when people recognize the information from the state, they will be looking for problems and its cause together

with the significance of the project or activity. They can also share their opinions so that the agency or the owner of the project or activity can apply them for further consideration.

- 3) Joint adjudication means that people can help making decision whether they agree or disagree with the project or activity right from the site selection especially the voice from people who live in the area of a project who can refuse a project if the measurements used in reducing the environmental impact are unclear or the opportunities to monitor the project are shut to the public.
- 4) Joint operation means to the participation in investing, selecting workers, or operating by themselves. This level of participation may not be possible in all types of projects. For example, if a project requires specialized knowledge, expertise, or high technology, sometimes it is difficult for people to participate in the project. However, in a case of local project or activity such as watershed or other resources management that are based on folk wisdom, locals can come to operate or jointly invest which is considered as a joint operation as well.
- 5) Joint monitoring and evaluation refers to a co-monitoring and following-up the implementation of the project or activity whether it is going according to its goal and purpose. Especially, if the project or activity is likely to have an impact on the nature and environment, the use of monitoring systems will be massively beneficial to prevent such problems. People can participate as a watch dog to protect and solve the problem the operation promptly before the unwanted consequences would occur. After the project or activity is initiated, there must be followed by the evaluation of that action whether it is attainable or can achieve the purpose or not. There should also be a monitoring whether the project or activity apply the prevention to the environmental issues or not as well as the effect of the operation to be used as a guide of effective measurement in the future.
- 6) Gaining results refers to how much an undergone project or activity has given the results both in a positive and negative aspects towards people and environment which is unavoidable to take the result.

Chusakul, Kovathanakul, and Esichaikul (2016) described the level of community participation that can contribute to the sustainability of community tourism. It can be divided into 5 levels: 1) passive participation, 2) participation by

consultation, 3) functional participation, 4) interaction participation, and 5) self-mobilization and connectedness. Each level has attribute as shown in Table 2.9.

 Table 2.9 Level of Community Participation

Level of Community Participation	Features
Passive Participation	People participate in the decision-making process
	of an organization. Information is available to
	external facilitators. Power and control are outside
	the area.
Participation by Consultation	People are participating in counseling or
	answering questions but not taking part in making
	decision.
Functional Participation	External agencies see that people's participation
	and helps them achieve their goals. Citizens are
	engaged by bundles to achieve predefined
	objectives.
Interaction Participation	People are involved in the analysis, development
	plan, and establish or strengthen a local group or
	institution. The group wants to learn and decide on
	the available resources.
Self-Mobilization and	People participate by getting started on projects
Connectedness	independently from outside institutions or
	organizations. Contact with external experts for
	resources and advice when needed are available
	but the power and control of resources is at the
	local community.

Source: Chusakul et al., 2016.

However, Chusakul et al. (2016) states that participation of local people in tourism management can be divided into 3 parts including 1) regional communities, 2) community organization or tourist attractions management, and 3) travel agency. Such details are as shown in Table 2.10.

 Table 2.10
 Participation of Local People in Tourism Management According to the

 Classification of Responsibility for Tourism Development

Level/Organization	Responsibility
Regional Communities	1. Jointly define tourism philosophy and vision within
	the community or region.
	2. Jointly consider if the special interest tourism (SIT)
	model appropriate to the community.
	3. Constrain the capacity to promote or accept tourism
	according to the sustainable development plan.
Community Organization /	1. Coordinate the implementation of the sustainable
Tourist Attractions	tourism development plan.
Management	2. Supervise the level of impact caused by tourism
	within a community or region.
Travel Agency	1. Promote and support the implementation of SIT
	sustainable tourism development plans.
	2. Observe the rules, regulations, and guidelines for
	implementing sustainable tourism development plans.
Visitors or Tourists	1. There is a sense of responsibility for tourism as a
	good tourist and respect the values of the local people.
	2. Accept the terms and conditions of the community
	towards a sustainable tourism development plan.

Source: Chusakul et al., 2016.

From the information above, both public and private sectors should therefore be aware of the principle of participation. It will let them know the problems and needs of each other. People will have more participation when they attend the activities and help developing the community. Participation is then a significant guarantee of sustainable living for all people in the community.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The research uses mixed methods to investigate the competencies of accountants of community-based tourism in Thailand, the efficiency of the current types of accounting system of community-based tourism in Thailand, and the development model of accounting system for community-based tourism in Thailand. Mixed methods include quantitative research in that. It focused on testing or confirming theoretical concepts for describing information. Qualitative research focused on creating conceptual or theoretical models from real phenomena. In this study, research is focused on both research (Creswell, 2013) and brings together the range of processing and interpretation. Since a quantitative research provides only data result (i.e. variables and parameters), it cannot give the best explanation of some research questions and that is why a qualitative research is needed to obtain information from specialists and real situations at primary sources (Brewer & Hunter, 2006; Creswell & Clark, 2007). A quantitative research is the result of applying knowledge and theories that are positivism paradigm. Quantitative data cannot explain some research problems; therefore, further investigation is required. Moreover, qualitative data provides tacit and implicit knowledge. Oppositely, quantitative data is explicit and obvious. Therefore, all of two methods: qualitative and quantitative methods are used to answer all of the research problems. Chapter 3 describes the research methodology. It is divided into two parts, first part is discussing about quantitative research methods and the second part is discussing about qualitative research methods. This includes describing the source of the population/sample/target group and how to conduct research, research tools, data collection, and steps to create a research tool. The data were analyzed both quantitatively and qualitatively and the statistics used in the research were as follows:

 Table 3.1
 Research Methodology

Research Objectives	Methodology
1. Study the competencies of accountants of community-	Mixed
based tourism in Thailand.	
2. Study the efficiency of the current types of accounting	Quantitative
system of community-based tourism in Thailand.	
3. Propose the development model of accounting system	Qualitative
for community-based tourism in Thailand.	

The Table 3.1 presents the methodologies that are used to find the results for each research objective.

3.2 Quantitative Research Methodology

This section describes the population used in the study, the sample used in the study, sampling methods, research tools, validity, pilot testing, and the data analysis process. The details are as follows:

3.2.1 Population

Population used in this study includes accountants of CBT and executive board of CBT in Thailand. There are 167 CBT in Thailand from the list of Ministry of Tourism and Sports database.

3.2.2 The Samples

The samples used in this study were accountants of CBT and executive board of CBT in Thailand using purposive sampling by selecting one CBT from the list of Ministry of Tourism and Sports database. One accountant of CBT and one executive board of CBT were selected. Therefore, each CBT had 2 respondents. They were chosen because they are those who know about policy making and bookkeeping, and they are knowledgeable in the topic under study.

According to the exact population, the size of the sample was then calculated using Yamane (1973).

Accountant of CBT

$$\begin{array}{rcl} n = & N & & \\ & \hline 1 + Ne^2 & & \\ n = & 167 & & \\ \hline & \hline 1 + (167)(0.05)^2 & \\ n = & 117 & \\ n \approx & 150 & & \\ \end{array}$$

Where
$$n = population size$$

 $N = population$
 $e = tolerance (0.05)$

According to the sampling calculation, the samples sizes of the accountants of CBT in Thailand were 150.

Executive board of CBT

$$\begin{array}{rcl} n = & N & & \\ & & \overline{1 + Ne^2} & \\ n = & 167 & & \\ \hline & \overline{1 + (167)(0.05)^2} & \\ n = & 117 & \\ n \approx & 150 & & \\ \end{array}$$

Where
$$n = population size$$

 $N = population$
 $e = tolerance (0.05)$

According to the sampling calculation, the sample sizes of the executive boards of CBT in Thailand were 150. Therefore, the sample size is 300.

3.2.3 Research Tools

The research tools used in the study were questionnaires produced by the research as follows:

Researcher has created tools for exploration. Primary data is a questionnaire for accountants of CBT and the executive boards of CBT in Thailand to study general information, competency of accountants, and efficiency of accounting system. There were 300 questionnaires. The questionnaire was divided into 4 parts.

- Part 1 General information about the respondents
- Part 2 Competencies of accountants of CBT in Thailand
- Part 3 Efficiency of current types of accounting system of CBT in Thailand
- Part 4 Other suggestions for competency of accountants of CBT in Thailand and efficiency of accounting system of CBT in Thailand

The 5 point Likerts scale is used in this study: Part 2 Competencies of accountants of CBT in Thailand used "Very Important," "Fairly Important," "Important," "Slightly Important," and "Not at all Important."

$$size \ of \ interval = \frac{The \ maximum \ score - The \ minimum \ score}{number \ of \ interval}$$

size of interval
$$=$$
 $\frac{5-1}{5}$ $=$ 0.8

Average Range		Meaning
5	-	Very Important
4	-	Fairly Important
3	-	Important
2	-	Slightly Important
1	_	Not at all Important

Part 3 Efficiency of current types of accounting system of CBT in Thailand used "Strongly agree", "Agree", "Neutral", "Disagree" and "Strongly disagree." The result will be interpreted using interval scale as follows:

$$size \ of \ interval = \frac{The \ maximum \ score - The \ minimum \ score}{number \ of \ interval}$$

size of interval
$$=$$
 $\frac{5-1}{5}$ $=$ 0.8

Average Range		Meaning
5	-	Strongly Agree
4	-	Agree
3	-	Neutral
2	-	Disagree
1	-	Strongly Disagree

3.2.4 Validity

All the questionnaires are validated before being used. They are needed to assess whether they can be used to measure what they are supposed to measure and they can provide all the results to answer the research questions. There are 2 types of validation that are performed: content validity and construct validity.

Five specialists who specialize in accounting system development perform validation of the questionnaires by using the index of item objective congruence (IOC). A specialist will give each question a score as follows:

A question is congruent; the score will be +1.

A question is questionable, the score will be 0.

A question is incongruent; the score will be -1.

Then for each question the score from all three specialists are averaged. If the IOC average score is equal or greater than 0.5, that question is acceptable, and needs to be revised if otherwise. The revised questions have to be evaluated by the specialists again and again until the IOC average score is equal or greater than 0.5 (Turner, Mulvenon, Thomas, & Balkin, 2002). The IOC score of this research is 0.8.

3.2.5 Pilot Testing

Pilot testing is performed to test the questionnaire's reliability (Neuman, 2013; Turner et al., 2002). Before the questionnaires are completed by the sample, all the questions have to be checked that their answers are reliable and consistent. The questionnaire pilot testing should have at least 10% of sample participants (Neuman, 2013; Punch, 2013; Turner et al., 2002). Thus, there are 30 participants in the pilot and they are not the member of 300 samples. The result from the pilot testing are calculated to obtain the reliability by using Cronbach's alpha coefficient approach (Creswell & Clark, 2011). If the coefficient is equal or greater than 0.75, the questionnaires are acceptable and reliable. If it is greater than 0.6 but less than 0.75, the questionnaires are questionable and need to be improved. If it is less than 0.6, the questionnaires are poorly reliable and are rejected if otherwise (Creswell, 2003; Creswell & Clark, 2011; Neuman, 2013). The reliability score of this research is 0.9.

3.2.6 The Data Analysis Process

The data analysis used in this research is proposed by Burn and Hague (2002) and consisted of 6 steps as follows:

- 1) Gathering data, coding data, entering data into a computer, and screening or cleaning data for errors
 - 2) Performing statistical analysis
 - 3) Verifying the results of the statistical analysis
 - 4) Explaining, discussing the results and concluding
 - 5) Writing a report

3.2.7 Performing Statistical Analysis

There are 3 types of statistical analysis; descriptive statistics, inferential statistics, and test statistics (Turner, 2010). In this study, statistical analysis is done by using research questions and hypothesis testing. There are 2 aspects of statistical analysis. The first aspect is about demography such as age, gender, education level, occupation and descriptive statistics is used. This aspect includes percentage and frequency. The second aspect is about accounting system and accountant competency of community-based tourism in Thailand and descriptive statistics is used. This aspect

includes mean (\bar{x}) and standard deviation (S.D.). Also there is inferential statistics used and done by paired sample t-test, f-test, and ANOVA analysis. The Scheffe' method was used to test the difference in mean pair score at 95%.

3.3 Qualitative Research Methodology

This section describes the population, the sample, sampling methods, research tools, pilot testing, and the data analysis process. The details are as follows:

The third objective of this research is to propose a development model of accounting system for community-based tourism in Thailand. To achieve this objective, a new improved accounting system has to be developed with knowledge, data, information and certain processes. Qualitative research method has a research paradigm which is a more naturalistic approach than scientific approach (Edwards & Holland, 2013). A sample of a population is chosen for any particular study. Which and how many people selected are determined by the research objectives and the study population's characteristics.

3.3.1 Population

Population used in this study includes accountants of CBT and executive board of CBT in Thailand. There are 167 CBT in Thailand from the list of Ministry of Tourism and Sports database.

3.3.2 The Samples

The samples used in this study were accountants of CBT and executive board of CBT in Thailand employed purposive sampling by selecting one CBT from the list of Ministry of Tourism and Sports database. One accountant of CBT and one executive board of CBT were selected. Therefore, one CBT would have 2 respondents. The samples size of the accountants of CBT in Thailand were 15 and the samples size of the executive board of CBT in Thailand were 15. Therefore, the samples size is 30. The number of samples or participants is not specific according to the Grounded theory (Komives, Owen, Longerbeam, Mainella, & Osteen, 2005). However, Corbin and Strauss (2014) suggest that the number of participants should be

stopped when first there is no new information obtained or there is new information but there is a lot of repeated information. Second, the collected data or information are good and clear enough (Ezzy, 2003; Locke & Biddle, 2006). Thus, in this research, the number of participants is not fixed. At the early stage of the interview, it will be a broad interview with three to four interviewees. Then, the information from the first stage is used for conducting the in-depth interview.

3.3.3 Research Tools

The research tools used in the study were semi-structured interview produced by the researcher. In-depth interview offers much more detailed data or information than what is obtained through other data collection methods, such as questionnaire.

- 1) Selecting population and sample
- 2) Choosing research instruments
- 3) Designing interview
- 4) Constructing interview

3.3.4 Validity

To test the validity of the in-depth interview in this research, three processes are done; content validity, pilot-test, and interview. To assess how accurately the interview questions represent all sides of a given research objective, only the specialists in that area can provide validation. The specialists will check to ensure that the interview questions cover all research objectives' aspects. Also, the used language should be appropriate and easy to understand to the interviewees (Marshall & Rossman, 2006; Patton, 2001; Wengraf, 2001). Then, the validated research questions are tested with tryout participants to ensure that the interviewees all understand the questions. To test the reliability of the interview question, it can be done by using a different interviewer asking the same kind of questions to the same interviewee to see that the answers will be the same or not (Edwards & Holland, 2013; Kvale, 1996; Patton, 2001). In this research, five specialists in accounting perform the content validity of interview questions' content and then the validated questions are pilot tested with three tryout participants. These three tryout participants must have characteristics that meet exactly the same criteria as the research participants. After

the pilot testing, the interview questions are revised and improved to be ready for the in-depth interview process.

3.3.5 The Data Analysis Process

Guba and Lincoln (1992) suggest that researchers are the most important instruments in an in-depth interview process. The researchers will play a big role in the data collection process and conducting the interview in a manner that will allow the researchers to perform additional interviews when more and more in-depth interviews are required. Because of simultaneous interviews, the information from indepth interviews is much more detailed than information from the questionnaires (Turner, 2010).

In-depth interview in this research is semi-structured interview because it is more flexible than structured interview but more prepared than unstructured interview (Creswell, 1998; Edwards & Holland, 2013; Wengraf, 2001). In this research, the interview questions are prepared prior to the first interview. The questions are wideranging with the idea of developing a website for promoting improvement for community-based tourism in Thailand. The questions should not intentionally guide to specific answers. Kvale and Brinkmann (2009) suggest that an interview guide can vary from relatively loose to highly-scripted but no matter what it has to ensure that the interviewers will not lose track or miss points during the interview. Moreover, at the beginning of interviews, interviewers have to clearly introduce and clarify themselves, state the purpose of the interview, and also clearly explain the detail of interview questions (Edwards & Holland, 2013; Wengraf, 2001).

The interview guide for this research is conducted from the past information. The sub-questions are formed from the main research questions to ensure that all the details of research objectives are covered. Podhisita and Xenos (2015) state that sub-questions can help to illustrate a concept of first stage analysis process.

The data analysis used in this research is proposed by Burn and Hague (2002) and consisted of 6 steps as follows:

- 1) Gathering data, coding data, entering data into a computer, and screening or cleaning data for errors
 - 2) Performing statistical analysis

- 3) Verifying the results of the statistical analysis
- 4) Explaining, discussing the results and concluding
- 5) Writing a report

3.3.6 The Content Analysis

The qualitative data analysis process in this research is the content analysis by using the component of data analysis interactive model proposed by Miles, Huberman, & Saldana (2013). The methodology used for gathering information is qualitative research method. Since qualitative research is often used to understand meaning of social phenomena by experiencing it in a researcher's natural context. It is always piloted in natural setting (i.e. research about something as they are). Thus, to do the qualitative data analysis, it has to be in natural way. Component of data analysis interactive model is illustrated in Figure 3.1. There are three types of analysis activities; data reduction, data display, and conclusion - drawing and verifying which include collecting data activity and analysis activities form interactive process. The researcher adopted the interactive model of Miles et al. (2013) on content analysis.

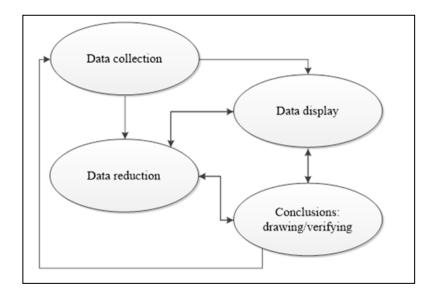


Figure 3.1 Components of Data Analysis: Interactive Model

Source: Miles, Huberman, and Saldana, 2013.

3.3.7 Data Reduction

Data reduction is the process of selecting, focusing, simplifying, abstracting, and transforming the data collected in notes or transcripts. The analyst used the principles of selectivity to reduce the data to address the needs of the evaluation. However, it is important to not "flatten" the data so it sounds like responses to a questionnaire. Exploring the specific content of the respondents' views, and perhaps take note of the frequency that different issues are raised, as well as the intensity of the respondents' views.

3.3.8 Data Display

Data display provides an organized, compressed assembly of information that permits drawing conclusions. The display can be text or graphic, but allows the analyst to see patterns and relationships. One example method is to develop flow charts mapping out critical paths and decision points. Much of qualitative analysis involves comparing and contrasting across samples to establish patterns, and then develop questions that can lead to improved understanding (Marshall & Rossman, 2006; Mules et al., 2013; Patton, 2001).

3.3.9 Conclusion Drawing

This involves stepping back to understand what the data mean with respect to the original question(s). The available data is used to draw conclusions that are credible, defensible, and better than alternative explanations. The researcher must be careful to not go beyond what the data really show. There are a variety of strategies that can be used to try to generate meaning from the data, including noting patterns and themes, clustering data, compare and contrast. This process should be used sometimes again and again to repeat the process of understanding the data at a deeper level. The researcher should be aware of the assumptions underlying the research, which can be bias or confuse the process of drawing conclusions.

3.3.10 Data Organization

During data analysis which happened as soon as data are collected, data should be recursively organized and engaged through multiple stages. Organizing collected data is ongoing process which can help data analysis and is an integral part of analysis. In this research, two types of data organizations were used: physical data organization and content data organization.

Physical data organization often starts during collecting data, such as transcripts from the interviews. Organizing data all the time helps to secure the data and to make it easy to find when this data is needed (Ezzy, 2003; Patton, 2001). All physical data in this research have been well organized and protected since the data collecting data process started. Content data organization is the process of screening or refining the data. Then these meaningful messages from collecting data are recorded, organized and ready to be used.

CHAPTER 4

RESERCH RESULTS

In this chapter, the research results from questionnaires and interviews are presented. To systematically present the results in this chapter, they are reported in following sections.

- 1) Questionnaires respondents' demographic profiles
- 2) The survey's results of accountant competency of community-based tourism in Thailand
- 3) Hypothesis tests on accountant competency of community-based tourism in Thailand
- 4) The survey's results of the current types of accounting system of community-based tourism in Thailand

4.1 Questionnaires Respondents' Demographic Profiles

Analysis of respondents' demographic data by using descriptive statistics is presented as frequency, percentage, mean and standard deviation. The analysis results explain respondents' demographic profiles that are gender, age, marital status, education level, and monthly income and the results are shown in Table 4.1, Table 4.2, Table 4.3, Table 4.4, and Table 4.5 respectively.

Table 4.1 Frequency and Percentage of Respondents' Genders

	Gender	Frequency	Percentage
1. Male		120	40%
2. Female		180	60%
	Total	300	100%

There are 300 questionnaires respondents. There are more females than males where 180 females or 60% and 120 male or 40% as shown in Table 4.1.

 Table 4.2 Frequency and Percentage of Respondents' Ages

Age	Frequency	Percentage
1. 20 years and younger	0	0%
2. 21 to 30 years	30	10%
3. 31 to 40 years	150	50%
4. 41 to 50 years	110	36.67%
5. 51 years and older	10	3.33%
Total	300	100%

As shown in Table 4.2, the highest frequency of respondents age range is 31 to 40 years with 150 people or 50%; second is 41 to 50 years with 110 people or 36.67%; third is 21 to 30 years with 30 people or 10%; and fourth is 51 years and older with 10 people or 3.33%. There are not respondents who are less than 21 year old.

 Table 4.3 Frequency and Percentage of Respondents' Marital Statuses

Marital Status	Frequency	Percentage
1. Single	25	8.33%
2. Married	270	90%
3. Widowed/Divorced	5	1.67%
4. Separated	0	0
Total	300	100

Most of respondents are married with 270 people or 90%; followed by single respondents with 25 people or 8.33% and last widowed/divorced respondents with 5 people or 1.67% as shown in Table 4.3.

 Table 4.4 Frequency and Percentage of Respondents' Education Levels

Education Level	Frequency	Percentage
1. Elementary School	100	33.33%
2. Middle School	90	30.00%
3. Vocational Certificate/High School	70	23.34%
4. High Vocational Certificate/Technical Certificate/	30	10.00%
Diploma		
5. Bachelor's Degree	10	3.33%
6. Higher than Bachelor's Degree	0	0%
Total	300	100%

The information of the respondents' education levels is presented in Table 4.4. elementary school level is more than other levels with 100 people or 33.33%; second is middle school level with 90 people or 30%; third is vocational certificate/high school level with 70 people or 23.34%; fourth is high vocational certificate/technical certificate/ diploma with 30 people or 10%; and lastly is bachelor's degree level with 10 people or 3.33%.

 Table 4.5 Frequency and Percentage of Respondents' Monthly Income

Monthly Income	Frequency	Percentage
1. 10,000 bahts and less	0	0%
2. 10,001 to 15,000 bahts	20	6.67%
3. 15,001 to 20,000 bahts	120	40.00%
4. 20,001 to 25,000 bahts	150	50.00%
5. 25,001 to 30,000 bahts	10	3.33%
6. 30,001 and more	0	0%
Total	300	100%

Table 4.5 presents the information of the respondents' monthly income and the average of 20,001 to 25,000 bahts has the most number of respondents with 150

people or 50%; the second is the average of 15,001 to 20,000 bahts with 120 people or 40%; the third is the average of 10,001 to 15,000 bahts with 20 people or 6.67%; the lastly is the average of 25,001 to 30,000 bahts with 10 people or 3.33%.

4.2 The Survey's Results of Accountant Competency of Community-based Tourism in Thailand

The results of respondents' opinion about accountant competency of community-based tourism in Thailand are analyzed by using descriptive statistics and presented in term of mean (\bar{x}) and standard deviation (S.D) as shown in Table 4.6-4.11. There are 5 aspects of accountant competency: knowledge, skills, self-concept, motive and traits.

Table 4.6 The Respondents' Opinion on Accountant Competency of Community-Based Tourism in Thailand

Aspects of Accountant Competency	\overline{X}	S.D	Opinion Level
Knowledge	3.96	0.90	High
Skills	4.13	0.94	High
Self-Concept	3.65	1.00	High
Motive	3.77	0.98	High
Traits	4.00	0.93	High
Total	3.92	0.95	High

Table 4.6 shows respondents' opinion levels on accountant competency of community-based tourism in Thailand. The total has $\bar{x}=3.92$, S.D. = 0.90 and opinion level = high. The best aspect of accounting competency is "Skills" with $\bar{x}=4.13$, S.D. = 0.94 and opinion level = high; second is "Traits" with $\bar{x}=4.00$, S.D. = 0.93 and opinion level = high; third is "Knowledge" with $\bar{x}=3.96$, S.D. = 0.90 and opinion level = high; fourth is "Motive" with $\bar{x}=3.77$, S.D. = 0.98 and opinion level

= high; and lastly is "Self-Concept" with $\bar{x} = 3.65$, S.D. = 1.00 and opinion level = high.

 Table 4.7 Knowledge Aspect of Accountant's Competency

Knowledge	\overline{x}	S.D.	Opinion Level
1.1 Bookkeeping	4.00	0.95	High
1.2 Management and analysis financial	3.94	0.95	High
statement			
1.3 Applying accounting knowledge for decision	3.94	1.09	High
making			
1.4 Monetary assets or cash equivalent and	4.17	0.79	High
depreciation calculation			
1.5 Debt and investment	3.70	1.16	High
1.6 Basic computer usage	3.97	1.02	High
1.7 Production cost calculation	4.17	0.67	High
1.8 Production sale price calculation	4.08	0.71	High
1.9 Community-based tourism management	3.82	0.79	High
such as marketing and personnel management			
1.10 Related legal knowledge and restrictions	4.02	0.86	High
1.11 Community-based tourism audit	3.73	0.82	High
Total	3.96	0.90	High

Table 4.7 shows accountant competency of community-based tourism in Thailand on the knowledge aspect. The total has $\bar{x} = 3.96$, S.D. = 0.90 and opinion level = high. The two knowledge aspects have the highest $\bar{x} = 4.17$. They are monetary assets or cash equivalent and depreciation calculation and production cost calculation and both have opinion level = high. However, the knowledge of production cost calculation has a better S.D. = 0.67 than the knowledge of monetary assets or cash equivalent and depreciation calculation S.D.=0.79. The third highest mean is the knowledge of production sale price calculation with $\bar{x} = 4.08$, S.D. = 0.71

and opinion level = high. The fourth highest mean is the knowledge of related legal knowledge and restrictions with $\bar{x}=4.02$, S.D. = 0.86 and opinion level = high. The fifth highet mean is the knowledge of bookkeeping with $\bar{x}=4.00$, S.D. = 0.95 and opinion level = high. The sixth highest mean is the knowledge of basic computer usage with $\bar{x}=4.00$, S.D. = 0.95 and opinion level = high. The two aspects of knowledge are on the seventh place $\bar{x}=3.94$. Management and analysis of financial statement and applying accounting knowledge for decision making have both opinion level = high. However, the knowledge of management and analysis financial statement has a better S.D. = 0.95 than the knowledge of applying accounting knowledge for decision making S.D. = 1.09. The ninth place mean is the knowledge of community-based tourism canagement such as marketing and personnel management with $\bar{x}=3.82$, S.D. = 0.79 and opinion level = high. The tenth place mean is the knowledge of community-based tourism audit with $\bar{x}=3.73$, S.D. = 0.82 and opinion level = high and the knowledge aspect with the lowest mean is debt and investment with $\bar{x}=3.7$, S.D. = 1.16 and opinion level = high.

 Table 4.8 Skills Aspect of Accountant's Competency

Skill	\overline{x}	S.D.	Opinion Level
2.1 Perform bookkeeping correctly and compliantly	3.82	1.24	High
with accounting standard			
2.2 Keep accounting records and documents	3.85	1.23	High
according to the legal restrictions			
2.3 Systematically prepare financial information	4.08	0.79	High
(financial statement)			
2.4 Analyze and interpret financial information	3.94	1.20	High
(financial statement)			
2.5 Expertly use accounting software	4.11	0.97	High
2.6 Expertly use Microsoft Office for accounting job	4.11	0.84	High
2.7 Well applied knowledge of business law and	4.29	0.79	Highest
regulations to practice			

Table 4.8 (Continued)

Skill	\overline{x}	S.D.	Opinion Level
2.8 Accurately perform numerical calculations	4.50	0.74	Highest
2.9 Truly understand the policy of community-based		0.70	Highest
tourism			
Total	4.13	0.94	High

Table 4.8 shows accountant competency of community-based tourism in Thailand on the skill aspect. The overall mean of skill aspects of accountant is 4.13, S.D. = 0.94 and opinion level = high. The the skill with the highest mean is the skill of accurately perform numerical calculations equivalent to 4.50, S.D. = 0.74 and opinion level = highest. The second place mean is the skill of truly understand the policy of community-based tourism with $\bar{x} = 4.47$, S.D. = 0.70 and opinion level = highest. The third place mean is the skill of well- applied knowledge of business law and regulations to practice with $\bar{x} = 4.29$, S.D. = 0.79 and opinion level = highest. The 2 skills have the fourth place $\bar{x} = 4.11$. The skills of expertly using accounting software and expertly using Microsoft Office for accounting job, both have opinion level = high. However, the skill of expertly using Microsoft Office for accounting job has a better S.D. = 0.84 than the skill of expertly using accounting software S.D. = 0.97. The sixth place mean is the skill of systematically preparing financial information (financial statement) with $\bar{x} = 4.08$, S.D. = 0.79 and opinion level = high. The seventh place mean is the skill of analyzing and interpreting financial information (financial statement) with $\bar{x} = 3.94$, S.D. = 1.2 and opinion level = high. The eighth place mean is the skill of keeping accounting records and documents according to the legal restrictions with $\bar{x} = 3.85$, S.D. = 1.23 and opinion level = high. The skill aspect with the lowest mean is performing bookkeeping correctly and compliantly with accounting standard with $\bar{x} = 3.82$, S.D. = 1.24 and opinion level = high.

 Table 4.9 Self-Concept Aspects of Accountant Competency

Self-Concept	\overline{x}	S.D.	Opinion Level
3.1 Hard-working	4.03	0.90	High
3.2 Responsible	3.71	0.90	High
3.3 Creative	3.76	1.04	High
3.4 Self-taught	4.03	0.93	High
3.5 Enthusiastic to learn new things	3.85	1.01	High
3.6 Disciplined worker	3.59	1.20	High
3.7 Following professional ethics	3.78	0.76	High
3.8 Detail-oriented person	3.79	0.77	High
3.9 Able to perform data security	3.95	0.84	High
3.10 Able to protect organization confidentiality	3.29	0.91	High
3.11 Optimistic	3.68	1.03	High
3.12 Generous	3.41	0.89	High
3.13 Passed accountant training	3.24	1.25	Medium
3.14 Have accounting work experience	3.56	1.16	High
Total	3.65	1.00	High

Table 4.9 shows accountant competency of community-based tourism in Thailand on the self-concept aspect. The overall mean in this competency = 3.65, S.D. = 1.00 and opinion level = high. Two self-concept- aspects obtained the highest mean=4.03, they are hard-working and self-taught and both have opinion level = high. However, the self-concept of hard-working has a better S.D. = 0.90 than the self-concept of self-taught S.D.= 0.93. The third place mean is the self-concept of able to perform data security with $\bar{x} = 3.95$, S.D. = 0.84 and opinion level = high. The fourth place mean is the self-concept of enthusiastic to learn new things with $\bar{x} = 3.85$, S.D. = 1.01 and opinion level = high. The fifth place mean is the self-concept of detail oriented person with $\bar{x} = 3.79$, S.D. = 0.77 and opinion level = high. The sixth place mean is the self-concept of following professional ethics with $\bar{x} = 3.78$, S.D. = 0.76 and opinion level = high. The seventh place mean is the self-concept of creative with

 $\overline{x}=3.76$, S.D. = 1.04 and opinion level = high. The eighth place mean is the self-concept of responsible with $\overline{x}=3.71$, S.D. = 0.9 and opinion level = high. The ninth place mean is the self-concept of optimistic with $\overline{x}=3.68$, S.D. = 1.03 and opinion level = high. The tenth place mean is the self-concept of discipline worker with $\overline{x}=3.59$, S.D. = 1.2 and opinion level = high. The eleventh place mean is the self-concept of have accounting work experience with $\overline{x}=3.56$, S.D. = 1.16 and opinion level = high. The twelfth place mean is the self-concept of generous with $\overline{x}=3.41$, S.D. = 0.89 and opinion level = high. The thirteenth place mean is the self-concept of able to protect organization confidentiality with $\overline{x}=3.29$, S.D. = 0.91 and opinion level = high. The self-concept aspects with the lowest mean is passing accountant training with $\overline{x}=3.24$, S.D. = 1.25 and opinion level = medium.

 Table 4.10 Motive aspects of Accountant's Competency

Motive	\overline{x}	S.D.	Opinion level
4.1 Monthly income	3.51	0.83	High
4.2 Job benefits	3.77	0.78	High
4.3 Job promotion	3.79	0.97	High
4.4 Job stability	4.19	0.96	High
4.5 Workplace environment	3.80	0.80	High
4.6 Office facilities	3.32	0.92	High
4.7 Friendship between co-workers	3.80	0.84	High
4.8 Acceptable performance by executive and	4.20	0.84	High
community			
4.9 Proud of the job	4.20	0.91	High
4.10 Accountant training to gain more	3.77	0.75	High
knowledge			
Total	3.84	0.86	High

Table 4.10 shows accountant competency of community-based tourism in Thailand on the motive aspect. The total has mean = 3.84, S.D. = 0.86 and opinion

level = high. Two motive aspects have obtained the highest $\bar{x} = 4.20$. They are acceptable performance by executive and community and proud of the job and both have opinion level = high. However, the motive of acceptable performance by executive has a better S.D. = 0.84 than the motive of proud of the job S.D. = 0.91. The third place mean is the motive of job stability with $\bar{x} = 4.19$, S.D. = 0.96 and opinion level = high. Another two aspects of motive are on the fourth place with $\bar{x} = 3.80$. They are workplace environment and friendship between co-workers and both have opinion level = high. However, the motive of workplace environment has a better S.D. = 0.80 than the motive of friendship between coworkers S.D. = 0.84. The sixth place mean is the motive of job promotion with $\bar{x} = 3.79$, S.D. = 0.97 and opinion level = high. Another two motives obtained mean on the seventh place, $\bar{x} = 3.77$. They are benefits and accountant training to gain more knowledge and both have opinion level = high. However, the motive of accountant training to gain more knowledge has a better S.D. = 0.75 than the motive of benefits S.D.= 0.78. The ninth place mean is the motive of monthly income with $\bar{x} = 3.51$, S.D. = 0.83 and opinion level = high. The motive aspects with the lowest mean is the motive of office facilities with $\bar{x} = 3.32$, S.D. = 0.92 and opinion level = high.

Table 4.11 Trait Aspects of Accountant Competency

Traits	\overline{x}	S.D.	Opinion level
5.1 Good eyesight	3.93	0.96	High
5.2 Clean and appropriate clothing	3.98	1.01	High
5.3 Self-confidence	4.13	0.75	High
5.4 Reliability	3.96	0.99	High
Total	4.00	0.93	High

Table 4.11 shows accountant competency of community-based tourism in Thailand on the traits aspect. The total mean is equivalent to 4.00, S.D. = 0.93 and opinion level = high. The trait with the highest mean is self-confidence with mean = 4.13, S.D. = 0.75 and opinion level = high. The second place mean is the traits of

clean and appropriate clothing with $\bar{x} = 3.98$, S.D. = 1.01 and opinion level = high. The third place mean is the traits of reliable characteristic with $\bar{x} = 3.96$, S.D. = 0.99 and opinion level = high. The trait with the lowest mean is good eyesight with $\bar{x} = 3.93$, S.D. = 0.96 and opinion level = high.

4.3 Hypothesis Tests on Accountant Competency of Community-based Tourism in Thailand

In this section, five hypothesis tests are done and the results are presented in Table 4.12-4.21. These hypothesis tests are used to describe the accountant competency of community-based tourism in Thailand.

Hypothesis 1: Accountant competency of community-based tourism in Thailand is not different according to gender, age, marital status, education level, and monthly income.

The accountant competency of community-based tourism in Thailand is tested against the different genders, different age-intervals, different marital statuses, different education levels and different monthly incomes.

Hypothesis 1.1: Gender differences in accountant's competency in community-based tourism in Thailand are not significantly different.

The hypothesis tests are done to prove "gender differences in accountant's competency of community-based tourism in Thailand are not different" by comparing each gender on the average of accountant competency. The t-test for two sample groups (genders) yielded the results as shown in Table 4.12.

Table 4.12 The Hypothesis Tests for "Gender Differences in Accountant's Competency of Community-Based Tourism in Thailand Are Not Different"

Competency	Gender	\overline{x}	S.D.	t	Sig.
Knowledges	Male	3.69	1.01	1.01	0.51
	Female	3.65	0.93		
Skills	Male	3.61	0.51	2.61	0.75
	Female	3.84	0.50		
Self-Concepts	Male	3.64	0.85	1.66	0.19
	Female	3.54	0.71		
Motives	Male	3.72	0.56	2.34	0.11
	Female	3.71	0.66		
Traits	Male	3.95	0.57	1.26	0.85
	Female	3.89	0.44		
Total	Male	3.72	0.70	1.78	0.49
	Female	3.73	0.65		

Note: *significant at p < 0.05

Table 4.12 shows that the competency (total) $\bar{x} = 3.72$ (S.D. = 0.70) of males are slightly different from the $\bar{x} = 3.73$ (S.D. = 0.65) of male. Since the significant value = 0.49 is greater than 0.05, therefore, gender differences in accountant's competency of community-based tourism in Thailand are not significantly different.

The "knowledge" $\overline{x} = 3.69$ (S.D. = 1.01) of males are slightly different from the $\overline{x} = 3.65$ (S.D. = 0.93) of male. Since the significant value = 0.51 is greater than 0.05, therefore, gender differences in accountant knowledge are not significantly different.

The "skills" $\overline{x} = 3.61$ (S.D. = 0.51) of males are slightly different from the $\overline{x} = 3.84$ (S.D. = 0.50) of male. Since the significant value = 0.75 is greater than 0.05, therefore, gender differences in accountant skills are not significantly different.

The "self-concepts" $\overline{x} = 3.64$ (S.D. = 0.85) of males are slightly different from the $\overline{x} = 3.54$ (S.D. = 0.71) of male. Since the significant value = 0.19 is greater than 0.05, therefore, gender differences in accountant self-concepts are not significantly different.

The "motives" $\overline{x} = 3.72$ (S.D. = 0.56) of males are slightly different from the $\overline{x} = 3.71$ (S.D. = 0.66) of male. Since the significant value = 0.11 is greater than 0.05, therefore, gender differences in accountant motives are not significantly different.

The "traits" mean=3.95 (S.D. = 0.57) of males are slightly different from the $\bar{x} = 3.89$ (S.D. = 0.44) of male. Since the significant value = 0.85 is greater than 0.05, therefore, gender differences in accountant traits are not significantly different.

Hypothesis 1.2: Age differences in accountant's competency in community-based tourism in Thailand are not different.

The hypothesis tests are done to prove "age differences in accountant's competency in community-based tourism in Thailand are not different" by comparing each age interval's the average of accountant's competency. The F-Test for four sample groups (age intervals) yielded the results as shown in Table 4.13.

Table 4.13 The Hypothesis Tests for "Age Differences in Accountant's Competency of Community-Based Tourism in Thailand Are Not Different"

Competency	Gender	\overline{x}	S.D.	F	Sig.
Knowledge	21 to 30 years	3.81	0.75	7.34	0.10
	31 to 40 years	4.02	0.50		
	41 to 50 years	3.96	0.64		
	51 years and older	4.00	0.69		
Skills	21 to 30 years	3.91	0.51	2.31	0.07
	31 to 40 years	3.68	0.51		
	41 to 50 years	3.99	0.56		
	51 years and older	3.99	0.56		

 Table 4.13 (Continued)

Competency	Gender	\overline{x}	S.D.	F	Sig.
Self-Concepts	21 to 30 years	4.09	0.75	4.09*	0.00
	31 to 40 years	4.00	0.71		
	41 to 50 years	3.98	0.54		
	51 years and older	4.01	0.73		
Motives	21 to 30 years	4.11	0.67	2.34	0.99
	31 to 40 years	3.58	0.77		
	41 to 50 years	3.72	0.58		
	51 years and older	3.74	0.69		
Traits	21 to 30 years	3.81	0.50	0.55	0.62
	31 to 40 years	3.75	0.87		
	41 to 50 years	3.65	0.78		
	51 years and older	3.6	0.81		
Total	21 to 30 years	3.94	0.64	1.79	0.15
	31 to 40 years	3.81	0.67		
	41 to 50 years	3.86	0.62		
	51 years and older	3.60	0.58		

Note: *significant at p < 0.05

Table 4.13 shows that the competency (total) $\overline{x} = 3.94$ (S.D. = 0.64) of age 21 to 30 years, $\overline{x} = 3.81$ (S.D. = 0.67) of age 31 to 40 years, $\overline{x} = 3.86$ (S.D. = 0.62) of age 41 to 50 years, and $\overline{x} = 3.60$ (S.D. = 0.58) of age 51 years and older are slightly different from each other. Since the significant value = 0.15 is greater than 0.05, therefore, the age differences in accountant's competency in community-based tourism in Thailand are not significantly different.

The "knowledge" $\overline{x}=3.81$ (S.D. = 0.75) of age 21 to 30 years, $\overline{x}=4.02$ (S.D. = 0.5) of age 31 to 40 years, $\overline{x}=3.96$ (S.D. = 0.64) of age 41 to 50 years, and $\overline{x}=4$ (S.D. = 0.69) of age 51 years and older are slightly different from each other.

Since the significant value = 0.1 is greater than 0.05, therefore, age differences in accountant knowledges are not significantly different.

The "skills" $\overline{x} = 3.91$ (S.D. = 0.51) of age 21 to 30 years, $\overline{x} = 3.68$ (S.D. = 0.51) of age 31 to 40 years, $\overline{x} = 3.99$ (S.D. = 0.56) of age 41 to 50 years, and $\overline{x} = 3.99$ (S.D. = 0.56) of age 51 years and older are slightly different from each other. Since the significant value = 0.07 is greater than 0.05, therefore, age differences in accountant skills are not significantly different.

The "self-concepts" $\overline{x} = 4.09$ (S.D. = 0.75) of age 21 to 30 years, $\overline{x} = 4.00$ (S.D. = 0.71) of age 31 to 40 years, $\overline{x} = 3.98$ (S.D. = 0.54) of age 41 to 50 years, and $\overline{x} = 4.01$ (S.D. = 0.73) of age 51 years and older are slightly different from each other. Since the significant value = 0 is less than 0.05, therefore, age differences in accountant self-concepts are significantly different.

The "motives" $\overline{x} = 4.11$ (S.D. = 0.67) of age 21 to 30 years, $\overline{x} = 3.58$ (S.D. = 0.77) of age 31 to 40 years, $\overline{x} = 3.72$ (S.D. = 0.58) of age 41 to 50 years, and $\overline{x} = 3.74$ (S.D. = 0.69) of age 51 years and older are slightly different from each other. Since the significant value = 0.99 is greater than 0.05, therefore, age differences in accountant motives are not significantly different.

The "traits" $\overline{x} = 3.81$ (S.D. = 0.50) of age 21 to 30 years, $\overline{x} = 3.75$ (S.D. = 0.87) of age 31 to 40 years, $\overline{x} = 3.65$ (S.D. = 0.78) of age 41 to 50 years, and $\overline{x} = 3.60$ (S.D. = 0.81) of age 51 years and older are slightly different from each other. Since the significant value = 0.62 is greater than 0.05, therefore, age differences in accountant traits are not significantly different.

Since the "self-concepts" significant value = 0 is less than 0.05, therefore, age differences in accountant self-concepts are significant different. Multiple comparisons are done to investigate the mean differences of each age intervals comparison by using Lest Significant Difference (LSD) and the comparison results is shown in Table 4.13.

Table 4.14 The Hypothesis Tests for "Age Differences in Accountant's Self-Concept Are Not Different"

Age	Mean	21-30	31-40	41-50	>=51
		years	years	years	years
21 to 30 years	3.81	-	0.94	0.51*	0.89
31 to 40 years	3.75		-	0.42*	0.58
41 to 50 years	3.65			-	0.78
51 years and older	3.60				-

Note: *significant at p < 0.05

Table 4.14 shows pairwise comparisons of means between each age interval. The mean of age 41 to 50 years is significantly different from means of age 21 to 30 years and 31 to 40 years.

Hypothesis 1.3: Marital status differences in accountant's competency in community-based tourism in Thailand are not different.

The hypothesis tests are done to prove "marital status differences in accountant's competency in community-based tourism in Thailand are not different" by comparing each age interval's the average of accountant competency. The F-Test for four sample groups (marital statuses) yielded the results as shown in Table 4.15.

Table 4.15 The Hypothesis Tests for "Marital Status Differences in Accountant's Competency of Community-Based Tourism in Thailand are Not Different"

Competency	Marital status	\overline{x}	S.D	F	Sig
Knowledge	Single	3.80	0.61	0.97	0.15
	Married	3.53	0.79		
	Widowed/Divorced	4.11	0.56		
Skills	Single	3.80	0.73	0.38	0.89
	Married	4.01	0.71		
	Widowed/Divorced	3.89	0.70		
Self-Concept	Single	4.10	0.60	0.42*	0.63
	Married	4.03	0.96		
	Widowed/Divorced	4.04	0.89		
Motives	Single	3.30	0.76	1.73*	0.77
	Married	3.57	0.73		
	Widowed/Divorced	3.53	0.45		
Traits	Single	4.11	0.45	0.29	0.33
	Married	3.88	.48		
	Widowed/Divorced	3.80	0.76		
Total	Single	3.82	0.63		
	Married	3.80	0.73		
	Widowed/Divorced	3.87	0.67		

Note: *significant at p < 0.05

Table 4.15 shows that the competency (total) means of all marital status are not significantly different. Marital status differences in accountant's knowledge are not significantly different. Marital status differences in accountant's skills are likewise not significantly different. Marital status differences in accountant's self-concept are significantly different. Marital status differences in accountant motives

are significantly different. Marital status differences in accountant traits are not significantly different.

Since marital status differences in accountant's self-concept and motive are significantly different, multiple comparisons are done to define which pairwise comparison is different, and the results are presented in Table 4.15.

Table 4.16 The Hypothesis Tests for "Marital Status Differences in Accountant's Self-Concept or Motive Are Not Different"

Self-Concepts	\overline{x}	Single	Married	Widowed/Divorced
Single	4.10	-	0.61*	0.16
Married	4.03		-	0.44*
Widowed/Divorced	4.04			-
Motives				
Single	3.30	-	0.32	-0.17
Married	3.57		-	-0.49*
Widowed/Divorced	3.53			-

Note: *significant at p < 0.05

Table 4.16 shows that self-concept mean of married status is significantly different from means of single status and widowed/divorced status. Moreover, motive mean of married status is significantly different from the mean of widowed/divorced status.

Hypothesis 1.4: Education level differences in accountant's competency in community-based tourism in Thailand are not different.

The hypothesis tests are done to prove "education level differences in accountant's competency of community-based tourism in Thailand are not different" by comparing each education level's average of accountant competency. The F-Test for five sample groups (education levels) yielded the results as shown in Table 4.17.

Table 4.17The Hypothesis Tests for "Education Differences in Accountant'sCompetency of Community-Based Tourism in Thailand are NotDifferent"

Competency	Education Level	\overline{x}	S.D.	F	Sig
Knowledge	Elementary School	4.13	0.75	0.92	0.41
	Middle School	3.98	1.01		
	Vocational Certificate/High	3.96	0.99		
	School				
	High Vocational	3.93	0.96		
	Certificate/Technical Certificate/				
	Diploma				
	Bachelor's Degree	4.00	0.95		
Skills	Elementary School	3.85	1.01	1.68	1.88
	Middle School	3.71	0.97		
	Vocational Certificate/High	4.15	0.70		
	School				
	High Vocational	3.59	0.86		
	Certificate/Technical Certificate/				
	Diploma				
	Bachelor's Degree	3.86	0.90		
Self-Concepts	Elementary School	3.81	0.88	0.61	0.54
	Middle School	3.76	0.98		
	Vocational Certificate/High	3.97	0.90		
	School				
	High Vocational	3.89	0.90		
	Certificate/Technical Certificate/				
	Diploma				
	Bachelor's Degree	4.14	0.82		
Motives	Elementary School	3.79	0.94	2.87*	0.55
	Middle School	4.17	0.93		
	Vocational Certificate/High	3.77	1.04		
	School				

Table 4.17 (Continued)

Competency	Education Level	\overline{x}	S.D.	F	Sig
	High Vocational	3.29	0.91		
	Certificate/Technical Certificate/				
	Diploma				
	Bachelor's Degree	3.85	0.95		
Traits	Elementary School	3.75	1.00	3.55*	0.74
	Middle School	3.85	0.94		
	Vocational Certificate/High	4.01	0.84		
	School				
	High Vocational	4.11	1.00		
	Certificate/Technical Certificate/				
	Diploma				
	Bachelor's Degree	4.02	0.92		
Total	Elementary School	3.87	0.92	0.91	0.45
	Middle School	3.89	0.96		
	Vocational Certificate/High	3.97	0.89		
	School				
	High Vocational Certificate/	3.76	0.93		
	Technical Certificate/ Diploma				
	Bachelor's Degree	3.98	0.91		

Note: *significant at p < 0.05

Table 4.17 shows that the competency (total) mean of all educational levels are not significantly different. Education level differences in accountant's knowledge are not significantly different. Education level differences in accountant's skills are not significantly different. Education level differences in accountant's self-concept are not significantly different. Education level differences in accountant's motives are significantly different. Education level differences in accountant traits are significantly different.

Since education level differences in accountant motive and traits are significantly different, multiple comparisons are done to define which pairwise comparison is different, and the results are presented in Table 4.18.

Table 4.18 The Hypothesis Tests for "Education Level Differences in Accountant's Motive or Traits are Not Different"

Motives	Mean	Elementary	Middle	Vocational	High	Bachelor's
		School	School	Certificate/	Vocational	Degree
				High School	Certificate/	
					Technical	
					Certificate/	
					Diploma	
Elementary School	3.79	-	-0.01	0.86	-0.94	0.22*
Middle School	4.17		-	-0.86	0.97	0.25*
Vocational	3.77			-	0.42	0.99*
Certificate/High						
School						
High Vocational	3.29				-	0.58*
Certificate/Technical						
Certificate/ Diploma						
Bachelor's Degree	3.85					-
Traits						
Elementary School	3.75	-	0.42	0.21	0.32	0.43
Middle School	3.85		-	0.53	-0.34*	0.75
Vocational	4.01			-	0.67	-0.94*
Certificate/High						
School						
High Vocational	4.11				-	0.76
Certificate/Technical						
Certificate/ Diploma						
Bachelor's Degree	4.02					-

Note: *significant at p < 0.05

Table 4.18 shows that motive mean of bachelor's degree is significantly different from the means of elementary school, middle school, vocational certificate/high school, and high vocational certificate/technical certificate/diploma.

Traits mean of middle school is significantly different from mean of high vocational certificate/technical certificate/ diploma. Moreover, traits mean of vocational certificate/high school is significantly different from mean of bachelor's degree.

Hypothesis 1.8: Monthly income differences in accountant's competency in community-based tourism in Thailand are not different.

The hypothesis tests are done to prove "monthly income differences in accountant's competency in community-based tourism in Thailand are not different" by comparing each monthly income level's average of accountant competency. The F-Test for five sample groups (monthly income levels) yielded the results as shown in Table 4.19.

Table 4.19 The Hypothesis Tests for "Monthly Income Differences in Accountant's Competency of Community-Based Tourism in Thailand Are Not Different"

Competency	Monthly Income	\overline{x}	S.D.	F	Sig
Knowledge	10,000 bahts and less	3.53	1.17	3.44*	
	10,001 to 15,000 bahts	3.12	1.22		0.001
	15,001 to 20,000 bahts	3.69	0.92		
	20,001 to 25,000 bahts	3.96	0.88		
	25,001 to 30,000 bahts	3.76	0.85		
	30,001 and more	3.79	0.91		
Skills	10,000 bahts and less	3.12	1.22	-0.26*	0.80
	10,001 to 15,000 bahts	3.53	1.17		
	15,001 to 20,000 bahts	3.23	1.27		
	20,001 to 25,000 bahts	3.69	0.92		
	25,001 to 30,000 bahts	3.96	0.88		
	30,001 and more	3.82	0.71		
Self-Concepts	10,000 bahts and less	3.60	0.82	5.70	0.00

Table 4.19 (Continued)

Competency	Monthly Income	\overline{x}	S.D.	F	Sig
	10,001 to 15,000 bahts	3.50	0.76		
	15,001 to 20,000 bahts	3.66	0.61		
	20,001 to 25,000 bahts	3.76	0.63		
	25,001 to 30,000 bahts	3.80	0.75		
	30,001 and more	3.91	0.56		
Motives	10,000 bahts and less	4.14	0.66	0.94	0.35
	10,001 to 15,000 bahts	4.19	0.69		
	15,001 to 20,000 bahts	4.11	0.54		
	20,001 to 25,000 bahts	4.00	0.59		
	25,001 to 30,000 bahts	4.17	0.55		
	30,001 and more	4.15	0.73		
Traits	10,000 bahts and less	3.95	0.59	-2.55	0.01
	10,001 to 15,000 bahts	3.85	0.72		
	15,001 to 20,000 bahts	3.91	0.56		
	20,001 to 25,000 bahts	3.66	0.61		
	25,001 to 30,000 bahts	3.53	0.84		
	30,001 and more	3.82	0.71		
Total	10,000 bahts and less	3.66	0.89	1.80	0.07
	10,001 to 15,000 bahts	3.64	0.91		
	15,001 to 20,000 bahts	3.67	0.78		
	20,001 to 25,000 bahts	3.84	0.71		
	25,001 to 30,000 bahts	3.82	0.77		
	30,001 and more	3.89	0.73		

Note: *significant at p < 0.05

Table 4.19 shows that the competency (total) means of all monthly income levels are not significantly different. Monthly income differences in accountant's knowledge are significantly different. Monthly income differences in accountant's skills are significant different. Monthly income differences in accountant's self-concept are not significantly different. Monthly income differences in accountant's

motives are not significantly different. Monthly income differences in accountant's traits are not significantly different.

Since monthly income differences in accountant's knowledge and skills are significantly different, multiple comparisons are done to define which pairwise comparison is different, and the results are presented in Table 4.20.

Table 4.20 The Hypothesis Tests for "Monthly Income Differences in Accountant's Knowledge or Skills Are Not Different"

	Mean	10,000	10,001	15,001	20,001	25,001	30,001
		bahts	to	to	to	to	and
		and less	15,000	20,000	25,000	30,000	more
			bahts	bahts	bahts	bahts	
Knowledge							
10,000 bahts and less	3.53	-	0.06	0.01	-0.04	0.36	0.61
10,001 to 15,000 bahts	3.12		-	0.65	-0.22	-0.08	1.06
15,001 to 20,000 bahts	3.69			-	0.14	0.84	0.97
20,001 to 25,000 bahts	3.96				-	0.32	0.42*
25,001 to 30,000 bahts	3.76					-	0.36*
30,001 bahts and more	3.79						-
Skills							
10,000 bahts and less	3.12	-	0.05	0.03	-0.152	.075	0.31
10,001 to 15,000 bahts	3.53		-	0.04	0.04	0.06	0.05
15,001 to 20,000 bahts	3.23			-	0.02*	-0.07*	0.11*
20,001 to 25,000 bahts	3.69				-	0.08	0.07
25,001 to 30,000 bahts	3.96					-	0.13
30,001 bahts and more	3.82						-

Note: *significant at p < 0.05

Table 4.20 shows that the mean of knowledge with monthly income of 30,001 bahts and more is significantly different from means of monthly income of 20,001 to 25,000 bahts and monthly income of 25,001 to 30,000 bahts.

The mean of skills with monthly income of 15,001 to 20,000 bahts is significantly different from means of monthly income of 20,001 to 25,000 bahts, monthly income of 25,001 to 30,000 bahts, and monthly income of 30,001 bahts and more.

Although, there are some means which are significantly different in some cases, but the means of competency (total) of gender, age, marital status, education level, and monthly income are not significantly different. Therefore, all H_0s are accepted as shown in Table 4.21.

Table 4.21 Summary of Hypothesis Tests

Hypothesis Test	Decision
1.1 Gender differences in accountant's competency of community-	Accept H ₀
based tourism in Thailand are not different.	
1.2 Age differences in accountant's competency of community-based	Accept H ₀
tourism in Thailand are not different.	
1.3 Marital status differences in accountant's competency of	Accept H ₀
community-based tourism in Thailand are not different.	
1.4 Education level differences in accountant's competency of	Accept H ₀
community-based tourism in Thailand are not different.	
1.5 Monthly income differences in accountant's competency of	Accept H ₀
community-based tourism in Thailand are not different.	

4.4 The survey's Results of the Current Types of Accounting System of Community-based Tourism in Thailand

The investigation of the current types of accounting system of community-based tourism in Thailand is separated into four parts:

- 1) Community survey and analysis
- 2) Designing accounting system (accounting cycle)
- 3) Applying the accounting system
- 4) Following the result of accounting system application

The results of respondents' opinion about the current types of accounting system of community-based tourism in Thailand are analyzed by using descriptive statistics and presented using mean and standard deviation as shown in Table 4.22-4.26.

Table 4.22 The Respondents' Opinion on The Current Types of Accounting System of Community-Based Tourism in Thailand

Current Types of Accounting System	\overline{x}	S.D.	Opinion Level
1. Community survey and analysis	3.63	0.72	High
2. Designing accounting system (accounting	3.34	0.78	Medium
cycle)			
3. Applying the accounting system	4.04	0.76	High
4. Following the result of accounting system	4.15	0.61	High
application			
5. Accountant competency of community-based	4.25	0.72	Highest
tourism			
Total	3.88	0.72	High

Table 4.22 shows respondents' opinion levels on the current typres of accounting system in community-based tourism in Thailand. The total has $\overline{x}=3.88$, S.D. = 0.72 and opinion level = high. The highest mean is accountant competency of community-based tourism with $\overline{x}=4.25$, S.D. = 0.72 and opinion level=highest. The second place mean is following the result of accounting system application with $\overline{x}=4.15$, S.D. = 0.61 and opinion level = high. The third place mean is applying the accounting system with $\overline{x}=4.04$, S.D. = 0.76, and opinion level = high. The fourth place mean is community survey and analysis with $\overline{x}=3.63$, S.D. = 0.72 and opinion level = high. The opinion with the lowest mean is designing accounting system (accounting cycle) with $\overline{x}=3.34$, S.D. = 0.78, and opinion level = medium.

Table 4.23 The Respondents' Opinion on The Current Community Survey and Analysis

Community Survey and Analysis	\overline{x}	S.D.	Opinion Level
1. Registering as an association or club	3.79	0.91	High
2. Fundraising for founding community-based	3.12	1.22	Medium
tourism			
3. Dividend management	3.53	1.17	High
4. Lay-outing organization of community-	3.23	1.27	Medium
based tourism			
5. Hiring tourism officers by community	3.39	1.15	High
6. Homestay availability	3.72	0.93	High
7. Community tours	3.95	0.92	High
8. Reservation system availability	4.27	0.90	Highest
9. Including cost for service pricing	4.20	0.83	Highest
10. Souvenirs selling availability	3.69	0.92	High
11. Reporting on souvenirs stocks	3.96	0.88	High
Total	3.71	1.00	High

Table 4.23 shows respondents' opinion levels on the current community survey and analysis. The overall mean is equivalent to 3.71, S.D. = 1.00 and opinion level = high. The opinion with the highest mean is reservation system availability with $\overline{x} = 4.27$, S.D. = 0.90 and opinion level=highest. The second place mean is including cost for service pricing with $\overline{x} = 4.20$, S.D. = 0.83 and opinion level=highest. The third place mean is reporting on souvenirs stocks with $\overline{x} = 3.96$, S.D. = 0.88 and opinion level=high. The fourth place mean is community tours with $\overline{x} = 3.95$, S.D. = 0.92 and opinion level=high. The fifth place mean is registering as an association or club with $\overline{x} = 3.79$, S.D. = 0.91 and opinion level=high. The sixth place mean is homestay availability with $\overline{x} = 3.72$, S.D. = 0.93 and opinion level=high. The seventh place mean is souvenirs selling availability with $\overline{x} = 3.69$, S.D. = 0.92 and opinion level=high. The eighth place mean is dividend management

with $\overline{x}=3.53$, S.D. = 1.17 and opinion level=high. The ninth place mean is hiring tourism officers by community with $\overline{x}=3.39$, S.D. = 1.15 and opinion level=high. The tenth place mean is ay-outing organization of community-based tourism with $\overline{x}=3.23$, S.D. = 1.21 and opinion level=medium. The opinion with the lowest mean is fundraising for founding community-based tourism with $\overline{x}=3.12$, S.D. = 1.22 and opinion level=medium.

Table 4.24 The Respondents' Opinion on the Current Design of Accounting System (Accounting Cycle)

Design Accounting System (Accounting Cycle)	\overline{x}	S.D	Opinion Level
1. Documents of the accounting records, such as	3.42	1.14	High
receipt			
2. Forms for accounting record, such as a spending	3.79	0.91	High
form			
3. Accounting record diary entries	4.20	0.83	Highest
4. Passing from basic diary record to categories	3.12	1.22	Medium
record			
5.Daily report	3.79	0.89	High
6. Closing accounting record at the end period	3.69	0.92	High
7. Trial financial budget.	3.53	1.17	High
8. Improving accounting record at the end period	3.23	1.27	Medium
9. Open an account for tourism by community	3.57	1.09	High
10. Detailed cash systems	3.23	0.99	Medium
11. Property record	4.05	0.95	High
12.Initial cost	3.98	0.92	High
13. Separating production costs out of the selling	3.94	1.15	High
and administrative expenses			
14. Permanent asset depreciation	3.94	1.12	High
15. Debts recording	4.08	1.05	High
16. Capital recording	4.07	0.82	High
17. Approval process for withdrawing materials or	4.07	0.83	High
office supplies			

Table 4.24 (Continued)

Design Accounting System (Accounting Cycle)	\overline{x}	S.D	Opinion Level
18. Checking stocks of materials, products, office	4.02	0.72	High
supplies			
19. Categorizing materials, products, office supplies	3.91	0.86	High
20. Accounting coding			
21. Financial documental report	3.93	0.96	High
22.Presenting financial report	4.13	0.75	High
23. Past information comparison	3.98	1.01	High
24. Auditors suggest accurate accounting advice	3.96	0.99	High
Total	3.81	0.98	High

Table 4.24 shows respondents' opinion levels on the current designing accounting system (accounting cycle). The total mean is equivalent to 3.81, S.D. = 0.98 and opinion level = high. The highest mean is accounting record diary entries with $\overline{x} = 4.2$, S.D. = 0.83 and opinion level=highest. The second place mean is presenting financial report with $\overline{x} = 4.13$, S.D. = 0.75 and opinion level=high. The third place mean is debts recording with $\overline{x} = 4.08$, S.D. = 1.05 and opinion level=high. The fourth place mean is capital recording with $\overline{x} = 4.07$, S.D. = 0.82 and opinion level=high. The fifth place mean is approval process for withdrawing materials or office supplies with $\overline{x} = 4.07$, S.D. = 0.83 and opinion level=high. The sixth place mean is property record with $\overline{x} = 4.05$, S.D. = 0.95 and opinion level=high. The seventh place mean is checking stocks of materials, products, office supplies with $\overline{x} = 4.02$, S.D. = 0.72 and opinion level=high.

Table 4.25 The Respondents' Opinion on The Current Application of Accounting System

Application Of Accounting System	\overline{x}	S.D	Opinion Level
1. Preparing all documents for bookkeeping	4.24	1.01	Highest
2. Finding some equipment to make job easily	4.06	0.85	High
such as computers			
3. Keeping all accounting records as the law	4.00	0.88	High
required			
4. Asking all departments to participate on	3.93	0.97	High
bookkeeping			
Total	4.01	0.93	High

Table 4.25 shows respondents' opinion levels on the current application of accounting system. The overall $\overline{x}=4.01$, S.D. = 0.93 and opinion level = high. The opinion with the highest mean is preparing all documents for bookkeeping with $\overline{x}=4.24$, S.D. = 1.01 and opinion level=highest. The second place mean is finding some equipment to make job easily such as computers with $\overline{x}=4.06$, S.D. = 0.85 and opinion level=high. The third place mean is keeping all accounting records as the law required with $\overline{x}=4.00$, S.D. = 0.88 and opinion level=high. The opinion with the lowest mean is asking all departments to participate on bookkeeping with $\overline{x}=3.93$, S.D. = 0.97 and opinion level=high.

Table 4.26 The Respondents' Opinion on The Current Result of Accounting System Application

Following the result of Accounting System	\overline{x}	S.D	Opinion Level
Application			
4.1 Checking the accounting system whether it	3.78	0.92	High
follows the standard requirement			
4.2 Improve and change the accounting system	3.65	1.04	High
Total	3.72	0.98	High

Table 4.26 shows respondents' opinion levels on the current result of accounting system application. The total has $\overline{x} = 3.72$, S.D. = 0.98 and opinion level = high. The respondents' opinion with the higher mean is checking the accounting system whether it follows the standard with $\overline{x} = 3.78$, S.D. = 0.92 and opinion level=highest. The opinion with the lower mean is improve and change the accounting system with $\overline{x} = 3.65$, S.D. = 1.04 and opinion level=highest.

4.5 The Analysis of Qualitative Research

4.5.1 To answer research question 1: what are the competencies of the accountants of the community-based tourism in Thailand?

Most of the CBT accounting users do not obtain directly in accounting field. They apply their experience from working in the community and are able to compute. They can explain the background of the accounts, and they mostly do because they want the community to be able to run the business. The problem is finding manpower because accounting job must be transparent and the members can check the monetary background and other assets to other members. It is also needed to clarify the movement of receipts. Group members always report the movements of the financial statements to the members. From the interview about the competency, how do the community-based tourism accountants have qualifications or competencies? The researcher will explain as follows.

4.5.1.1 Knowledge

To strengthen the community in order to support the problem solving and development of economic, social, cultural and natural resources, and the environment at the same time, the government and private sector must work together to strengthen the community to solve problems by themselves. This can be done by stimulating and creating a participatory process as well as creating an environment for the community to think and do it together and also learn to help each other. This will lead to sustainable development in the long run. Therefore, it is needed a development model for achieving the objectives of the community. However, there are many unsuccessful communities that have not been to the target. The communities have experienced with some business problems for example management, marketing, labor, production technology especially accounting. There are also non-systematic accounting arrangements which cannot be used for planning and decision making. It can be seen when the communities funded by the government, they operated without planning and lack of reporting. This is due to the lack of emphasis on accounting as a basis for planning and decision making. Therefore, when they run of out the funding, they finally stop their business. It can be seen obviously that accounting knowledge plays an important role in community development, especially the community-based tourism.

From the interview, it is found that CBT accountants mostly are the local people. There is a community advisory committee or treasurer to administer the community and they share the responsibility together. Each position is assigned according to their own interest and ability.

Time to work is one of the most important factors for dividing accounting work of the community. This is because people who work as an accountant have to spend its own time working for the community while everyone have their own work to do. (Supatchakarn Reunphet, personal communication, July 1, 2016)

To work for the community, there are no bosses, everyone work together. Also, working as an accountant is quite awkward because the accountant knows about all incomes and expenses. Most of members and nonmembers always watch attentively for a mistake about money, while actually working at the accounting position know only the numbers which have never really seen the money. (Supawadee Boukaew, personal communication, July 1, 2016)

The community does not have its own accounting system. The accounting shows only the simply report of income and expenditure. There is not enough financial information to plan and make decision in order to develop the community. This is due to the lack of accounting knowledge. (Wanna Polbon, personal communication, July 1, 2016)

The community normally records a simple accounting. The accountant does not follow the accounting process because he/she does not know how to do it properly. This has led to many community problems that have caused many problems later. (Ratayut Kumsanit, personal communication, July 7, 2016)

The knowledge of preparation forms of entry is also an important part of the community's conduct. This can cause less problems in the community action if the community can gain knowledge of accounting procedures. Also, it allows the accountant to design the form correctly along with community action. (Charin Sripratum, personal communication, July 7, 2016)

To have the accounting procedures knowledge can help the community record the accounting transaction correctly. There are sometimes government agencies such as cooperative promotion department or bank for agriculture and agricultural cooperatives also provide the accounting advice. Otherwise, the community followed what the former accountant has done in the past which is not the correct way to do the accounting. It is easy to make a mistake because the community does not understand how to record transaction correctly. This is due to the lack to accounting knowledge. (Anurat Pumsithiparin, personal communication, July 7, 2016)

The community accountants have the same opinion that it is necessary to gain correctly the accounting knowledge and must be a verification form. (Chutima YimYam, personal communication, July 7, 2016)

The knowledge of the details of the record form, it is vital to the operation of the community and makes the community's operation smoothly.

To gain knowledge of accounting procedures correctly, the accountant will be able to design the form including procedure to comply with the implementation of the community. (Jaran Aunsiri, personal communication, July 7, 2016)

Having knowledge about the correct procedures in bookkeeping, the accountant will know the procedure of the bookkeeping or other transactions which are from other recommended organization such as the provincial cooperative and the auditor of the cooperative, including the usual implementation system of the community. The accountants are able to apply the knowledge correctly. If they do not know the procedure of the bookkeeping, the accountant will to record the transactions. But, there are some mistakes on accounting records because they do not have enough knowledge. (Anurat Pumsitisorn, personal communication, July 9, 2016)

Most accountants have the idea that they need knowledge; good recording transaction and the format can be audited. (Poungthong Phopee, personal communication, July 11, 2016)

In this step of the operation, it is in accordance with of the community accountants. If they have knowledge and the financial analysis skills inefficiently, it causes the problems on the decision of the operation. The operation of the goods will make profit or loss; it must be true because the accountants need to know how to operate correctly. (Narong Witayakorn, personal communication, July 12, 2016)

The community accountant requires the knowledge of depreciation and the correct method of calculation. Most communities just make the profit or loss but they do not calculate the depreciation. When the other organizations support for the knowledge or examination, they will indicate that actually, the communities do not have profits as expected. Therefore, every community will eventually suffer the same problems that they can sell products but they take a loss as well as many members of the community. Many members of the cooperative will be always notified that the cooperative take a loss. (Siriwattana Suksawat, personal communication, July 17, 2017)

To find the accounting information, it will have to open from the books, which wastes a lot of time to search. So, the community needs a computer but

the computer is quite expensive. Importantly, the people that work in the position of accountants might not have much computer knowledge and they need much time in training. In some communities, the accountants may be required to work as other positions such as community management due to the tourism community. Each member already has their main occupation; farming and gardening and most members will not be able to help operate the community. (Rampai Tonjang, personal communication, July 17, 2016)

The knowledge on law and regulations, including the accounting audit is another problem that the community is facing wit because they are vital to the development of the community, commerce and economic. Especially, when there are projects of the government, they want to be promoted or not refused from the government. (Manat Rakmak, personal communication, July 17, 2016)

The knowledge management in the community, especially marketing, it is extremely important. Most communities always think or operate the marketing on their own views. Therefore, it does not correspond to the needs of consumers or tourists coming into the community. (Chutima YimYam, personal communication, July 18, 2016)

The person holding this position must be patient and tolerant allowing everyone to audit the transparency. Most accountants do not have bachelor degree or directly graduate in accounting. Most of them will do just simple accounting by taking notes of what the members buy in the community and how useful those products are. They record all disbursement items. Those who disburse must also consult with members of the community first. The procedure is, if the members would want to buy any products or services, it must be signed or acknowledged by the community chair. When the members approve, the chair will notify the accountant to record the disbursement of money. This knowledge is learned from the experience of previous generations or the case studies from other communities. Interestingly, each community is not the same. In conclusion, the knowledge of accounting plays an important role for community development especially the knowledge of recording, procedures, and preparation of financial statements including the community property

assessment. The community operating costs are covering product cost, personnel cost, and management cost of the community. If this correct information is planned for managing community properly; marketing, pricing of the products and corresponding and covering of the community's expenses. In terms of pricing, it does not calculate only a part of the expenses so in the long-term of the operation of the community, even though, the community has operated correctly but why the problems has been occurred. Another important thing that communities need the most is to have knowledge of the laws, restrictions and regulations because these things are important and that will not result in obstacles to the functioning of the community.

The regulations must be treated properly with no exception or avoid doing some regulations, in particular, the accounting regulations because it is the protection of corruption correctly. If the accountants of the community do everything correctly, it will reflect the action of the community properly. Therefore, basic knowledge of accounting knowledge helps the communities develop and grow in a sustainable manner.

4.5.1.2 Skills

The accounting skills must have regulations and planning including method of accounting, financial statements, documents and various book accounts, which are finally the community financial information and report including the use and keeping of evidences, documents, certificate of accounting and finance for recording business transactions to collect data and statistics figures. Then, the community can use them correctly and appropriately. In general, the account system of the community consists of the operation system, documents for recording data, the internal control system, and tools. After having the proper knowledge, it requires the development of skills that can bring knowledge to perform completely and efficiently. According to most people in the community do not have direct accounting knowledge, they tried to work on accounting by themselves. They have tried in many ways in order to find an appropriate way for their community. Also, the accounting report must be available for the community members to check and show transparency

of the report. Therefore, these kinds of skills accumulate from their experience and their practicing.

Also, some people's hand-writing are not readable and probably wrong calculation sometimes. Therefore, the computer could help them to record and calculate easily. Previously, there is a computer training program from some universities for training people in the community, but they cannot remember because some weeks they do not have any record. So, they do not have enough experience of using the computer program to record. Nowadays, they have only one computer which is used with every job in the community, for example, the presentation of community operations. The community is often visited by outside people and having a party, the computer could be used for the karaoke. This causes the accountants have to use the book to record as original. (Thanin Kongduan, personal communication, July 1, 2016)

Practices and problems in the accounting of the community, most accountants gain their knowledge in accounting, from the training, but they still also lack of skills in operating, such as the correct accounting standards. Most accountants still choose to do manually according to a private understanding. Therefore, the accounting is not accurate according to the accounting principles generally, and cannot be applied in business. (Pratum Cheilomkham, personal communication, July 1, 2016)

The main problem in the recording transaction of the community accounting is lacking of basic knowledge in accounting and no unity of the involved organizations; there is the education and publishing a range of accounting patterns according to the aptitude of the organizations. However, it does not conform to the basic requirements of the users. It causes confusion and errors, and not focus on the accounting. When the accountants have knowledge, they have not been developed the skills to use them correctly. (Pornchulee Nakkham, personal communication, July 7, 2016)

The delegation of the finance and accounting, the preparation of documents must be covered to the receiving of money. Whenever the producers get paid whether it is paid to any of the items to the documents of payment, they must make the documents or the receipt of groups. They should ask the payee who receive payment to sign by all the time. For the use of documents used for receiving money, it should be sequenced and used continuously until the end of the book before using the new book. As for the documents used for paying, the producer group has to ask for the receipt every time from the seller. If they do not have the receipt such as transport payment, the receiver has to do the payment request form with the details of payment and the signatures of the payer and the recipient in the payment request form. According to the details on the payment, besides the knowledge, the skills of the accountant are very important for the accounting system of the community. (Soawalak Ouna, personal communication, July 7, 2016)

The tourism community must have a group of producers in the community. Also, in the operation of the group or the other groups, the account must have the recording transaction every day, or every time. Therefore, the manufacturers are required to record all accounts in the revenue and expense accounts daily. In the same time, the accountants have to bring data from the documents of the revenue and expense accounts to record in all accounts. In addition, if the manufacturer does not have the skills to record the data completely and accurately, it will affect the community accounting system in overall. (Wilawan Tawong, personal communication, July 9, 2016)

Keeping accounting documents skills according to the law includes the documents of revenue and payment documents and passbook. The community should keep cash only as far as they need. The excess demand should be kept in the bank. All the account banks documents and the book bank must be kept safely and stably. The documents of revenue and payment documents must be kept in the file categorized by date, moth and year to be convenient for searching and verifying. (Supalak Suwanpum, personal communication, July 9, 2026)

The problem of accounting is keeping documents, including incomplete inventory account. These problems may lose. The inaccurate revenue and expense recording due to the uncompleted coordination makes the documents lost or delayed and results in the accounting errors. The accountants who lack

of the skills and experience to do the accounts should previously check accounting documents to be accurate every time." (Anurat Pumsitisorn, personal communication, July 9, 2016)

As for the arrangement of the financial information, many financial reports should be done such as a monthly report; trial balance, comprehensive profit and loss statement, monthly revenue and payment report, debt collection report, monthly inventory report and annual report, including financial status report and performance of business for example comprehensive profit and loss statement, statement of financial position and manufacturing cost statement, etc. (Poungthong Phopee, personal communication, July 11, 2016)

The purposes of preparation of financial information are to provide beneficial quantitative financial information relating to income or turnover of the community and to make economic decisions including giving also the information used for assessment of the effectiveness of the administration of the community. All these skills should be applied in the right way to ensure the implementation of community and does not cause problems in the community. If the accountants do not have enough skills, the financial status of the community is not correct. It will cause the reliability of information or the transparency of the operation of the community as the experience of many communities. (Phanin Homnan, personal communication, July 12, 2016)

The correct financial information analysis skills come from the result of accurate recording in the accounts based on the standard. Keeping documents correctly with the regulations will result in the preparation of financial information and financial statement according to regulations. (Wanlee Sukprasert, personal communication, July 12, 2016)

If the accounting information is interpreted effectively and correctly, it will result in the operation of the community effectively. Also, the analysis of the manufacturing cost statement and actual cost and labor cost, the accountants, the accountant should be able to check the information whether it is correct or incorrect. If the information is not correct, they can make it correct. (Sonthaya Tavong, personal communication, July 12, 2016)

The soft skill used in the accounting operation is complex and difficult to understand because the majority of the community accountants are not specialized in using a computer and do not have much knowledge of accounting. (Runglawan Jaiteangtam, personal communication, July 17, 2016)

The government sector should have the officials to encourage each community the importance of accounting and need to do the accounting. They should have each community to find the accountant who is able to do the accounting and to make accurate financial reports. The government officials should support the computer equipment and modern computer program for the accounting community as well as to develop skills in the use of accounting program, because all the communities have less skill in accounting but it is needed to be developed the most. (Siriwattana Suksawat, personal communication, July 17, 2016)

The process of accounting system should be done under the legally based on the law and regulations. The accountants must be developed skills correctly. It is important to make the community follow the system of good governance and the corruption don not occur in the community. (Nipaporn Sukkerd, personal communication, July 17, 2016)

To implement the tourism policy in community to be successful, there are important issues for the people involved to determine the target for the operation clearly. The people who are responsible for the policy should meet the needs of tourists and do the operational plan systematically to beneficial to the public as possible. Also, they should emphasize the use of local knowledge and the community unique. (Manat Rakmak, personal communication, July 17, 2016)

To bring the community tourism policy into practice, it must focus on participation, engagement and acceptance. Participation will lead to the teamwork effectively as well as motivation, using appropriate leadership, engagement of members, and participation resulting in the acceptance and skilled team work." (Rampai Tonjang, personal communication, July 17, 2016)

Accountants must follow the rules of the community. The main duties of the accountants have mentioned, most of the daily duty are about the same with other community accountants. It is a must that an accountant should have the skill of taking notes, especially the income, and expenses. Therefore, the community members can realize the community financial condition. The community normally report the financial condition to the members on a monthly basis.

4.5.1.3 Self-Concept

Normally, People who work for the community, they work for the collotive and devoted. This kind of work does not get paid much. They volunteer to work not for salary. Most of them have their own job, such as farming. During the tourist season, when they have free time, they come to join the community-based tourism, for example, opening their house for the homestay or selling souvenirs. However, to work as an accountant is not predictable. Some days, there are no transactions at all while some days there are many transactions. This is depending on the season. Also, there are many transactions at the end of the period, due to it is the time to report all the detail about the incomes and expenses to the community members. It can be seen that to work as an accountant is not flexible job.

The community leaders or the group leaders should have knowledge about community management system to allow members to know and understand in the same direction. They may have to clarify and discuss with members in the meeting. In addition, an orientation, as well as various practices according to the standard of the system should receive approval from members to reduce conflict or resistance. (Thanin Kongduan, personal communication, July 7, 2016)

The community must have communication and review periodically or as appropriate period on the community information, rules, regulations, the information learned from the outside and related laws, and acknowledge the community members. (Pratum Cheilomkham, personal communication, July 7, 2016)

The staff of the community must have patience and efforts in the work because it will be the force that will promote success. They have to endure speech habits, stress and bad situation, adapt and try to fix the problems until they can face the problems and succeed at last. (Siriwimol Srisuk, personal communication, July 7, 2016)

The people who can succeed in the workplace, they need to develop themselves. They should not stop development for their work, understand how to work in their duties, how to work more effectively and learn more in order to improve work efficiency. (Jaran Aunsiri, personal communication, July 7, 2016)

To be an accountant for the community must be enthusiastic and disciplined. If the account is not recorded on time, it can be forgotten. Also, when all transactions are finished recording, there would be some mistaken which cannot keep the account balance. Therefore, the community accountant must be responsible for the duty and cannot ignore the job even if they are doing other jobs.

4.5.1.4 Motives

As mention earlier, people who work for the community must sacrifice. This is because this kind of job receives a little in return and sometimes there are no wages or salaries. The wages or salaries can be received only when the community made a profit which is deducted from incomes and expenses of the community. The community staff definitely do not get paid if it is not the tourist season.

The salary framework of the accountants in the community must be set up clearly because they have to devote their time to do this work instead of their main job. Also, this makes their income reduce. The accountants in the community can help working just for the first phase of the operation so it makes the accounting system of the community not meet the standards. (Chutima Yimyam, personal communication, July 1, 2016)

The welfare of the accountant of the cooperative system is as similar as the salary. They should deserve the proper salary as well as their responsibilities because they are responsible for the finance of the community. This is considered as an important part of the operation of community to be transparent. (Pornchulee Nakkham, personal communication, July 7, 2016)

The previous problems of community are the unclear of the salary system and insecurity in working as the volunteers or people who work for the community. This will affect the ongoing community work, including welfare and the progress in the work of the community. (Anurat Pumsitisorn, personal communication, July 9, 2016)

In making the accounting system of the community to succeed as expected, one important factor is the tools and equipment required for work, which must be supported by the community, not as a duty of the accountants, including the appropriateness of the work environment and the work place because it's about the proper storage of documents and can be checked. (Poungthong Phopee, personal communication, July 11, 2016)

The accountants in the community want to be accepted from members of the community because it is the responsibility of working for the community. Even though the received salary is not enough but they are proud for working and help the community to be grown. The accountants want to have trust from the community and they are proud that they can do their duties frankly. (Narong Witayakorn, personal communication, July 12, 2016)

The training is important to the accountants because knowledge and skills can help reduce the problem of ignorance and do the accounting system appropriately. When the training is needed, the accountants are supported from the community continuously. Generally, the government will encourage them regularly. However, the training must be supported by the community, so the accountant can attend the training. (Rawanna Jamneien, personal communication, July 16, 2016)

The chairman and the board of the community must think that the training and developing skill is required and must be supported. It's not waste of time because it benefits the community to be worth and makes the community sustainable development. (Siriwattana Suksawat, personal communication, July 17, 2016)

In conclusion, they are very proud of doing work for their community. Also, there is one good thing from working this position is, there are many kinds of training from government sector such as the Ministry of Tourism and Sports which is encouraged to participate in the development of knowledge for example, intensive training for the community accountants. After training, they can use the knowledge to apply to their job. They feel grad when they can report the correct financial report to the members and acquire compliment from the members. That is very good enough for them rather than receive the money. Another important thing is everyone in the community are friendly and always help each other to work. They believe that all of them own the community. This makes the members feel comfortable to work.

4.5.1.5 Traits

Trait refers to physical characteristic caused by genetics such us having green eyes. Trait is an important part of someone's personality or appearance for example try to describe someone who should work for the community accountant. It is found that the community accountant must be confident, dare to decide based on accuracy and do not gamble or smoke or drink regularly.

The age of the accountant should not be too old or too young because if they are old, it is bad effect on eyesight. Sometimes the accounting is loaded; it can make eye fatigue easily. However, there are not many choices to determine anyone in the community to fit in the accounting positing based on the lack of the accounting knowledge. (Pamorn Saei, personal communication, July 1, 2016)

The accountants in the community must have reliable personalities because it is the first factor that would allow members to ensure the functioning of the accountant to work correctly. (Supatchakarn Reunphet, personal communication, July 1, 2016)

Having a good personality can indicate the significance of some work, including the preparation to work, responsibilities of work in all forms, preparation for problems and obstacles, including the interaction and talking with others. (Anurat Pumsitisorn, personal communication, July 9, 2016)

The accountants in the community who are accepted and got respect and the impression from others, they should show their good and appropriate personality for other users to see because the personality influences the feelings and emotions for others considerably. Personality is considered as critical components influencing the feelings and emotions of those who see extremely. It affects the respect, cooperation, trust and support from others in the community. (Piya Nilpat, personal communication, July 11, 2016)

The accountants in the community must have reliable personalities because it is the first factor that would allow members to ensure the functioning of the accountant to work correctly. (Thawee Choungyen, personal communication, July 12, 2016)

The confidence personality is critical to the operation tremendously. A good accountant will need to have the confidence to express correctly. It will result in the recognition of the community as well as to adapt to others quickly. (Rawanna Jamneien, personal communication, July 16, 2016)

The confidence personality is critical to the operation tremendously. A good accountant will need to have the confidence to express correctly. It will result in the recognition of the community as well as to adapt to others quickly. (Somthawin Kokprasong, personal communication, July 17, 2016)

Likewise, the accountant is a very important position. Having bad image can destroy their reliabilities. To be an accountant should contain a respectful physical characteristic as it is a dedicated job.

From the findings of the guidelines for improving the community tourism accounting, the individual features are different; it results in the different opinions on the problems and obstacles in the community accounting. The accountants who have different educational level and field of studies, there will be different problems in the community accounting. The accountants who have no knowledge of accounting will encounter problems with the operating accounts. Also, the documents used in the recording of accounting transactions and accounting records from the general journal to the general ledger more than the people who have knowledge of accounting. It is in

accordance with the accountants who have no knowledge of accounting. The existent problems are against the concept of knowledge and ability of accountants consisting of knowledge, skills, ethics, professionalism and experience in the operation and it is in accordance with the practices and issues in the preparation of the accountants in the community. Mostly, the accountants in the community lack of basic knowledge of accounting resulted in error financial reporting. So, there should have a model making to do it correctly and effectively.

4.5.2 To answer the research question 3: what should the developed model of accounting system for community-based tourism in Thailand be?

After studying of the objective 1 and objective 2, the results were able to create a complete model and bring the model to evaluate. The researcher used indepth interviews to acquire the 10 experts' opinion. The results are as follows.

The general accounting system comprises four processes: 1) surveying and analyzing the context, 2) designing the system, 3) implementing the system, and 4) monitoring the system.

4.5.2.1 Context Analysis Process

This is an analysis phase. Who are related to the accounting department? What kinds of relationship do that people should have? The researcher must study the organization chart to find out who approves is the process for example how many days the certain account should take. Normally, the accounting system can be used with any parties. The procedures or processes are the same. However, it is different details in designing the accounting system for community-based tourism. It is also necessary to analyze the people who involved with the accounting which are considered more complicated in each community. This is because the nature of the operation is different as well. The developed system should be able to apply to all communities but it can be difficult in practice. However, to design the accounting systems for community-based tourism must be easy to understand and follow, not redundant. Also, it must be easy to learn because most people in the community do not have the accounting knowledge or graduate from the accounting degree. Therefore, the qualification of accountants in the community cannot be determined.

People in the community must be able to work on their own because community based-tourism requires people to do their job by themselves. Therefore, there are more process of recruiting the community accountant than general accountants. Also, it must be appropriately concerned. To recruit the accountant of community-based tourist is definitely different from to recruit a general accountant in a private company or government sector. If the qualification recruiting a community accounting was defined as usual, nobody would be able to be an accountant for the community. However, we can define the initial qualification of those who are going to be the accountants for the community. This can be considered from demographic information like gender, age, status including knowledge, skills, motives, and traits. They can be developed as the capacity building of the community the executive board committee of the community defines competency of the community accountants. The executive board committee of the community actually know well about the detail of accountant's job. They should describe the general tasks, or other related duties, and responsibilities of the community accounting position which is called job description (JD).

It should be considered from various elements such as the community staff are required to achieve in their own job. This can lead to the overall achievement of the organization. Even though the organization has changed its goals, JD usually does not change. However, in the capacity building section, the executive board of the community can create the qualifications of the accountant for community-based tourism through the collaborative process of people in the community working together by using their knowledge, skill, motive, self-concept, trait and experience.

In addition, the executive board should focus on a capacity. This is because the capacity can measure the organization quantitatively. The higher the capacity, the more resources a company has to offer. The capacity is a device that encourages accountants to work faster, such as switching from a book recording to be computer recording instead. However, using the information system to record the community transaction is such a high investment. It may not be suitable for community. Normally, every business needs to know its capacity in order to be able to produce, serve or accommodate a large order for their customers, such as restaurants, beauty salons, hotels, factories, and hospitals. They must all know their own capacity.

If the amount of production or service is more than the accountant can do, it may be dissatisfied the job. However, one of the community problems is that there is no budget for planning to hire additional accountants if the number of tourists or the number of products and services increases in the future.

In terms of context analysis of the community, the accountants must understand well about their community-based tourism, such as understand their own the kind of product Each community-based tourism is unique. Some communities emphasize on weaving. Some community emphasize on the processing of raw materials. In addition, the accountant must have the ability to determine the cost of community products or services otherwise price of the community product or service cannot be determined as well. Selling goods or services is one of the main sources of income for the community. The income is the resource to develop the community or to share with other members in the community.

4.5.2.2 Designing of Accounting System

It was found that the knowledge and skills of the accountant of community-based tourism were different from other common accountant. This is because the community-based tourism is operated by their own people in the community. Therefore, the design of accounting system must not be complicated, easy to learn and response to the community-based tourism needs. As mentioned before, each community-based tourism had their own differences in each perspective so the design of accounting system of community-based tourism must be able to adapt to every community-based tourism. However, the step of designing the accounting system have to study about the document and cash. For example, when the financial transaction occurred, what kinds of document would be involved? That means the account forms are needed to be designed concisely and carefully such as the financial evidence like the receipts. The accountant of the community-based tourism must understand the characteristics of the receipts can be used for recording and the component of the receipts. The accountant of the community-based tourism should also be able to identify the impracticable receipts. In addition, the accountant of the community-based tourism has ability to inform the member of the community especially about the payment transaction and any other transaction about cash. The accountant should determine the account form, for example when the financial

transaction occurred, what kinds of the account form should also occur. The accountant of the community and the executive board committee have to work together to design the appropriate account forms. The diary record and the diary report must be updated. The financial record must be done every single day in order to keep the information updated all the time. Along with the accountant must be able to conclude and explain regular income and payment to the members of the community. Finally, the financial information could be investigated.

However, it is the main duty of the accountant of the community to design the accounting system. This is because the accountant could recognize the different kinds of the financial books such as cash receipts journal, account payables journal and account receivables journal. Therefore, the accountant of the community should contain the knowledge and skills of accounting in order to be able to design the accounting. The accountant should be trained in accounting for community-based tourism, for example, invite accounting university teacher to give some accounting advice to the accountant of the community.

4.5.2.3 Implementation

The entire designed document was used in this process. The executive boards of the community should allow the accountant to test the document before actual use in the community. The designed document must be tested for accuracy just in case there are any problems. It can be created a model of financial information for the testing. If there is anything that goes wrong, the designed document must be modified. It might have to adjust the process or adjust the organizational chart. The testing can be operated in many ways such as test while the design was occurring so the improvement can be done immediately. After testing the accounting system properly, the accounting system can be operated in actual work. However, after the accounting system has been used for a while the account forms should be redesigned again.

To implement the accounting system, the executive board or the accountant of the community must prepare well the document, trained accounting staff, and also the equipment involved.

4.5.2.4 Monitoring

After the accounting system has been used for a while, the system should be monitored to ensure that there are no any problems or any causes of the problems. The process can be done at the beginning. Therefore, the problems can be fixed ever since. There are three causes of the problems. Firstly, the problems occur because of the accounting system itself or the accounting system is not appropriate to the community. Secondly, the problems occur because of the changing of community such as increasing in the products or services and increasing in members of the community. Thus, the accounting system must be improved. Thirdly, the problems occur because of the accountant of the community itself. The executive board of the community should allow the accountant trained or alternate the accountant.

The community-based tourism management is operated by their member in community. It is shown that the members in the community have the opportunity to participate. It is collaborative learning of members in the community. This can be a tool for sustainable development.

4.6 The Development Model of Accounting System of Community-Based Tourism in Thailand

The results from qualitative research and quantitative research can establish the development model of accounting system of community-based tourism in Thailand which is shown in Figure 4.1

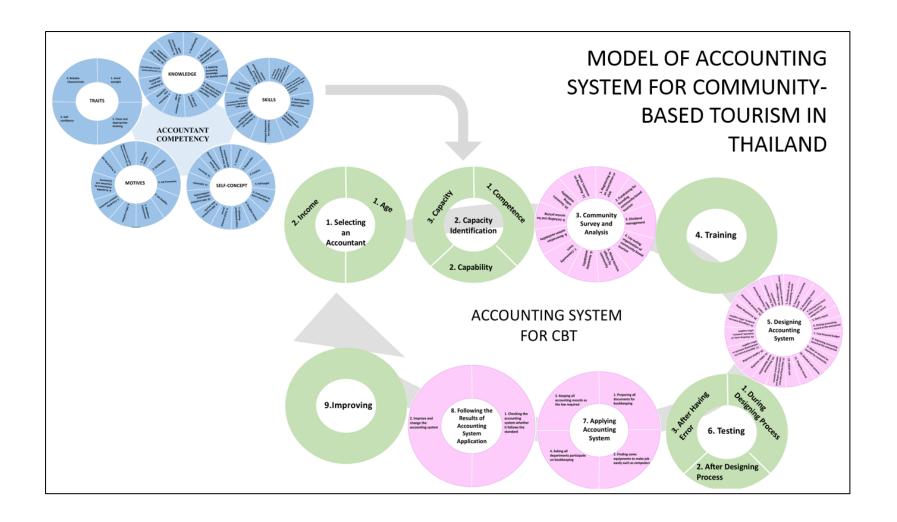


Figure 4.1 A Development Model of Accounting System of Community-Based Tourism in Thailand

Figure 4.1 shows the development model of accounting system for Thai community-based tourism. It differs from a general accounting system which has to comply with the standard on accounting system. This is because the accounting system, which applies for a community, is different from the general accounting system. The general accounting system comprises four processes: 1) surveying and analyzing the context, 2) designing the system, 3) implementing the system, and 4) monitoring the system.

However, the pattern of accounting system for Thai community-based tourism consists of nine processes: 1) the recruitment process of CBT accountants, 2) creating capacity identification, 3) survey and analysis of CBT contexts, 4) accounting training, 5) design of a CBT accounting system, 6) testing of the system, 7) application of the system, 8) follow-up of the use of the system, and 9) improvement of the system. The details of each process are as follows.

- 1) Recruitment an accountant: It is the process of selecting a member in a community to perform an accounting job. This is the primary selection process because most of community's members do not have accounting knowledge. This study found that most of selected people are female because females are perceived to be more meticulous than males. Their ages are in the range between 31-40 years and they are married. This information is used by the management of community-based tourism when recruiting an accountant.
- 2) Building identification: Owing to the fact that an accountant of a community-based tourism does not have knowledge about and skill in accounting, the management should help him/her build his/her capability by the following ways.
- (1) Competence: His/her competence should be improved by supporting him/her to acquire accounting knowledge and skill, to have self-concept, to find motive, and to have good personalities.
- (2) Capability: It is an accountant's capability which should be promoted by the management of community-based tourism through processes which promote and develop an accountant of community-based tourism. This would help him/her fulfill his/her potentialities.

- (3) Capacity: The management has to indicate the level of an accountant's capacity in terms of workload and also consider whether his/her capability is sufficient to respond needs in the future.
- 3) Surveying and analyzing the context of community-based tourism: This process is to understand the context of everything in community which includes community-based tourism resources. This is to consider what resources the community has before designing accounting system because each community has different resources. For example, some communities produce and sell woven silk, some provides tourism services, or some provide accommodation like homestay. There is also a need to understand the flow of accounting activities: downstream, midstream, and upstream.
- 4) Accounting training: It is the activity which is important in designing and implementing accounting system for community-based tourism. There are many styles of training. The community-based tourism should therefore select the style which is the most appropriate to them. The training would help the accountant acquire accounting knowledge, capability, and skill. Importantly, it helps reduce human error when performing accounting job.
- 5) Designing of a CBT accounting system: This process is to design accounting system which is appropriate to a community-based tourism. An accountant should identity what information and reports community needs. This is to respond the need. If the design of the accounting system is inappropriate, the accounting process turns worse as well. The accountant should therefore spend time to design and understand the system. This process is a time-consuming process. The outcome of this process is the information about data which will be used in accounting and reporting process. An accounting process is to know how to do, to select an accounting book which will be used to record the transaction, and to know who will be responsible for preparing accounting reports, and to know how many accounting books the community should have.
- 6) Testing of the system: This process is to test the accounting system for community-based tourism which was designed in the previous process. This is to check whether there is any mistake. Testing system can be done in many ways, for instant, testing during the designing process, testing after the designing process, and

testing after having error. However, a system designer should use manipulated data for stimulating the system. If real data are used, it will interrupt the daily operation. Testing the real data cannot be done in some cases or situations because the data do not occur at that time.

7) Application of the system application: After testing the system and ensuring that there is no any problem, a community-based tourism can implement the system. The application can be done in two ways: 1) replacing the old system by the new one and 2) running parallel. Each way has both advantages and disadvantages. For replacing the old system by the new one, its pro is that an account does not do the duplicate of work because he/she runs only the new one. However, its disadvantage is that if there is error in the new system, there is no any back-up system and damage is inevitable. For running parallel, its advantage is that if the new system has problem, the old one is still running. However, its disadvantage is that an account does the duplicate of work.

The suggestion is that, at the beginning of the implementation, running parallel should be appropriate for a short period of time. When ensuring that there is no any mistake, the old system is then replaced by the new one. In this process, the management should support the accountant with tools and equipment which will help him/her performs his/her job comfortably, prepare documents, and keep related documents.

- 8) Follow-up of the use of the system: When the new system has been used for a short period of time, there is a need for following up and monitoring the system. The monitoring is to identify problems or mistakes from the new system. If so, the revision of the system will be done in timely manner. For following-up, the management should talk to an accountant because he/she is the person who really knows the problem. The follow-up can also be done by an interview and/or an observation.
- 9) Improvement of the system: It is the last process of the accounting system design for community-based tourism. If problems are found in monitoring process, these problems should be resolved by amending/revising the old process. However, there may be uncontrollable problems or obstacles, for example, the changes in patterns of community-based tourism's operations, the changes in groups

of tourists, and change in government's policy on a period of fiscal year which affects community-based tourism.

As mentioned earlier, an accounting system for community-based tourism is different from a general accounting system. An accountant from local community is quite different from a general accountant and the nature of community-based tourism is also different from a general business. Therefore, community-based tourism should have an accounting system which is appropriate to the community.

CHAPTER 5

CONCLUSION AND DISCUSSION

This chapter summarizes the dissertation titled 'A development of model of accounting system for the community-based tourism in Thailand.' It also reviews the results of the three research objectives, a development model process and adoption, contributions to knowledge, managerial implications of the research, recommendations for further research, and limitations of the study.

The chapter begins by summarizing results on the research questions, discussing the development model process and adoption of the accounting system for community-based tourism in Thailand. It also examines the theoretical contributions and methodological contributions, and proceeds to focus on the managerial implications of the research. The chapter concludes the reflecting on the limitations of the research and provide suggestions for future investigation.

5.1 Summarized Results on Research Questions

To explain the result of the research, the researcher will explain each of the research questions respectively. The termination of this study is to find a model of accounting system for community-based tourism in Thailand. Therefore, the three principal research questions were asked to meet the three objectives which are shown in Table 5.1.

 Table 5.1 Research Objectives and Research Questions

Research Objectives	Research Questions	Methodology
1. To study the competencies of	1. What are the competencies of	Mixed
accountants of community-based	accountants of community-	
tourism in Thailand	based tourism in Thailand?	
2. To study the efficiency of the	2. What is the efficiency of the	Quantitative
current type of accounting system	current types of accounting	
of community-based tourism in	system of community-based	
Thailand	tourism in Thailand?	
3. To propose a development	3. What should the developed	Qualitative
model of accounting system for	model of accounting system for	
community-based tourism in	community-based tourism in	
Thailand	Thailand be?	

5.2 Summarized Results on Research Questions 1: What are the accountant competencies of community-based tourism in Thailand?

5.2.1 From a Quantitative Point of View

One of the core driving factors of any organization is the competency level of its various team members. From the literature review of competencies, it is found that the accountant competencies are knowledge, skills, self-concept, motive and traits. It is important to point out that competencies are distinct from goals. Goals are concerned with 'what' has been accomplished; competencies are concerned with 'how' it was accomplished. This study revealed that the respondents' opinion level on accountant's competency in community-based tourism in Thailand which is consisting of knowledge, skills, self-concept, motive, and traits are high. This is because when the respondents evaluated their competencies they always evaluated in a high standard. Any competencies can be described in terms of the behaviors. These behaviors can then be thought of in terms of KSAs, an acronym that stands for knowledge, skills, and attitudes. Moreover, measuring competencies is an essential

part of assessing a team member's performance. However, the results of this study showed that skills were the most important factor which was consistent with the study of Kavanagh and Drennan (2008) that knowledge and skills were the basic competencies for every single accountant in order to meet the organization requirements. Spencer and Spencer (1993) point out that competencies refer to underlying characteristics of a person which include motive, trait, self-concept, knowledge, and skill; all of these characteristics generate causal relationship, which allows the person to complete works better than the criterion-reference or work goals. The secondary important factor was traits, which refer to one's touchable physical characteristics and being reliable and trustworthy. This is consistent with the study of Kaewsan and Kongrungchoke (2015). The study found that the accountants' characteristics are able to establish a good relationship with other colleagues in other departments. It also establishes the reliance and trustworthiness of the owner of the organization. In addition, Boyatzis (1982) asserts that a person's underlying characteristics consist of motive, trait, skill, self-image, social role as well as body of knowledge, all of which are required to produce better outcomes.

The tertiary important factor is knowledge which must be enhanced for the accountant. Petchsri Nonsiri (2012) claimed that people who conducted accounting for their community, lack of accounting knowledge, however it could be developed and encouraged for them. This can be done through the special accounting training in educational institutions which finding is consistent with Vera-Munoz, Ho, and Chow (2006). Further, Nadaillac (2003) emphasizes that to be regarded as having competencies, a person has to take action and use his abilities in order to produce satisfying outcomes and achieve work goals. Therefore, knowledge can help CBT accountants to solve actual problems and achieve its goals.

It can be seen that the accountant of the community must contain the important factors in order to increase work efficiency of the community-based tourism (McClelland, 1970; Boyatzis, 1982; Boam & Sparrow, 1992; Spencer & Spencer, 1993; Nadaillac, 2003; Dubois & Rothwell, 2004). This study found that most of respondents paid attention to the accuracy in calculating and the ability to understand the tourism policy of community-based tourism. This means that that the accountants of the community must be able to accurately calculate. The accountants

of the community were also knowledgeable about the policy of community-based tourism which was one of the skills of accounting development. Srichanapun, Khiewrujee, & Siripun (2015) said that people who worked with the community have to understand their own community's policy well, otherwise even how well of the knowledge or skills of the accountants were, the community could not be able to complete their target.

According to the five hypotheses tested, it is found that gender and competencies were not significantly different statistically. That means that male and female have the same competencies. It was not consistent with Tongsukko (2004) who argued that the organizations require female accountants rather than male accountants. This is because females paid more attention to details than males. However, the result of this study was different from common organizations because the community-based tourism operated their activities in terms of the members were able to participate in and also nonprofit organization. Moreover, the community cannot select a person who is responsible for accounting according to the proper competencies.

It also appears that there is no difference statistically between the accountant competencies of the community-based tourism in Thailand and age. That means the accountant competencies do not depend on the age of the accountant competencies of the community-based tourism in Thailand. There is also no difference in the statistical significant between the accountant competencies of the community-based tourism in Thailand and status, education and income of the accountant. This is consistent with Pongsakorntungsil (2014).

5.2.2 From a Qualitative Point of View

Most of the CBT accounting do not have accounting degree. They apply their experience from working for the community and they are able to compute. They can explain the background of the accounting and they mostly do because they want the community to be able to run the business. The problem is to find the manpower because accounting job must be transparent and the members can check the background of the monetary and other assets to other members. It moreover needs to clarify the movement of receipts. Group members always want to have a report the

movements of the financial statements. CBT accountants mostly are the local people. There is a community advisory committee or treasurer to administer who have responsibility. Each position is assigned according to their interest. From the literature review of competencies, it is found that the accountant competencies are knowledge, skills, self-concept, motive, and traits. These will be discussed from a qualitative point of view as follows.

5.2.2.1 Knowledge

This study found that accountant must have multiple knowledge. Firstly, they need to know the nature of the community's business. The procedure of doing accountant is, if the member would like to buy any products or services, it must be signed or acknowledged by the community chair. When the members approve, the chair will notify the accountant to record the disbursement of money. This knowledge will use the experience of previous generations or case study from other community on how they do. Secondly, the accountant has to agree on how much money will be deducted into the community to be a common account that the accountant needs to record. This is one of the knowledge of CBT accountant. Thirdly, the accountants in some communities may have to work in other areas, such as community management because the community is a tourism community.

5.2.2.2 Skills

The skills required to do the accounting is to make notes as agreed for the administrators and other community members understand because the money in the community is quite delicate. It is a must to have the skills to take notes, especially the ones that belong to themselves, income, and expenditure. The community will know how much is the income and where the money are from. Accountants must follow the rules set by the community. One of the most important skills for a community accountant today is to use a computer program to do the transaction, such as Microsoft Office Excel.

5.2.2.3 Self-Concept

About self-concept, the respondents said that the accountant job is not flexible. To be an accountant for the community must be enthusiastic and disciplined. If the account is not recorded on time, it can be forgotten. Also, when all transactions are finished recording, there would be some mistaken which cannot keep the account

balance. Therefore, the community accountant must be responsible for the duty and cannot ignore the job even if they are doing other jobs.

5.2.2.4 Motives

About motives, the respondents agreed that working as an accountant is a pride. As mention earlier, people who work for the community must sacrifice. This is because this kind of job receives a little in return and sometimes there are no wages or salaries. The wages or salaries can be received only when the community made a profit which is deducted from incomes and expenses of the community. The community staff definitely do not get paid if it is not the tourist season.

5.2.2.5 Traits

Trait refers to physical characteristic caused by genetics such us having green eyes. Trait is an important part of someone's personality or appearance for example try to describe someone who should work for the community accountant. It is found that the community accountant must be confident, dare to decide based on accuracy and do not gamble or smoke or drink regularly.

5.3 Summarized Results on Research Questions 2: What is the efficiency of the current types of accounting system of community-based tourism in Thailand?

According to the study of the current types of accounting system of community-based tourism in Thailand, it is found that the accounting system for community-based tourism in Thailand required the accounting system which was not complicated and working experience of the community. This is because people in the community lack of accounting knowledge. The accounting standard for accounting system consists of four steps which are 1) analysis and study the context of community-based tourism, 2) design the accounting system (accounting cycle), 3) apply the accounting system, and 4) follow the accounting system. This study found that most accountants do not have bachelor degree or directly graduate in accounting. Most of them will do just simple accounting by taking note of what they buy in the community and how useful those products are. However, the result of the study revealed that the respondents paid attention to the accountant competencies

because the accountant competencies were the most important for working in accounting area. This is consistent with Mouritsen, Hansen, and Hansen (2001) who argued that even though how well the system was, if staff lack knowledge, skills, and good characteristics, the system turned to be useless and unable to accomplish the goals. Tongkaew (2007) supported that competencies play an important role in succeeding in administration. To follow the accounting system was the secondary important factor which was also important. This is because to follow the accounting system is the step to investigate how the current accounting system worked or what kinds of occurring problems were. This is the step of changing of the current system to be new system. The information of the changing is needed for developing the system. The problem can be solved beforehand.

However, to develop the accounting system for the community-based tourism is so much different from common accounting system. This is because the common accounting system cannot apply for the people who work for the community but lack of the accounting knowledge and skills which is consistent with Ei Ei Khin, Jaruwan Daengbuppha, and Petchsri Nonsiri. (2014).

5.4 Summarized Results on Research Questions 3: What should the development model of accounting system for community-based tourism in Thailand be?

This study found that the four steps namely; 1) analysis and study the context of community-based tourism, 2) design the accounting system (accounting cycle), 3) apply the accounting system, and 4) follow the accounting system of common accounting system were unable to apply for the accounting system of community-based tourism in Thailand. Therefore, it is necessary to study the accounting system which is appropriate with the community-based tourism in Thailand. It can be concluded that there were nine steps of the accounting system for community-based tourism in Thailand as follows: 1) selection of the accountant of community based-tourism in Thailand, 2) creating capacity building, 3) analyzing and studying context of the community-based tourism in Thailand, 4) training, 5) design the accounting system, 6) testing the accounting system, 7) applying the accounting system, 8)

following the accounting system, and 9) adjusting the accounting system. It can be seen that there are more steps of the accounting system for community-based tourism in Thailand than common accounting system. This is because there are the knowledge of the accountant, capacity building of the accountant, training, and testing the accounting system which are the difference from the common accounting system. Therefore, the accounting system for community-based tourism in Thailand is different and contains more steps than common accounting system. It is shown in Figure 5.1.

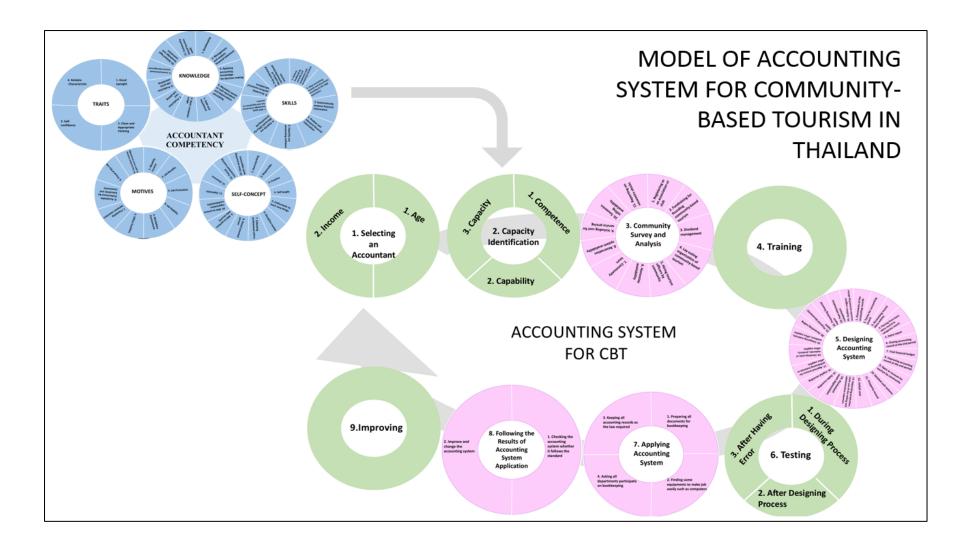


Figure 5.1 A Development Model of Accounting System of Community-Based Tourism in Thailand

It can be seen from Figure 5.1 that the steps of the selecting the accountant of community-based tourism, creating the capacity building, training, testing the accounting system, and adjusting the accounting system are the differences from the common accounting system.

5.5 Model Development Process and Adoption

This section discusses about model development process and how to apply the model.

The model development process is as follows:

The model is a structural relationship of components/variables/principles/concepts/functions that can explain a single phenomenon. The research process of model consists of three steps.

First step is the study of the phenomenon, the creation and development of the model is due to the phenomenon in the society. It is important for human beings to seek the truth in the phenomenon of what constituent. The factors such as elements/principles/concepts/functions are involved. This study sets up the research questions from the phenomenon. Therefore, it is the source of the question for answering the process of creating and developing models.

Second step is to create and develop a model by looking at the state of the phenomena. It is to gather basic information from 150 accountants of CBT and 150 executive board members of CBT by using questionnaires survey. It also gather the information from 15 accountants of CBT and 15 executive board members by using in-depth interviews. It leads to analysis and synthesis to obtain the conclusion of the model based on the phenomena.

Third step is to assess the developed model by considering the feasibility. It is to guarantee that the model can implement actual work with the cost effective. It also guarantee that the implementation following the ethical rules and do not result in damage to people involved.

5.5.1 Adoption of the Accounting System for Community-Based Tourism in Thailand

The accounting system model from this research can be adopted for community-based tourism in Thailand. It contains the details of each step which the community-based tourism in Thailand can follow. The model could help to examine the accounting matter of community-based tourism in Thailand. Therefore, it can be fair when the community wants to share the revenue.

5.6 Contributions to Knowledge

5.6.1 Theoretical Contributions

Following an overview of the research literature, this study developed an original conceptual framework with the aim of advancing knowledge about the accounting system for the community-based tourism in Thailand. It is found that the common accounting system cannot be applied for the community-based tourism in Thailand. This is because the community-based tourism cannot identify the same qualification of accountant as the common organization. The community-based tourism operates its own activities by members in the community. That means that the members in the community lack of the specific accounting knowledge. In addition, they cannot identify the specific qualification of accountant. Therefore, this research studied about the selection of accountant for community-based tourism in Thailand. It determined the appropriate gender, age, and status. When the accountant has been selected, the community-based tourism in Thailand had to support the accountant to be trained until the accountant is able to conduct accounting for the community-based tourism in Thailand. This study found that there were nine steps of the accounting system for community-based tourism in Thailand as follows: 1) the recruitment process of CBT accountants, 2) creating capacity identification, 3) survey and analysis of CBT contexts, 4) accounting training, 5) design of a CBT accounting system, 6) testing of the system, 7) application of the system, 8) follow-up of the use of the system, and 9) improvement of the system. It can be seen that there are more steps of the accounting system for community-based tourism in Thailand than common accounting system.

5.6.2 Methodological Contributions

The major contributions of this study can also be viewed from a methodological perspective. This study utilized a combination of quantitative and qualitative methods, which enabled it to conduct an in-depth and holistic exploration of accounting system for the community-based tourism in Thailand. It is enable to investigate the competencies of accountants of community-based tourism in Thailand, the efficiency of the current types of accounting system of community-based tourism in Thailand, and the development model of accounting system for community-based tourism in Thailand. The strengths of qualitative methods were employed to explore the views of accountants of CBT and executive boards of CBT. The use of quantitative methods enabled the researcher to analyze the experiences of a larger sample of 300 accountants of CBT and executive boards of CBT. This combination of research methods yielded substantial data which addressed the accounting system for the community-based tourism in Thailand. Finally, this research found nine steps of the accounting system that is appropriate to use for community-based tourism in Thailand while the common accounting system contains four steps. Therefore, the accounting system for community-based tourism in Thailand is different and contains more steps than common accounting system.

5.7 Managerial Implications

The findings of this study have significant implications for the management of community-based tourism in Thailand especially to understand the notion of the specific accountant of community-based tourism. In addition, the community can use the competency to develop the capacity of community accountants. The results of this study clearly indicate that the four steps namely: 1) analysis and study the context of community-based tourism, 2) design the accounting system (accounting cycle), 3) apply the accounting system, and 4) follow the accounting system of common accounting system were unable to apply for the accounting system of community-based tourism in Thailand. Therefore, the nine steps of the accounting system for community-based tourism in Thailand that were found from this study can be used to solve problems and to strengthen the CBT accounting system in the future. Also, the

communities will be able to increase their potentials in sustainable tourism development and allocate suitable benefits for a successful CBT operation.

5.8 Recommendations for Further Research

This research was conducted only in community-based tourism in Thailand which is studied only in Thailand. The accounting system for community-based tourism should be studied in other countries which are similar to the tourism context of Thailand. The difference of products and services of different communities should be studied separately as well.

5.9 Limitations of the Study

The limitations of the study are primarily related to the scope of the research. This study investigated only 150 CBT due to limitations of time and cost. According to the Ministry of Tourism and Sports (2018), there are 167 CBT in Thailand. In addition, this study used purposive sampling in order to access to the data. The major disadvantages associated with the employment of these techniques are that the samples do not accurately represent the entire population.

5.10 Conclusion

The success of the community-based tourism is determined by their ability to select the accountant of community-based tourism, to create the capacity building, to train, to test the accounting system, and to adjust the accounting system that are different from the common accounting system. From the literature reveiw, it was found that the generneral accounting system of community-based tourism in Thailand has a problem of conducting accounting in the community. Therefore, the competencies of accountants of community-based tourism in Thailand and the the current types of accounting system of community-based tourism in Thailand were studied in order to recommend a development model of accounting system for

community-based tourism in Thailand. The competencies of accountants of community-based tourism in Thailand were different from other competencies of accountants of common organizations. The accounting system of community-based tourism in Thailand was also different from accounting system of common organizations. This is because the accountants of the community-based tourism in Thailand are the member of the community who lack accounting knowledg and skills. Therefore, it is neccessary to recommend a development model of accounting system for community-based tourism in Thailand.

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APPENDIX

QUESTIONNAIRE

A Development Model of Accounting System for Community-Based Tourism in Thailand

The questionnaire is divided into four sections which are;

- Part 1 General information about the respondents
- Part 2 Competencies of accountants of CBT in Thailand
- Part 3 Efficiency of the current types of accounting system of CBT in Thailand
- Part 4 Other suggestions for competency of accountants of CBT in Thailand and the efficiency of the current types of accounting system of CBT in Thailand

The researcher would like to express a great thankfulness and appreciation for your kind co-operation and great assistance in making this research successfully.

Sincerely yours,

The Researcher

Part 1 General information about the respondents

Explanation	n: Please enter ✓ into ()	
1. Gender		
	() Male	() Female
2. 4		
2. Age		
	() 20 years and younger	() 21 to 30 years
	() 31 to 40 years	() 41 to 50 years
	() 51 years and older	
3. Status		
	() Single	() Married
	() Widowed / Divorced	() Separated
4. Education	onal Background	
	() Elementary School	
	() Middle School	
	() Vocational Certificate/High	School
	() High Vocational Certificate/	Technical Certificate/ Diploma
	() Bachelor's Degree	
	() Higher than Bachelor's Degr	ree
5. Monthly	Income	
2. Iviolitily	() 10,000 bahts and less	() 10,001 to 15,000 bahts
	() 15,001 to 20,000 bahts	() 20,001 to 25,000 bahts
	() 25,001 to 30,000 bahts	() 30,001 bahts and more

Part 2 The competencies of accountant of community-based tourism in Thailand data

Please rate your opinion levels on accountant competency of community-based tourism in Thailand by marking "\sqrt" symbol at the appropriate scale from 1 to 5 as per criteria shown

- 5 = Very Important
- 4 = Fairy Important
- 3= Important
- 2 = Slightly Important
- 1 = Not at all Important

Competency	1	2	3	4	5
Knowledges					
1.1 Bookkeeping					
1.2 Management and analysis					
financial statement					
1.3 Applying accounting knowledge					
for decision making					
1.4 Monetary assets or cash					
equivalent and depreciation					
calculating					
1.5 Debt and investment					
1.6 Basic computer usage					
1.7 Production cost calculating					
1.8 Production sale price calculating					
1.9 Community-based tourism					
Management such as marketing and					
personnel management					
1.10 Related legal knowledge and					
restrictions					

Competency	1	2	3	4	5
1.11 Community-based tourism					
audit					
Skills					
2.1 Perform bookkeeping correctly					
and compliantly with accounting					
standard					
2.2 Keep accounting records and					
documents according to the legal					
restrictions					
2.3 Systematically prepare financial					
information (financial statement)					
2.4 Analyze and interpret financial					
information (financial statement)					
2.5 Expertly use accounting software					
2.6 Expertly use Microsoft Office					
for accounting job					
2.7 Well apply knowledge of					
business law and regulations to					
practice					
2.8 Accurately perform numerical					
calculations					
2.9 Truly understand the policy of					
community-based tourism					
Self-Concepts					
3.1 Hard-working					
3.2 Responsible					
3.3 Creative					
3.4 Self-taught					
3.5 Enthusiastic to learn new things					
3.6 Discipline worker					

Competency	1	2	3	4	5
3.7 Following professional ethics					
3.8 Detail oriented person					
3.9 Able to perform data security					
3.10 Able to protect organization					
confidentiality					
3.11 Optimistic					
3.12 Generous					
3.13 Passed accountant training					
3.14 Have accounting work					
experience					
Motives					
4.1 Monthly income					
4.2 Job Benefits					
4.3 Job promotion					
4.4 Job stability					
4.5 Workplace environment					
4.6 Office facilities					
4.7 Friendship between coworkers					
4.8 Acceptable performance by					
executive and community					
4.9 Proud of the job					
4.10 Accountant training to gain					
more knowledge					
Traits					
5.1 Good eyesight					
5.2 Clean and appropriate clothing					
5.3 Self-confidence					
5.4 Reliable characteristic					

Part 3 Efficiency of the current types of accounting system of CBT in Thailand Please rate your opinion level on efficiency of the current types of accounting system of CBT in Thailand by marking "✓" symbol at the appropriate scale from 1 to 5 as per criteria shown.

5 = Strongly Agree

4 = Agree

3 = Neural

2 = Disagree

1 = Strongly Disagree

	1	_			
Current types of accounting system	1	2	3	4	5
1. Community survey and analysis					
1.1 Registering as an association or club					
1.2 Fundraising for founding					
community-based tourism					
1.3 Dividend management					
1.4 Lay-outing organization of					
community-based tourism					
1.5 Hiring tourism officers by					
community					
1.6 Homestay availability					
1.7 Community tours					
1.8 Reservation system availability					
1.9 Including cost for service pricing					
1.10 Souvenirs selling availability					
1.11 Reporting on souvenirs stocks					
2. Design accounting system					
(accounting cycle)					
2.1 Documents of the accounting					
records, such as receipt					
2.2 Forms for accounting record, such as					
a spending form					

Current types of accounting system	1	2	3	4	5
2.3 Accounting record daily entries					
2.4 Passing from basic dairy record to					
categories record					
2.5 Daily report					
2.6 Closing accounting record at the end					
period					
2.7 Trial financial budget.					
2.8 Improving accounting record at the					
end period					
2.9 Open an account for tourism by					
community					
2.10 Detailed cash systems					
2.11 Property record					
2.12 Initial cost					
2.13 Separating production costs out of					
the selling and administrative expenses					
2.14 Permanent asset depreciation					
2.15 Debts recording					
2.16 Capital recording					
2.17 Approval process for withdrawing					
materials or office supplies					
2.18 Checking socks of materials,					
products, office supplies					
2.19 Categoring materials, products,					
office supplies					
2.20 Accounting coding					
2.21 Financial documental report					
2.22 Presenting financial report					
2.23 Past information comparison					
2.24 Auditors suggest accurate					

Current types of accounting system	1	2	3	4	5
accounting advice					
3. Application the accounting system					
3.1 Preparing all documents for					
bookkeeping					
3.2 Finding some equipment to make job					
easily such as computers					
3.3 Keeping all accounting records as the					
law required					
3.4 Asking all departments to participate					
on bookkeeping					
4. Following the result of accounting					
system application					
4.1 Checking the accounting system					
whether it follows the standard					
requirement					
4.2 Improve and change the accounting					
system					

Part 4 Other suggestions for competency of accountants of CBT in Thailand and the efficiency of the current types of accounting system of CBT in Thailand

4.1 Other suggestions for competency of accountants of CBT in Thailand

4.2 Other suggestions for the efficiency of the current types of accounting system of
CBT in Thailand

Thank you very much for your kind co-operation

Semi-Structured Interview Guideline for CBT Accountants and Executive Board Committees

- 1. What do you think about your current types of accounting system?
- 2. What should the competencies of the CBT accounting be?
 - 2.1 Knowledge Aspect
 - 2.2 Skills Aspect
 - 2.3 Self-concept Aspect
 - 2.4 Motives Aspect
 - 2.5 Traits Aspect

Interview Question Guideline for Accounting Experts and CBT Accountants

- 1. Do you think that the development model of accounting system for community-based tourism in Thailand can be practical? If not, please recommend.
- 2. Do you think that the component variables of competencies of CBT accountants are suitable or not? Please recommend.
- 3. Do you think that the component variables of the efficiency of current types of accounting system for community-based tourism in Thailand are suitable or not? Please recommend.
- 4. Do you have any suggestion on how to improve the development model of accounting system for community-based tourism in Thailand? Please recommend.

BIOGRAPHY

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