Leadership styles and E-commerce adoption
An analysis of Thai food exporters

By

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ABSTRACT

Being an effective leader in today business environment is a challenged task. The world has shifted to the digital era where social and business structures are rapidly changed. The trend of globalization forces all leaders to regularly learn more on what was changed and what is being changed. Today, companies that already adapt new business concept probably have a better application that satisfy more customers than companies that work in the old manner. What is work in the past is probably obsolete in today. One of the popular issues during the last two decades is the phenomenon of e-commerce. How leader reacts with the trend of e-commerce is primary purpose of this study. It is said that the way leader acts and behaves will directly affect company performance.

This study explores the association between leadership styles and e-commerce adoption. The purposes of the study are to identify the type of leadership styles in associated with the level of e-commerce adoption and to measure that attitude of the leaders toward employing e-commerce. The study was conducted in Thailand and emphasized in exporting industry. Three hundred Thai food companies were systematically selected. Self-administered questionnaires were mailed to those companies. The response rate was 70.67%.

Hypothesis was developed and tested with statistical significant level of 0.05. A Pearson chi-square test supported that there was a difference in e-commerce adoption between leadership styles. By using regression analysis, the study found two factors influenced the level of e-commerce adoption: type of leadership style and number of employees.

The finding indicated that most managers were medium shared leadership style which inclined to task concern rather than people concern. The majority of companies have already adopted e-commerce into their business. The result showed that most of them were in the level of information based e-commerce. Leaders who have high shared leadership tend to have a higher level of e-commerce adoption than other two types of leadership. It would therefore seem that the leaders who are high in both task and people concern would be early adopters in e-commerce.

Most managers had positive attitude toward e-commerce. They agreed and accepted the advantages of employing e-commerce into their business. The attitudes they had were e-commerce can generally help the firm increases profit, reduces operating costs, quickly expands business globally, fast communicates with customers, and improves its image.
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Finally, I thank to the managers who filled out questionnaire that gave me a satisfactory response rate and facilitate me to discuss valid conclusion.

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Kittipong Sophonthummapharn
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CHAPTER ONE

1. Introduction

1.1 Background

Good governance usually leads to company’s good performance. It is widely accepted that business competition in the world today is more complicated due to the business environment is rapidly changed. In order to grow and prosper, the trend of both main and adjacent business needs to be defined and company needs to have a clear direction and strategy on how to deal with coming trend. Generally speaking, manager is the one who determines the direction of company. It is said, more or less, that company’s success or failure often depends on the ability of manager to make a decision in a particular phenomenon.

The world has been dramatically changed during the past two decades. The breakthrough in technology especially in computer technology has made life more convenient and comfortable than before. The computer network has facilitated people to easily communicate to others in different part of the world. The network called Internet has directly affected human living and business doing. It is available 24 hours a day 7 days a week and can be accessed from anywhere in the world where the connection is allowed. The world has shifted to digital era. In business perspective, Internet can be seen as a new channel to expand business globally with relatively low cost compared to traditional way. Establishing business via Internet is called electronic business (e-business) or electronic commerce (e-commerce). There is no absolute distinction between e-business and e-commerce. Some scholars view both items as interchangeable item. Kotler (2003, p. 26) defined e-business as the use of electronic means and platforms to conduct a company’s business. The Internet helps companies conduct business faster, more accurately, over a wider range of time and space, at less cost, and with the ability to customize and personalize customer offerings. He argued that e-commerce is more specific than e-business. E-commerce means that in addition to providing information about the company’s history, policies, products, and job opportunities, the Web site allows transactions of facilitates the online sale of products and services.

Turban et al. (2002) described the term e-commerce as business transactions that take place over telecommunications networks. A process of buying and selling products, services, and information over computer networks. They explained that e-business refers to a broader definition of e-commerce. It includes servicing customers, collaborating with business partners, and conducting electronic transactions within an organization. So, it is clear that e-business and e-commerce are equivalent and can be used interchangeably.

American Marketing Association (AMA) has the same definition for both e-commerce and e-business. A term referring to a wide variety of Internet-based business models. Typically, an e-commerce strategy incorporates various elements of the marketing mix to drive users to a Web site for the purpose of purchasing a product or service (Dictionary of marketing terms, n.d.).

Some leaders have foreseen the trend of e-commerce and quickly moved into this area. Several companies have succeeded and gained competitive advantages from establishing their business via Internet. Well known websites such as Amazon, eBay, Google, Yahoo, and Dell are often referred as successful e-commerce. Apparently, most well known websites are hosted in the countries where the Internet user rate is high especially USA. It is rare to find
successful websites from countries where the Internet user rate is low. Those countries where e-commerce is not recognized as a tool for competing in the world market need to encourage citizens to learn and apply the trend of e-commerce into their business and daily life.

When we look at a specific country like Thailand, e-commerce is still in its early stage of development. Even Thai government has encouraged and stimulated people to apply e-commerce into their businesses. E-commerce in Thailand is still not achieved compared to other countries. Some Thai entrepreneurs foresee the benefit of e-commerce and adopt it into their businesses while most of them still doubt and view e-commerce as a fad. They prefer to do business in traditional way and may use e-commerce as a new channel of advertising their products/services.

Before Asian financial crisis in 1997, the Thai economy had years of manufacturing-led economic growth—averaging 9.4% for the decade up to 1996. Relatively abundant and inexpensive labor and natural resources, fiscal conservatism, open foreign investment policies, and encouragement of the private sector underlay the economic success in the years up to 1997. The Asian financial crisis affected all levels of people from lowest class to highest class. It took a few years to recover and prepare the country to stand in the world market efficiently and effectively.

Today, the economy is essentially a free-enterprise system. Certain services, such as power generation, transportation, and communications, are state-owned and operated, but the government is considering privatizing them in order to minimize the government cost. The royal Thai government welcomes foreign investment, and investors who are willing to meet certain requirements can apply for special investment privileges through the Board Of Investment (BOI).

Thailand has increasingly diversified manufacturing sector made the largest contribution to growth during the economic boom. Industries registering rapid increases in production included computers and electronics, garments and footwear, furniture, wood products, canned food, toys, plastic products, gems, and jewelry. High-technology products such as integrated circuits and parts, electrical appliances, and vehicles are now leading Thailand’s strong growth in exports. Averaging of 60% of Thailand’s labor force is employed in agriculture. Rice is the country’s most important crop that makes the country as a major exporter in the world rice market. Other agricultural commodities produced in significant amounts include fish and fishery products, tapioca, rubber, corn, and sugar. Exports of processed foods such as canned tuna, pineapples, and frozen chicken and seafood are on the rise.

According to the information from the department of export promotion of Thailand, in year 2004 the exporting value was $97 billion and importing value was $94 billion (Import & Export value, 2004). The exporting structure could be divided into five categories. The contribution of each category was; Industrial products contribute 77.54%, Agricultural products 10.58%, Agricultural industry products 6.53%, Fuel products 3.78%, and other products 1.58% (Export structure, 2004).

According to the survey done by National Statistic Office in Thailand, the number of companies using e-commerce is little compared to the total number of companies in Thailand. In 2004, the total number of firms was 833,842 nationwide. Only 16.7% of the firms used computer in their business. 3.9% used e-commerce and only 0.3% provided online purchasing to customers. (Media and Telecommunication Statistic Survey, 2004). This shows that e-
commerce is not widely used now. I truly believe that there is a room in e-commerce for Thai exporters.

As the business today is getting more and more complicated, one way to prosper and sustain competitive advantages in contemporary world is adopting e-commerce into business. There are million of ‘how to’ articles and books recommend how to employ e-commerce into a particular business. However, the characteristic of leader in each company may encourage or discourage e-commerce adoption. Some leaders view e-commerce as an effective tool to boost their business rapidly while some may view it as a fad and prefer to stay in the same position. In the USA, for example, many managers have claimed the success of using e-commerce. Nonetheless, as for my preliminary observation, e-commerce in Thailand is a new popular trend but is not as successful as other countries.

This research will specifically focus on Thai food exporters because it is government’s policy that positions the country as ‘Kitchen of the world’. One of the purposes of this strategy is being one of the largest food exporters in the world within a few years and the products have received the highest confidence on safety and hygiene. Thai government has put more efforts to achieve this campaign. Regarding to the official website of the department of export, Thailand, there are 1,341 food exporting companies registered in the Thailand exporter directory. These companies range from small company to large company. As shown on directory list, some companies provide their own domain name websites and have company e-mail whereas some do not have their own website and use free e-mail for communicating with the customers. So, e-commerce adoption varies from company to company. This leads to the reason of conducting this study. I question why managers in Thai food exporting companies view and adopt the concept of e-commerce differently. The initial assumption is that different leadership style will differently lead the company and react to the business environment. By conducting this quantitative research, I intend to find the association between leadership styles and e-commerce adoption, which specifically emphasize in Thai food exporters.

1.2 Research Question and Hypothesis

What is the association between leadership styles and e-commerce adoption?

To answer above research question, this study will develop hypothesis and test it. The hypothesis statement is:

H1: There is a difference in the level of e-commerce adoption between leadership styles.

1.3 Objectives

The primary purpose of this study is to find correlation between leadership style and e-commerce adoption, which specifically emphasize on Thai food exporters. Thus the objectives of the study can be listed as follows.

- To find correlation between e-commerce adoption and leadership styles
- To identify leadership style among Thai food exporters
- To identify e-commerce adoption level among Thai food exporters
- To measure leaders’ attitude toward adopting e-commerce
1.4 Limitations and Demarcations

There are more than 11,000 registered exporter companies in Thailand covering 17 categories. Due to the limitation of time available, this research focuses only one category, food exporting. So, the results may not generalize to the whole exporting industry in Thailand since the nature of business varies from category to category. Nonetheless, the findings still can contribute to understanding the association between leadership styles and e-commerce adoption.

There are several instruments to identify leadership styles. The questionnaire widely used recently is ‘Multifactor Leadership Questionnaire (MLQ)’. It has two versions called MLQ (Avolio et al., 1995) and MLQ 5X short form (Bass and Avolio, 1995). MLQ is used to identify transformational and transactional leadership. In addition, Dulewicz and Higgs (2004) developed questionnaire call ‘Leadership Dimensions Questionnaire (LDQ). It is used to relate leadership dimensions to three different leadership styles – engaging, goal-oriented, and involving. Above mentioned instruments are not available for free. Nevertheless, there are several reliable and valid instruments available to use freely. There is leadership style questionnaire available to measure authoritarian, delegative, and participative style (Kirby, 2003, p.180-184). Also, TP questionnaire is available to measure the leaders whether they are task or people oriented (Pfeiffer and Jones, 1974, p.10). Since my study will mainly focus of task and people oriented style and due to the limitation of time and cost of conducting the study. I have decided to use TP questionnaire to identify leadership style in this study.

Furthermore, it is not only leadership style that determines e-commerce adoption in company but there are also several factors determine e-commerce adoption. Increasing in global competition, customers’ demand, competitors’ react to technology changing, and other factors are somewhat factors that determine level of e-commerce adoption. The findings of this research may be seen as a part of understanding how the company adopts e-commerce. Interesting people may need to consult other researches in similar topic.

1.5 Definition

Leadership: The art or process of influencing people so that they will strive willingly and enthusiastically toward the achievement of group goals (Koontz et al., 1984, p.506).


E-business: A broader definition of e-commerce, not just the buying and selling of goods and services, but also servicing customers, collaborating with business partners, and conducting electronic transactions within an organization (Turban et al, 2002, p. 5).

Small business: In this study, I define the size of business based on the number of employees. Small business is the firm that has less than 50 employees.
Medium business  The firm that has number of employees between 50 and 200.

Large business  The firm that has more than 200 employees.

1.6 Disposition

Chapter 1 – Introduction

This chapter provides readers background of the study, thesis statement, hypothesis statement, objectives of the study, limitations and demarcations, and gives definition of related words. This chapter describes the scope of interest in the study and explains why it is important to do this research. Then, relating literatures will be reviewed and discussed in chapter 2.

Chapter 2 – Literature Review

This chapter reviews theories concerning leadership and leadership style. This provides readers to see development and connection of leadership theories. Then, the author reviews articles in the arrears of Internet, e-commerce infrastructure, benefits and limitations of e-commerce and e-commerce adoption. Finally, I develop research framework for hypothesis testing. The model will also be discussed in analysis and conclusion chapters.

Chapter 3 – Methodology

This chapter describes research methodology and how the study will be conducted. It begins with choice of subject, perspective, and preconception to make readers clear about the direction and assumption of the study. Then, the chapter discusses research methods available for conducting the study. Finally, it presents how to specify sample in sampling process heading, how to gather data in data collection heading and what statistical technique will be used in analysis tool heading.

Chapter 4 – Analysis and Result

This chapter analyzes empirical data and transforms them into suitable graphics and tables to facilitate the readers to have a better understanding of the result. General demographic of respondents is presented. The type of leadership style and level of e-commerce adoption are analyzed. Most importantly, this chapter tests hypothesis statement. If the test yields positive result, the chapter is possibly ended with formulating prediction equation.

Chapter 5 – Discussion, Conclusion and Implication

This chapter discusses the research finding in relating to the theories in chapter 2. The conclusion and implication will be drawn from major finding of the study. The chapter ends with recommendation for further research.
2. Literature Review

2.1 Leadership

Leadership is usually referred to the power or ability to persuade, control, influence, or command the behaviour of others to do or follow whatever the leader wants them to do. The term of leadership has been defined in several ways. Koontz et al. (1984, p.506) defined leadership as ‘the art or process of influencing people so that they will strive willingly and enthusiastically toward the achievement of group goals’. Kim and Renee (1992, p.123) stated that leadership is the ability to inspire confidence and support among the members of the group who are needed to achieve organizational goals. Dubrin (2004) revealed that leadership has several definition including: interpersonal influence, directed through communication toward goal attainment; the influential increment over and above mechanical compliance with directions and orders; an act that causes others to act or respond in a shared direction; the art of influencing people by persuasion or example to follow a line of action.

McGregor (1987) argued that there are four main variables relating leadership. The variables are the characteristics of the leader, the needs and characteristics of the follower(s), the nature of the organization, and the environment. He stated that leadership is not a property of the individual but a complex relationship among these variables. Fellows et al. (2003) developed leadership model based on the model of Andrienssen and Drenth (1998). The new leadership model is shown in Figure 2-1

![Figure 2-1 Model of Leadership (Fellows et al., 2003, p.810.)](image)

According to Fellows et al. (2003), the majority of the theories of leadership are subject to four complex areas of difficulty: (1) the multiplicity of interacting (external and internal) factors that determine human behaviour; (2) leadership and associated activities are embedded in the organization; (3) people influence each other continually (including removal/introduction of persons); and (4) organizational requirements for leadership evolve.
Leadership development is interrelated to management development. The two perspectives are different concepts but they are parallel and do overlap. Leadership roles refer to those that come with and without formal authority, whereas management development focuses on performance in formal managerial roles. Leadership processes are those that generally enable groups of people to work together in meaningful ways, whereas management processes are considered to be position and organization specific (Keys and Wolfe, 1988).

Leadership will play a crucial role to lead the organization succeed or fail. The level of leadership varies from situation to situation. In routine work, leadership may be useless if everything is in control. Nonetheless, if the company faces with crisis and management is required to take a vital decision, the concept of leadership within crisis may be applied. It has been controversial discussed that leadership is the skill that born with the leader (born to be leader) or leadership can be taught and learned (learn to be leader). Most seem to agree that individuals can be trained to be leader. The extent to which leader acts to a particular situation is called leadership style.

2.2 Leadership Styles

There are a number of leadership styles for manager to learn and apply the style that most appropriate to his/her organization. Scholars and practitioners have studied and defined leadership style into a certain category. Each study is based on different assumptions and theories. Nevertheless, it is said the leadership style that managers use will be based on a combination of their beliefs, values and preferences, as well as the organizational culture and norms that encourage some styles and discourage others. It is widely accepted that no single style works the best. Each style is suitable to each particular phenomenon.

2.2.1 Charismatic Leadership

A charismatic leader is one who gathers followers through endeavor of personality and charm, rather than any form of external power or authority. The assumptions behind this style are: charm and grace are all that is needed to create followers; self-belief is a principle need of leaders; people will follow the one they personally admire.

Charismatic leaders have a great ability to deal with every situation. They are good at picking up the moods and concerns of both individuals and larger audiences. The way they move from person to person is that they pay much attention to the person they are talking to at any one moment, making that person feel like they are, for that time, the most important person in the world. They use a wide range of methods to manage their image such as engendering trust through visible self-sacrifice and taking personal risks in the name of their beliefs. Charismatic leaders will show great confidence in their followers by effectively using of body language as well as verbal language. They also make effective use of storytelling including symbolism and metaphor.

Conger and Kanungo (1987, 1998); Conger (1989) developed a model of charismatic leadership within organizational settings, and a measurement scale called the Conger-Kanungo model of charismatic leadership (Conger and Kanungo, 1994; Conger et al., 1997). Regarding to the model, charismatic leadership is an attribution based on followers as expressions of charisma in the same sense as a leader’s behaviors reflect that individual’s participative, people, and task orientations. Charismatic leaders differ from other leaders by
their ability to formulate and articulate an inspirational vision and by behaviors and actions that foster and impression that they and their mission are extraordinary.

Musser (1987) stated that charismatic leaders seek to instill both commitment to ideological goals and also devotion to themselves. The extent to which either of these two goals is dominant depends on the underlying motivations and needs of the leader.

If the leaders are not naturally charismatic, they may assiduously practice and learn to develop their skill. Charismatic leadership style is often found in politics and religion. Well known politician and religious leaders use charismatic style to gather a large number of followers. This style can be also applied to business environment. The leaders will often focus strongly on making the group very clear and distinct. They will try to build the image of the group, especially in the followers’ minds, as being far superior to all others.

2.2.2 Participative Leadership

A participative leader is one who seeks to involve other people in the process, possibly including subordinates, peer, superiors and other stakeholders. The assumptions behind this style are: people are more committed to actions where they have involved in the relevant decision-making; people are less competitive and more collaborative when they are working on joint goals; when people make decisions together, the social commitment to one another is greater and thus increases their commitment to the decision; several people sitting and deciding together make better decisions than one person alone.

The level of participation of leader may fall into one of this spectrum.

<table>
<thead>
<tr>
<th>&lt; Not participative</th>
<th>Highly participative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autocratic decision by leader</td>
<td>Leader proposes decision, listens to feedback, then decides</td>
</tr>
<tr>
<td>Team proposes decision, leader has final decision</td>
<td>Joint decision with team as equals</td>
</tr>
<tr>
<td>Full delegation of decision to team</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2-2 Participative leadership spectrum
Source: http://changingminds.org/disciplines/leadership/styles/participative_leadership.htm

The level of participation depends on the type of decision is being made. Decisions during production process may require the level of manager participation less than decisions during implementing company goal. Even there are many potential benefits of participative leadership. It can be a sham if managers ask for opinions and then ignore them. This is likely to lead to cynicism and feelings of betrayal.

Participative leadership is also known as consultation, empowerment, joint decision-making, democratic leadership, management by objective (MBO), and power-sharing. Many studies have investigated and classified this leadership style in several ways. There are two well-known studies during the 1950s: Michigan leadership studies; and Ohio State leadership studies.

Michigan leadership studies classified three critical characteristics of effective leaders.

- **Task-oriented behavior**: Managers’ tasks are different from subordinates. The managers have more variety of tasks including planning and scheduling work, coordinating activities and providing necessary resources. Moreover, they spend time guiding subordinates in setting task goals that are both challenging and achievable.
- **Relationship-oriented behavior**: The managers do not only concentrate on task, but also on their relationship with their subordinates. They are more considerate, helpful and supportive of subordinates such as helping subordinates to solve career and personal problems. In general, the managers will set goals and provide guidelines and sometime recommend how to achieve the goals.

- **Participative leadership**: This may be called team-oriented behavior. The role of manager is more facilitative than directive, guiding the conversation and helping to resolve differences. The managers will encourage team meeting to share ideas and involve the team in group decisions and problem-solving. Nevertheless, the managers are responsible for results. They may make final decisions based on recommendation from the team meeting. The idea of participative leadership is to build a cohesive team which works together rather than a set of individuals.

Ohio State leadership studies reported two critical characteristics of either of which could be high or low and were independent of one another. The studies was based on questionnaires to leaders and subordinates know as the Leader Behavior Description Questionnaire (LDBQ) and the Supervisor Behavior Description Questionnaire (SDBQ).

- **Consideration**: The degree to which a leader acts in a friendly and supportive manner towards his/her subordinates.

- **Initiating structure**: The degree to which a leader defines and structures his/her role and the roles of the subordinates towards achieving the goals of the group.

Both Michigan studies and Ohio State studies have been discussed that their studies were focused on task and people preference that is the classic managerial preference and discussed in well known theories such as Blake-Mouton Grid and XY theory of McGregor.

**Task-oriented**
- People with a task focus put getting the job done as the highest priority, before any people considerations. People are expected to getting the job done and any human considerations are generally viewed as a waste. Meetings with others are brief and business-like. Detailed work plans are drawn up.
- There is a general belief that without close attention people will get distracted, work slowly and otherwise act inefficiently.
- Subordinates are motivated with clear objectives and regular reviews. This is largely based on a view of ‘rational man’ that people are relatively simple and that motivating them correctly is simply a matter of pressing the right buttons. People are seen as generally selfish and lazy. The manager-worker division is quite clear: you think-they do. Motivation is based around Control and the simple exchange of money for compliance.

**People-oriented**
- There is a general belief that if the people are happy then they will be optimally motivated to do the work they are given. In addition, it is assumed that they will also think intelligently about the work and, with a minimum guidance, will plan, monitor and improve much of what they are doing.
- The role of the manager is seen more as being to motivate and support people. The manager is more likely to be a nurturing parent rather than a controlling parent.
- People are seen as being basically good and caring, and also too complex for simple behavioral techniques to work. The basic manager-worker is ‘I guide and support-you think and do.’ Motivation is based around Identity and social exchanges that create loyalty and other emotional ties.
Blake and Mouton (1961, 1985) developed model called Managerial Grid that later changed to Leadership Grid. The model concern people and task oriented with nine points on each. It is widely discussed and appeared in later researches. The model can be use to explain the difference in managerial or leadership style.

- **Impoverished management**: Leader has minimum effort to get the work done. He/she is basically lazy and avoids as much work as possible.
- **Authority-compliance**: Leader strongly focuses on task not on people. He/she focuses on efficiency and maybe eliminates subordinates wherever possible.
- **Country Club management**: Leader cares and concerns for the people, with a comfortable and friendly environment and collegial style. However, a low focus on task may give questionable results.
- **Middle of the road management**: Leader has a weak balance of focus on both people and task. Doing enough to get things done, but not pushing the boundaries of what may be possible.
- **Team management**: Followers are committed to task and leader is committed both people and task.

Lewin et al. (1939) identified three different styles of leadership toward the way leader makes decision. They found that the most effective style was Democratic. Excessive Autocratic styles led to revolution while under a Laissez-faire styles, people were not coherent in their work and did not put in the energy that they did when being actively led. The details of each style are:

- **Autocratic**: The leader takes decisions without consulting with others. The decision is made without any form of consultation. This style would works when there is no need for input on the decision, where the decision would not change as a result of input, and where the motivation of people to carry out subsequent actions would not be affected whether they are or are not involved in the decision-making.
- **Democratic**: The leader involves the people in the decision-making. However, the process for final decision may vary from leader to leader. The leader is still the one who makes final decision. The people usually appreciate this style especially if they
have been used to autocratic decision with which they disagreed. The problem of this style is when there is a wide range of opinions and there is no clear way of reaching an equitable final decision.

- **Laissez-Faire**: This style is to minimize the leader’s involvement in decision-making, and hence allowing people to make their own decisions. The person who make decision is responsible for the outcome. This style would work best when people are capable and motivated in making their own decisions, and where there is no requirement for a central coordination.

Likert (1967) identified four main types of management styles that can be seen here as leadership style: exploitative-authoritative, benevolent-authoritative, consultative, and participative. He claimed that the participative (democratic) style is always the superior among others. His explanation relates to decision-making and the degree to which people are involved in the decision.

- **Exploitive authoritative**: The leader has a low concern for people and uses such methods as threats and other fear-based methods to achieve conformance. Communication is almost entirely downward and the psychologically distant concern of people is ignored.

- **Benevolent authoritative**: This style is formed when the leader adds concern for people to an authoritative position. The leader uses rewards to encourage subordinates to achieve the task. He/she listens more to concerns lower down the organization. Some delegation of decisions can be made but almost all major decisions are still made centrally.

- **Consultative**: The information flow upward from subordinates to leader. The leader is making genuine efforts to listen carefully to what subordinates said. Nonetheless, major decisions are still largely centrally made.

- **Participative**: The level is also known as democratic. The leader makes maximum use of participative methods, engaging people lower down the organization in decision-making. Employees are psychologically closer together and work well together at all levels.

House (1971) proposes four leadership styles in the path-goal theory. The major proposition of path-goal theory is that the manager should choose a leadership style that takes into account the characteristics of the team and the demands of the task. Typically, a leader attempts to clarity the path to a goal for a group member so that he or she receives personal payoffs. At the same time, job satisfaction and performance increase (House, 1971; Keller, 1989). The four styles are directive style, supportive style, participative style, and achievement-oriented style.

- **Directive style**: leader focuses more on formal activities such as planning, organizing, and controlling. This style will improve morale if the task is unclear.

- **Supportive style**: Leader emphasizes teams’ well-being and creates an emotionally supportive climate. He/she improves morale when followers work on dissatisfying, stressful, or frustrating tasks.

- **Participative style**: Leader consults with team members to gather their suggestions. He/she will take these suggestions seriously for making decision. This style works best when leader wants to enhance the morale of well-motivated workers who perform nonrepetitive tasks.

- **Achievement-oriented style**: Leader creates challenging goals, pushes for work improvement, and sets high expectations for team members. The followers are
required to have high responsibility. This style works best with achievement-oriented people and also with those working on ambiguous and nonrepetitive tasks.

Another work related to participation and decision-making is Vroom and Yetton’s Normative Model. The model believes that decision acceptance increases commitment and effectiveness of action. It also proposes that participation increases decision acceptance. Two types of decision terms are defined. Decision quality, first, is the selection of the best alternative, and is particularly important when there are many alternatives. It is also important if there are serious implications for selecting or failing to choose the best alternative. Decision acceptance, second, is the degree to which a follower accepts a decision made by leader. Leader focuses more on decision acceptance when decision quality is more important. Vroom and Yetton (1973) defined five different decision procedures: Two are autocratic (A1 and A2), two are consultative (C1 and C2), and one is group based (G2).

- **A1**: Leader takes known information and then decides alone.
- **A2**: Leader gets information from followers and then decides alone.
- **C1**: Leader shares problems with followers individually, listens to ideas and then decides alone.
- **C2**: Leader shares problems with followers as a group, listens to ideas and then decides alone.
- **G2**: Leader shares problems with followers as a group and then seeks and accepts consensus agreement.

### 2.2.3 Situational Leadership

As many have agreed that there is no specific leadership style works best, the factor the leader needed to take into consideration is situation. It can be said that the best action of the leader depends on how well leader deals with a range of situational factors. Factors that affect situational decisions include motivation and capability of followers in particular situation. Moreover, the relationship between leader and followers can be another factor that affects leader behavior as much as it does follower behavior. The leader behavior is a combination of his/her stress, mood, believe, and perception during the time he/she deals with particular situation.

Maier (1963) stated that leaders not only consider the likelihood of a follower accepting a suggestion, but also the overall importance of getting things done. Thus in critical situations, a leader is more likely to be directive in style simply because of the implications of failure. Tannenbaum and Schmidt (1958) proposed three forces that led to the leader’s action: the forces in the situation, the forces in the follower, and the forces in the leader. This recognizes that the leader’s style is highly variable, and even such distant events as a family argument can lead to the displacement activity of a more aggressive stance in an argument than usual.

Vroom and Yetton (1973) suggested what type of leadership styles should be used in a particular situation based on their model. They concluded that the ‘normative’ aspect of the model is that it was defined more by rational logic than by long observation. The model is most likely to work when there is clear and accessible opinions about the decision quality importance and decision acceptance factors.

- When decision quality is important and followers possess useful information, then A1 and A2 are not the best method.
- When the leader sees decision quality as important but followers do not, then G2 is inappropriate.
- When decision quality is important, when the problem is unstructured and the leader lacks information/skill to make the decision alone, then G2 is best.
- When decision acceptance is important and followers are unlikely to accept an autocratic decision, then A1 and A2 are inappropriate.
- When decision acceptance is important but followers are likely to disagree with one another, then A1, A2 and C1 are not appropriate, because they do not give opportunity for differences to be resolved.
- When decision quality is not important but decision acceptance is critical, then G2 is the best method.
- When decision quality is important, all agree with this, and the decision is not likely to result from autocratic decision, then G2 is the best method.

Yukl (1989) combined other approaches and identified a number of situational variables that affect managerial behavior. The variables include: position power, nature of subordinates, task/technology, organization structure, nature of environment, external dependencies, social-political forces, and organization culture. The conceptual framework was developed based on the assumption that organizational effectiveness, in term of end-result variables, is mediated by a core set of intervening variables. Among variables, leader’s position power and personal power are seen as moderator of the effects of managerial behavior. The model that encompass each of the important sets of variables relevant for leadership effectiveness is shown in figure 2-4.

![Figure 2-4 An Integrating Conceptual Framework (Yukl, 1989, p.274)]
Hersey et al (1996) developed model called situational leadership model that explains how to match the leadership style to the readiness of the group members. Leadership style is classified according to the relative amount of task and relationship behavior the leader engages in. There are four leadership styles in this model.

- **Style 1** – High task and low relationship. The ‘telling’ style is very directive because the leader produces a lot of input but a minimum amount of relationship behavior. This style fits to an autocratic leader.

- **Style 2** – High task and high relationship. The ‘selling’ style is also directive but in a more persuasive, guiding manner. The leader provides considerable input about task accomplishment but he/she also emphasizes human relation.

- **Style 3** – High relationship and low task. The ‘participating’ style is less directive. There is more collaboration between leader and group members. The consultative and consensus subtypes of participative leader generally fit into this quadrant.

- **Style 4** – Low relationship and low task. The ‘delegating’ style would be classified as free-rein. The leader delegates responsibility for a task to a group member and is simply kept informed of progress.

The model suggested that the four leadership styles need to match the four combinations of high/low readiness and willingness. The four styles suggest that leaders should put greater or less focus on the task in question and/or the relationship between the leader and the follower. The details of the model can be summarized as following:

- **Telling/ Directing**  
  Follower – Unable and Unwilling, Leader – High task focus, Low relationship focus  
  When the followers cannot do the job and are not motivated, then the leader takes a highly directive role, telling them what to do and without a great deal of concern for the relationship. The leader may also provide a working structure, both for the job and in terms of how the person is controlled. The leader has to make followers do the job even they do not want to do.

- **Selling/ Coaching**  
  Follower – Unable and Willing, Leader – High task focus, High relationship focus  
  When the followers want to do the job but lack the skills or knowledge, the leader will friendly act as a coach, helping the followers to complete the task.

- **Participating/ Supporting**  
  Follower – Able and Unwilling, Leader – Low task focus, High relationship focus  
  When the followers can do the job but refuse to do it, the leader will not tell or show them what and how to do. The leader will concern finding out why followers refuse the job. Then, leader persuades them to collaborate.

- **Delegating**  
  Follower – Able and Willing, Leader – Low task focus, Low relationship focus  
  When the followers can do the job and are motivated to do it, the leader can basically leave them to do it and trusts that the followers can complete the job themselves.

Goleman et al. (2004) described six leadership styles that have different effects on the emotions of the targeted followers. The authors stated that leader could use any single style or combine the styles into a particular situation. The details of each style are:

- **The Visionary Leader:** Leader moves people towards a shared vision, telling them where to go but not how to get there. That means leader will motivate followers to struggle forward. He/she openly shares useful and helpful information to others. This style is best when a new direction is needed. It has a very strong impact on the climate.
- **The Coaching Leader**: This style works best when individuals need to build long-term capabilities. The leader will connect wants to organizational goals and hold long conversations that reach beyond the workplace. He/she helps followers find strengths and weaknesses and tying these to career aspirations and actions. He/she is excellent in delegating challenging assignments, demonstrating faith that demands justification and that leads to high levels of loyalty. It has a highly positive impact on the climate.

- **The Affiliative Leader**: The leader will make followers connect to each other and maintain harmony among followers. This style is collaborative style that focuses on emotional needs more than work needs. When things done badly, leader tries to avoid emotionally distressing situations such as giving negative feedback. This style works best in healing rifts and getting things done in stressful situations. It has a positive impact on climate.

- **The Democratic Leader**: Leader make commitment via participation. He/she will listen to both bad and good news. When things done badly, it looks like lots of listening but very little effective action. This style works best when simple inputs are needed or when the leader is uncertain. It has a positive impact on climate.

- **The Pace-setting Leader**: Leader builds challenge and exciting goals for followers. He/she expects excellent outcome from followers and often exemplify him/herself to followers. Leader will identify poor performers and demand more of them. If need, he/she may roll up his/her sleeves and rescue the situation by him/herself. The leader tends to provide low guidance and expects that people should know what they need to do. This style works best in organization consisted of motivated and competent teams. It often has a very negative effect on climate. This is because it is often poorly done.

- **The Commanding Leader**: Leader makes fears and gives clear directions by his/her powerful stance. He/she will command and expect a full compliance from followers. The leader needs to have high emotional self-control for success. Sometime the relationship between leader and followers is cold and distant. This style works best in crisis situation that unquestioned action is needed. It can also use with employees who do not respond to other methods.

### 2.2.4 Transactional Leadership

The transactional leader is one who works through creating clear structures making subordinates clear what is required to do. When the task is appointed, subordinates are considered to be fully responsible for it. Rewards will be given upon accomplishment. Nevertheless when things go wrong, they are considered to be personally at fault and are punished for their failure. Punishments are not typically mentioned but the subordinates have well understood that a formal system of punishment is in place.

The assumptions behind transactional leadership style are: people are motivated by reward and punishment; social systems work best with a clear series of command; the authority of manager needs to be accepted when people are first hired to do a job; and subordinates’ initial purpose is to do whatever the manager tells them to do.

Bass (1990) identified four characteristics of transactional leader.

- **Contingent Reward**: Contracts exchange of rewards for effort, promises rewards for good performance

- **Management by exception (active)**: Watches and searches for deviations from rules and standards, takes corrective action.

- **Management by exception (passive)**: Intervenes only if standards are not met.
- **Laissez-Faire**: Abdicates responsibilities, avoids making decisions.

Transactional leadership style is most often exhibited in business and industry today (Bass, 1985; Yammarino and Bass, 1990). Additionally, contingent reward leader behavior has also been positively correlated to follower attitudes and performance (Avolio et al., 1988; Bass and Yammarino, 1990).

### 2.2.5 Transformational Leadership

Transformational leadership is different from transactional leadership since it does not constitute an exchange of commodities between the leader and followers (Bass, 1985). Rather, it operates out of deeply held personal value systems. Burn (1978) called these values as end values and they cannot be negotiated or exchanged between individuals. Transformational leader is the one who puts passion and energy into everything. The leader inspires subordinates to achieve a tough job. The assumptions here are: people will follow one who inspires them; a person who has vision and passion can achieve great things; and the way to get things done is by injecting enthusiasm and energy.

Transformational leaders are often charismatic, but are not as narcissistic as pure charismatic leaders, who succeed through a believe in themselves rather than a believe in others. Transformational leaders are people-oriented and believe that success comes first and last through deep and sustained commitment. Typically, transformational leader starts with developing the vision and follows by selling the vision in parallel with finding the way forwards. Then, leading the charge is the last stage (Transformational Leadership, n.d).

- **Developing the vision**: leader develops a view of the future that will excite and convert potential followers. This vision may be developed by leader him/herself or emerge from a broad series of discussion. The important factor is the leader buys into it, hook, line and sinker.

- **Selling the vision**: Leader tries to sell the vision to followers. Since some people will easily buy the vision and some may take a while before joining the group, leader needs to use whatever works to convince all followers that the vision will work for the firm.

- **Finding the way forwards**: Some transformational leaders may know where to go and how to get there while others may not have a complete plan, but they will happily lead the exploration of possible routes to the promised land. The route forwards may not be clear and may not have many details. However, if the vision is clearly set, the direction will always be known.

- **Leading the charge**: Leaders are always visible and will stand up to be counted rather than hide behind their teams. They show by their attitudes and actions how everyone else should behave. The leaders also make continued efforts to motivate and rally their followers, constantly doing the rounds, listening, soothing and enthusing. In addition, if followers seem not to believe in the vision, leaders need to seek the way to reinforce their followers with a high level of commitment to the vision.

Bass (1990) argued that transformational leadership can be learned, and it can—and should—be the subject of management training and development. Research has shown that leaders at all levels can be trained to be charismatic in both verbal and nonverbal performance. He identified four characteristics of transformational leader.

- **Charisma**: Provide vision and sense of mission, instills pride, gains respect and trust.

- **Inspiration**: Communicates high expectations, uses symbols to focus efforts, expresses important purposes in simple ways.
- **Intellectual Stimulation**: Promotes intelligence, rationality, and careful problem solving.
- **Individualized Consideration**: Gives personal attention, treats each employee individually, coaches, and advises.

2.2.6 Development of Leadership Style Theory

A leadership science is continually developed in order to have a better understanding about how leader should properly act and lead organization. As I have review related literatures, most researchers deal with a particular aspect of leadership. Some emphasis on leadership behavior and skip some factors like situation. Yukl (1989) reviewed theories and researches related to leadership and described that the major findings in all researches fall into one of four categories: Power-Influence approach, Behavior approach, Trait approach, and Situational approach.

Day (2000) examined the filed of leadership development through three contextual lenses: conceptual context, practice context and research context. The selected practices in leadership development include 360-degree feedback, coaching, mentoring, networks, job assignments, and action learning. This means that there are many practices that have not been included in the study. The study also reviewed the development of leader and leadership.

Dulewicz and Higgs (2005) grouped leadership style and context into three categories. They proposed leadership style based on those categories. The details for each category are:

- **Goal-oriented**: A set of behaviors in which the leader sets direction and behaves in a way in which he/she plays a significant role in directing others to achieve the key goals required to attain the performance required. This is not an authoritarian approach but rather behaviors which are strongly leader-centric.

- **Involving**: A somewhat less leader-centric set of behavior. The leader’s focus remains on providing a strong sense of direction. However, there is a more significant focus on involving others in both setting direction and, to a larger extent, in determining how goals will be achieved.

- **Engaging**: Leader behaviors are focused on facilitating others in achieving both nature of the direction and means of achieving the necessary goals. The leader is more concerned with developing the capability of others to achieve than with the close direction of the enterprise.

The studies during the past few decades have mainly focused on characteristics and specific effects of charismatic and transformational leadership (Bass 1985; Kanungo 1990; Sashkin 1988; Tichy and Devanna 1990). Since there is no single leadership style work best for all situations, different phenomena will require different leadership style. The theory is continually developed and maybe someday we can reach the grand theory of leadership style that effectively and efficiently work with all situations.

2.3 E-commerce

2.3.1 Internet

It is widely known that Internet is the worldwide interconnection of many different computer networks. People use Internet in several ways. The popular activities used over the Internet include e-mail, reading news, watching movies, listening musics, searching information,
communicating with people, studying, researching, and shopping. The latest number of Internet users in March 2005 was around 888 million worldwide. This is a 146.2% increase from the year 2000 when the number was 360 million worldwide. This represents 13.2% of the world population. The 5 countries with the highest number of Internet users are USA (22.6%), China (10.6%), Japan (7.6%), Germany (5.2%), and India (4.4%). For Thailand, the Internet users are around 8.5 million. The Internet user growth rate worldwide is about 25% per year. At this rate, the number of Internet users is estimated to reach one billion by the year 2005 (World Internet Usage and Population Statistics, March 31, 2005).

The current number of registered domain names worldwide is around 300 million hosts, figure 2-5 (Internet Domain Survey Host Count, 2005). The most popular domain name worldwide is dot com and dot net. Up to 30 April 2005, the number of active registered domains is over 51 million. Dot com and dot net represent around 82% of total domain names. The details are presented in figure 2-6. In Thailand, the numbers of IPs on 28 April 2005 is 15.6 million IPs (Domain Counts, 2005). Internet is growing. The number of its users opens the door of opportunity for business. This is an enormous segment that companies should not oversee.

<table>
<thead>
<tr>
<th>Active</th>
<th>Deleted</th>
<th>On-Hold</th>
<th>New</th>
<th>Deleted</th>
<th>Transferred</th>
<th>TLD</th>
</tr>
</thead>
<tbody>
<tr>
<td>36,456,528</td>
<td>20,648,887</td>
<td>346,746</td>
<td>62,190</td>
<td>31,553</td>
<td>39,793</td>
<td>.COM</td>
</tr>
<tr>
<td>5,816,692</td>
<td>3,830,942</td>
<td>63,376</td>
<td>124,326</td>
<td>120,896</td>
<td>5,494</td>
<td>.NET</td>
</tr>
<tr>
<td>3,538,229</td>
<td>2,258,789</td>
<td>33,401</td>
<td>4,580</td>
<td>2,253</td>
<td>3,683</td>
<td>.ORG</td>
</tr>
<tr>
<td>3,488,517</td>
<td>1,039,887</td>
<td>1,274</td>
<td>2,488</td>
<td>813</td>
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</tr>
<tr>
<td>932,766</td>
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<td>490</td>
<td>968</td>
<td>5,225</td>
<td>864</td>
<td>.US</td>
</tr>
<tr>
<td><strong>51,376,875</strong></td>
<td><strong>28,698,470</strong></td>
<td><strong>446,308</strong></td>
<td><strong>196,114</strong></td>
<td><strong>161,960</strong></td>
<td><strong>54,425</strong></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Figure 2-6 Domain counts (http://www.whosi.sc/internet-statistics, April 30, 2005)
2.3.2 Type of E-commerce

Internet is mainly used as a communication tool that allows individuals whom stay in different part of the world to communicate instantly with low cost. E-mail is the most used feature in Internet today. E-commerce is one aspect of Internet and is commercial area where individuals, customers and companies can sell and buy products/services. It can be categorized into four major domains: B2C, B2B, C2C, and C2B (Kotler, 2003).

- **B2C (Business-to-Consumer):** Company provides products/services to consumers. Kotler (2003) stated that this type of e-commerce is useful for products and services when the consumer seeks greater ordering convenience, lower cost, or information about product features and prices. It is less useful for products that must be touched or examined in advance.

- **B2B (Business-to-Business):** Company sells and buys products/services with other companies. Many researches indicated that B2B is ten to fifteen times greater than B2C. It accounts for 90% of Internet revenue.

- **C2C (Consumer-to-Consumer):** Individuals can sell, buy and communicate among themselves. Some may setting their own website or using other websites from service providers like eBay.

- **C2B (Consumer-to-Business):** The way consumer communicates to companies. Some companies invite prospects and customers to e-mail questions, suggestions, and complaints. Companies may provide e-mail address, form, or ‘call-me’ button on their website.

Kalakota and Whinston (1997) stated three distinct general classes of e-commerce applications: inter-organizational (business-to-business), intra-organizational (within business), and customer-to-business. Some scholars add more type of e-commerce into those categories. Turban et al. (2002) classified e-commerce based on the nature of the transaction. The eleven types of e-commerce include Business-to-Business (B2B), Business-to-Consumer (B2C), Consumer-to-Consumer (C2C), People-to-People (P2P), Consumer-to-Business (C2B), Intra-business (organizational) EC, Business-to-Employees (B2E), Government-to-Citizens (G2C) and to others, Exchange-to-Exchange (E2E), Collaborative commerce, and Mobile commerce. However, the most popular referred terms are B2B and B2C.

2.3.3 E-commerce Infrastructure

Several scholars have developed model to explain the infrastructure of e-commerce in the firm. Kalakota and Whinston (1997) proposed a generic framework for e-commerce that consists of four main areas and two supplementary areas. Four main areas are network infrastructure, multimedia content and network publishing infrastructure, messaging and information distribution infrastructure, and common business services infrastructure. Two supplementary areas are public policy and technical standards. The framework is shown in figure 2-7.
Similarly, Bose (2002) presented technological framework for knowledge management capabilities and infrastructure for e-commerce. Knowledge management is an emerging capability in many organizations—that offers the promise to combat information overload, find critical information more efficiently, push time-sensitive information to decision-makers, utilize staff more effectively, and organize knowledge for rapid retrieval and reuse. The most important is that it provides ways to improve the interactions with enterprise partners such as customers, suppliers and collaborators. The success of e-commerce will depend on above knowledge management capabilities. The framework is shown in figure 2-8.

Figure 2-7 Generic Framework for Electronic Commerce (Kalakota and Whinston, 1997, p.12)

Figure 2-8 Standard for Knowledge Management in E-commerce (Bose, 2002, p.48)
E-commerce is defined by the sale or purchase of goods and services over the Internet and is an advanced stage of e-business activity and development. The firms must first engage in e-business activities such as marketing and advertising before making an e-commerce sale (Williams, 1999; Lefebvre et al., 2001). The figure 2-10 shows the stages in e-commerce development.

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**Figure 2-10 Stages of E-commerce deployment (William, 1999 in Henderson et al, 2004, p.506)**

Turban et al. (2002) stated that there are dozens of e-commerce applications available for companies. Some of the applications include shopping in online stores and malls, buying stocks, finding a job, conducting an auction, collaborating electronically on research and development projects, and running global exchanges. To execute these applications, companies need the right information, infrastructure, and support systems. The framework for e-commerce is shown in figure 2-11. Successful e-commerce implementation is dependent also on five major areas: people, public policy, marketing and advertisement, business partners, and support services.

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**Figure 2-11 A Framework for Electronic Commerce (Turban et al, 2002, p. 12.)**
Fellenstein and Wood (2000) described the term e-commerce based on the business processes that support selling and buying of goods and services over the network. They gave an example of similar Internet e-business sites, Barnes & Noble and Amazon.com. Both have been designed to market books but they are very different in their strategy and deployment as an e-business. In general, e-commerce enables both the buying and selling goods and/or services, while utilizing the Internet global infrastructure. The connection between sell and buy side is shown in figure 2-12.

![Figure 2-12 Business process framework between sell and buy side (Fellenstein and Wood, 2000, p. 28)](image)

As we can clearly seen that all basic elements such as marketing knowledge, management support, and human resource management are required to establish e-commerce. The infrastructure may vary from firm to firm since all firms have different size, business, and customers. Another thing that companies have to take into consideration is how necessary should companies adopt e-commerce. The next topic will show benefits and limitations of e-commerce that companies might see before decide whether e-commerce is suitable to their businesses.

### 2.3.4 Benefits and Limitations of E-commerce

Alike everything in the world, nothing is perfect. E-commerce provides several benefits to companies but there are also some limitations of using e-commerce. Peterson et al. (2001) argued that the Internet has both unique characteristics and characteristics that are shared with other marketing channels. This provides us an idea of the benefits of Internet that reflects to e-commerce in this study.

- The ability to inexpensively store vast amounts of information at different virtual locations.
- The availability of powerful and inexpensive means of searching, organizing, and disseminating such information.
- Interactivity and the ability to provide information on demand.
- The ability to provide perceptual experiences that are far superior to a printed catalog, although not as rich as personal inspection.
- The ability to serve as a transaction medium.
- The ability to serve as a physical distribution medium for certain goods (e.g. software)
- Relatively low entry and establishment costs for sellers.

Hawkins and Prencipe (2000) argued that Internet technology is relatively inexpensive. It is based on open standards and is therefore supported by numerous applications, which can cost-effectively process small transaction volumes and be configured to accommodate changes in users with ease. Furthermore, applications are not limited to interfirm transactions. Internet technology can be used to build private communication network within the organization to manage workflow, coordinate activities and share information to improve process efficiency (Rowlatt, 2001)

Fellenstein and Wood (2000) stated that e-commerce allows customers and suppliers to monitor changes in their market space while facilitating more efficient and effective supply chain. The reasons of the growth of e-commerce environment come from its simplicity, its convenience, and its captivating variety. Zimmerman (2001) argued that e-commerce could do more than just sell online. By properly of e-commerce, it helps the company achieve the following goals.

- Increasing brand or product awareness
- Enhancing corporate image
- Achieving market leadership
- Providing information and/or displaying samples of goods or services.
- Generating a list of prospective customers
- Building loyal relationships with customers
- Improving customer service
- Gathering information about customer needs and preferences to guide future product development
- Improving knowledge of customer demographics
- Testing consumer response to discounts or other special offers
- Finding strategic business partners, dealers, franchisees, or suppliers
- Recruiting employees, members, subscribers, or investors
- Saving money through automation, simplified distribution channels, reduced cost of order fulfillment, or smaller inventories

Turban et al. (2002) listed the benefits of e-commerce into three perspectives.

- Benefits to organizations include expanding business into both national and international market, decreasing operating costs, efficiency in supply chain management, compressing time-to-market, interacting more closely to customers, improving corporate image, increasing productivity, reducing paper and paperwork, and etc.
- Benefits to consumers include allowing consumers to access 24 hours a day, providing more choices, less expensive products and services, fast searching and comparing between sites, participating in virtual auctions and virtual communities, and etc.
- Benefits to society include creating more individuals work at home that resulting in less traffic and reduce air pollution, people all over the world have equality in access information, providing helpful information such as medical information to rural areas with relatively low cost, and etc.
Nonetheless, there are some limitations of e-commerce. The limitation can be seen as technical limitations and non-technical limitations (Turban et al., 2002).

- Technical limitations vary from company to company, country to country, and site to site. The major technical limitations are system security, reliability, standards, communication protocols, telecommunication bandwidths, software development, network server, and hardware setting.
- Non-technical limitations include cost of e-commerce development, customers’ perception toward online shopping, legal issue, rapidly changing environment that makes people still do not enter e-commerce, and etc.

Khatibi et al. (2003) examined e-commerce in Malaysia and listed both benefits and barriers of the adoption. The perceived benefits include competitiveness, better image, efficient processes, and better information system. The barriers or limitations of the adoption are the problem of keeping up and understanding the technology itself, lack of trained manpower, uncertainties with regard to its operations and regulations, and high switching costs.

Pires and Aisbett (2003) reviewed 21 papers relating to e-commerce adoption. The review yielded over 50 advantages and 40 disadvantages that might impact on firms when they adopt e-commerce in business-to-business operations. The implication of adoption was divided into three main factors: internal, market, and competitive factors. They are shown in Table 2-1 to 2-3.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased profits, leverage of scarce corporate resources</td>
<td>Advantages may be negated by critical mass requirements; nonsustainable advantage</td>
</tr>
<tr>
<td>Increased revenue and sales</td>
<td>Costs in staying on top of ICT</td>
</tr>
<tr>
<td>Reduced start-up capital needs and lower overheads once started</td>
<td>Specific skills required; reskilling required</td>
</tr>
<tr>
<td>Reduced cost: material, transaction, operation, marketing, distribution; reduced inventories</td>
<td>Small businesses have to carry more stock</td>
</tr>
<tr>
<td>More diverse business activities and economies of scope</td>
<td>Resistance to payment for services offered via the web</td>
</tr>
<tr>
<td>Economies of scale possible</td>
<td>Unreliability and risk</td>
</tr>
<tr>
<td>Better control over industry supply chains</td>
<td>Loss of control through loss of relationships</td>
</tr>
<tr>
<td>Disintermediation; enhance supplier-reseller relationships</td>
<td>Disintermediation</td>
</tr>
<tr>
<td>Improved sales tracking and improved marketing</td>
<td>Measurement challenges: difficult to determine the audience reached, costs and benefits</td>
</tr>
<tr>
<td>Shorter product development cycles; shorter supply chain</td>
<td>Long access and search times for information; traffic congestion</td>
</tr>
<tr>
<td>Accelerated transactions, with faster cash generation; automated buying processes</td>
<td>Time and expense in setting up new processes for handling orders, dispatch and freight</td>
</tr>
<tr>
<td>Increased flexibility and responsiveness</td>
<td>Difficulty in integrating existing databases and transaction-processing software designed for traditional commerce into the software that enable e-commerce</td>
</tr>
<tr>
<td>Improved internal processes and sharing of internal best practice; access to commercial research</td>
<td>Confusing and anarchic information environment</td>
</tr>
</tbody>
</table>

Table 2-1 Implications for business from adopting e-commerce: internal factors
Based on Pires and Aisbett (2003, p. 294)
<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Company location becomes irrelevant</td>
<td>- Potential inability to accommodate global differences—may justify exclusion of information such as prices</td>
</tr>
<tr>
<td>- Close customer relationships with higher switching costs through structural bonds linking computer systems</td>
<td>- Disruption to existing relationships along the selling channel</td>
</tr>
<tr>
<td>- Widens existing markets to the global level</td>
<td>- Risk from dealing with shoe-string businesses, Skeptical buyers; risk from unknown customers</td>
</tr>
<tr>
<td>- Reaches/creates new markets virtual communities</td>
<td>- Big companies band together to screw suppliers on prices</td>
</tr>
<tr>
<td>- Buyers gain easy access to more suppliers, more often</td>
<td>- Suppliers forced online (a benefit if compliance costs are reasonable)</td>
</tr>
<tr>
<td>- Suppliers can affordably reach more buyers</td>
<td>- Restricts competition: big businesses deal only with suppliers that have e-procurement systems.</td>
</tr>
<tr>
<td>- Larger potential customer base</td>
<td>- Shifts advantage from seller to the buyer</td>
</tr>
<tr>
<td>- Better customer service, increasing customer value; contributes to societal gain</td>
<td>- Security problems</td>
</tr>
<tr>
<td>- Shifts advantage from seller to the buyer; buyers can quickly and thoroughly compare attributes of competing products</td>
<td>- Cultural and legal impediments</td>
</tr>
<tr>
<td>- Service information more accurately distributed; customers’ problems solved faster</td>
<td>- Unwieldy URLs</td>
</tr>
<tr>
<td>- Improved communication and increased feedback in real time</td>
<td>- Need brick-and-mortar evidence</td>
</tr>
<tr>
<td>- Information can reach more people without sacrificing content</td>
<td>- Specific skills required</td>
</tr>
<tr>
<td>- Enables narrowly targeted marketing efforts</td>
<td></td>
</tr>
<tr>
<td>- Alternate sales/delivery channels</td>
<td></td>
</tr>
<tr>
<td>- Number of products carried by suppliers independent of physical display area</td>
<td></td>
</tr>
<tr>
<td>- Creates new information-based products and enables prosumption</td>
<td></td>
</tr>
<tr>
<td>- Increase supply chain efficiency</td>
<td></td>
</tr>
</tbody>
</table>

Table 2-2 Implications for business from adopting e-commerce: market factors

Based on Pires and Aisbett (2003, p. 294)
<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Business size becomes irrelevant</td>
<td>- Spells the end for small businesses</td>
</tr>
<tr>
<td>- Small businesses can compete on a more equal technological footing with</td>
<td>- Greater power for large businesses</td>
</tr>
<tr>
<td>multinationals; more opportunities for small businesses</td>
<td>- Risk from dealing with shoe-string businesses</td>
</tr>
<tr>
<td>- Big businesses may minimize inventory and increase cycle</td>
<td>- Bad for small business as big business can reduce costs by accepting only suppliers that practice JIT delivery</td>
</tr>
<tr>
<td>- Reduced cost for big business (through accepting only suppliers that practice JIT delivery)</td>
<td>- Reduced competition</td>
</tr>
<tr>
<td>- Price convergence at a lower price level; viral marketing</td>
<td>- Levelling of business practices</td>
</tr>
<tr>
<td>- Nonprice competition stimulated</td>
<td>- Need to maintain a trust relationship with customers, providing constant value-added information, products and quality on-line experience</td>
</tr>
<tr>
<td>- Low cost distribution of information goods</td>
<td>- Creates barriers to entry via IP, exclusivity arrangements and creation of customer communities</td>
</tr>
<tr>
<td>- Online synergy effects from cross-selling lead to one-stop shop offerings and increase customer perceived value</td>
<td>- Blurring of traditional boundaries</td>
</tr>
<tr>
<td>- Faster launching of new or revised products</td>
<td></td>
</tr>
<tr>
<td>- Eliminates some national and global barriers to entry, such as marketing costs, distribution and shelf-space acquisition</td>
<td></td>
</tr>
<tr>
<td>- Competitive intelligence</td>
<td></td>
</tr>
<tr>
<td>- Virtual enterprises may mimic benefits of vertical integration</td>
<td></td>
</tr>
</tbody>
</table>

Table 2-3 Implications for business from adopting e-commerce: competitive factors
Based on Pires and Aisbett (2003, p. 295)

2.3.5 Factors Influence E-commerce Adoption

Factors appear to encourage the adoption of Internet technology for e-commerce can be categorized as reactive and proactive, strategic, and tactical (Hawkins and Prencipe, 2000).

- Reactive drivers are associated with two factors; (1) direct (external) pressure from other firms in the supply chain, and (2) indirect (internal) pressure to maintain an e-commerce presence.

- Proactive drivers are related to strategic or tactical objectives.
  - Strategic proactive drivers include (1) supply chain co-ordination – the use of e-commerce to restructure the supply chain or integrate supply chain partners, and (2) new business development – the exploration of new business models, specifically the role of intermediaries and distributors.
  - Tactical proactive drivers include (1) cost reduction – transaction processing, inventory and purchase price, (2) process efficiency – reduced lead times, improved procurement and production practices and logistics, and (3) business process integration – integration of purchase and sales with other business functions.

Keeling et al. (2000) examined the factors driving and inhibiting e-commerce adoption in SMEs and found that the adoption was influenced by pressure from customers, a belief that e-commerce would generate revenue or reduce costs, access to new markets and competitor
activity. The study revealed that cost of e-commerce developments and concerns about security inhibited adoption. Han and Noh (2000) found that lack of customer satisfaction and use were the major factors that inhibited the e-commerce development. In addition, Poon and Swatman (1999) suggested that the perception of future benefits rather than currently realizable benefits supported the adoption of e-commerce in SMEs.

Teo and Ranganathan (2004) examined 108 firms in Singapore whether they are adopters or non-adopters of B2B e-commerce and found that 52.8% have adopted B2B e-commerce. The factors influence non-adopters are difficulty of measuring benefits, fear of granting suppliers and customers access to corporate systems, and insufficient time for staff to develop new skills in e-commerce. Tsao et al. (2004) investigated Taiwanese companies and argued that internal factors act as the most important determinant of success for the adoption of B2B e-commerce, while the factors relating to IS/IT investment evaluation and benefits realization, and governmental support are less significant.

Daniel and Grimshaw (2002) compared the adoption of e-commerce between large and small enterprises and found that the adoption and benefits vary with size of a firm. It seems that smaller businesses indeed view e-commerce as an opportunity for improving their performance and, therefore, leveling the playing field. In contrast, larger companies view e-commerce as an opportunity for simplifying complex internal processes and, therefore, reducing costs. The study found that the use of e-commerce for responding to competitors, providing enhanced customer services and improving relations with suppliers was driving the uptake by smaller businesses to a greater extent than by their larger counterparts. Only in the area of improved operational efficiency did larger businesses express greater interest in adopting e-commerce. Tigre and Dedrick (2004) studied e-commerce in Brazil and found that local forces seem to play a more influential role more than global forces. E-commerce in Brazil is strongly anchored in information intensive sectors little affected by foreign transactions. The study revealed that large firms are more active adopters and enjoy greater benefits from e-commerce. The barrier found in the study was the lack of legal protections.

Meehan (2002) stated that the lack of IT integration is referred as a key reason why many B2B projects fail to deliver the benefits users expect. Beach (2004) reviewed the surveys why smaller manufacturing organizations are failing to adopt Internet technology and argued that the manufacturing sector is failing to adopt e-commerce because firms either do not recognize its potential or perceive the risk of changing their business model to utilize the new technology to be greater than the benefits that might be derived.

Palacios (2003) tested five propositions and three of them were confirm: Global, more than domestic factors drive the spread of e-commerce in Mexico, B2C commerce has grown more at the sectoral level than at that the national level, and the existence of an adequate legal framework is a crucial condition for e-commerce to develop.

Moodley and Morris (2004) examined South African garment export producers toward using e-commerce. One of the finding revealed that e-commerce was not having a significant impact on the business models of the largest South African garment exporters. The market was not demanding it and the payoffs of transaction-oriented e-commerce and e-marketplaces were regarded as being uncertain. The study claimed that without active encouragement from buyers, many suppliers are likely to choose to wait. The survey of garment exporters in Bangladesh, Philippines and Sri Lanka also shows the similar findings (International Trade Centre, 2001). Brousseau (2003) argued that the usual statistical
indicators used to analyze the development in various countries could be misleading. This is because they assume that the Internet is the exclusive technology for e-commerce and they believe that all countries are following a similar path in developing the same e-commerce model. In fact, the nature of e-commerce could vary among countries depending on the pre-existing organization of distribution channels and interfirm relationships.

Houghton and Winklhofer (2004) distinguished between the use of the Internet as a marketing communication tool (website) and a transaction and distribution channel (e-commerce). They listed the sources of conflict that can affect website and e-commerce adoptions. The study also provided recommended solutions for those conflicts. Sources of conflict in website adoption include level of intermediary involvement, content of website, future e-commerce intentions (as perceived by the intermediary) whereas sources in e-commerce adoption are level of intermediary involvement, product range, future level of disintermediation (as perceived by the intermediary).

Henderson et al. (2004) found that most of agricultural input firms used websites and adopted some type of Internet strategy. Most activities were occurring with suppliers or channel partners rather than with end customers. Factors supported farmer e-commerce adoption are the ease of information access, more product choices, easier product comparisons, and improved buying convenience. The barriers are inability for after sales service, privacy concerns, and security concerns.

Grandon and Pearson (2004) identified four factors that influence e-commerce adoption: organizational readiness, external pressure, perceived ease of use, and perceived usefulness. They reviewed previous researches related to IT adoption. The summary is in Table 2-4.

<table>
<thead>
<tr>
<th>Source</th>
<th>Influencing Factors</th>
<th>IT studied</th>
<th>No. SMEs</th>
<th>Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incovina et al.</td>
<td>External pressure, perceived benefits, organizational</td>
<td>EDI adoption practices</td>
<td>7 SMEs</td>
<td>7 different industries</td>
</tr>
<tr>
<td></td>
<td>readiness</td>
<td></td>
<td>(n &lt; 200)</td>
<td></td>
</tr>
<tr>
<td>Chowdhury et al.</td>
<td>Readiness, external pressure, perceived benefits</td>
<td>EDI adoption</td>
<td>258 SMEs</td>
<td>Manufacturing, services,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(n &lt; 100)</td>
<td>government, etc.</td>
</tr>
<tr>
<td>Kaun and Chun</td>
<td>Technology organization environment</td>
<td>EDI adoption</td>
<td>571 SMEs</td>
<td>Not specified</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(n &lt; 100)</td>
<td></td>
</tr>
<tr>
<td>Ighiria et al.</td>
<td>Intra-organizational factors, extra-organizational</td>
<td>Personal computer</td>
<td>195 SMEs</td>
<td>Manufacturing and engineering</td>
</tr>
<tr>
<td></td>
<td>factors, perceived ease of use</td>
<td></td>
<td>(n &lt; 100)</td>
<td></td>
</tr>
<tr>
<td>Thong [63]</td>
<td>CET characteristics, IS characteristics, organization</td>
<td>IS adoption</td>
<td>166 SMEs</td>
<td>Not specified</td>
</tr>
<tr>
<td></td>
<td>al characteristics, environmental characteristics</td>
<td></td>
<td>(n &lt; 100)</td>
<td></td>
</tr>
<tr>
<td>Prestonizer and</td>
<td>Relative advantage, top management support,</td>
<td>Online data access,</td>
<td>78 SMEs</td>
<td>Manufacturing, retail sales and</td>
</tr>
<tr>
<td>Roberts [49]</td>
<td>organizational ease, external pressure</td>
<td>e-mail, and the Internet</td>
<td>(n &lt; 90)</td>
<td>wholesale trade, service, finance, insurance, others</td>
</tr>
<tr>
<td>Mehriittan et al.</td>
<td>Perceived benefits, organizational readiness, external</td>
<td>Internet adoption</td>
<td>7 SMEs</td>
<td>IT industry, clothing,</td>
</tr>
<tr>
<td></td>
<td>pressure</td>
<td></td>
<td>(n &lt; 200)</td>
<td>manufacturer, entertainment,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>transport</td>
</tr>
<tr>
<td>Merchantini and</td>
<td>Emphasis on top management, compatibility, relative</td>
<td>E-commerce adoption</td>
<td>62 SMEs</td>
<td>Not specified</td>
</tr>
<tr>
<td>Morceni [42]</td>
<td>advantage knowledge of the company’s employees</td>
<td></td>
<td>(n &lt; 200)</td>
<td></td>
</tr>
<tr>
<td>Riemeisebnder and</td>
<td>Attitude, subjective norm, perceived behavioral control</td>
<td>E-commerce adoption</td>
<td>184 SMEs</td>
<td>Defense, agriculture, oil and</td>
</tr>
<tr>
<td>McKirney [34]</td>
<td></td>
<td></td>
<td>(n &lt; 500)</td>
<td>gas, manufacturing</td>
</tr>
<tr>
<td>Riemeisebnder</td>
<td>Attitude, subjective norm, perceived behavioral control</td>
<td>Web site adoption</td>
<td>156 SMEs</td>
<td>Retail, services, government,</td>
</tr>
<tr>
<td>et al. [53]</td>
<td>perceived usefulness, perceived ease of use</td>
<td>(web presence)</td>
<td>(n &lt; 500)</td>
<td>retail, banking, medical,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>manufacturing</td>
</tr>
</tbody>
</table>

* n represents the maximum number of employees considered in the criteria to define a SME.

Table 2-4 Summary of factors of IT adoption in SMEs (Grandon and Pearson, 2004, p. 201)

2.3.6 Level of E-commerce Adoption

The level of e-commerce adoption is mostly explained in incorporating with e-commerce development. Most agree that all firm usually begin with simple website, which only provide some information about the firm. Zimmerman (2001) explained that the sites could be grouped into four general stages of development: Informative, Interactive, Transaction, and Transformative.
- Informative: a static site that presents passive material or advertising about a company or product; the web equivalent of a brochure.
- Interactive: a site that engages viewers to take action online, such as searching a catalog or checking the status of a shipment.
- Transactive: a site that sells product or services and accepts payment online.
- Transformative: a site that affects basic business processes, such as accepting bids from vendors or providing service to existing clients.

Daniel et al. (2002) proposed four distinct clusters of e-commerce adoption. The clusters are sequential stages that firms appear to pass during the adoption of e-commerce.

- Cluster 1 Developers: The firms are currently developing their first e-commerce services.
- Cluster 2 Communicators: The firms are using e-mail to communicate with customers, suppliers and employees.
- Cluster 3 Web Presence: The firms have information-based websites operating and are developing on-line ordering facilities.
- Cluster 4 Transactors: The firms have on-line ordering in operation and are developing on-line payment capabilities.

Zhu and Kraemer (2002) proposed e-commerce capability metrics that can be seen as the level of e-commerce adoption in this study. The model consists of four dimensions.

- Information: useful information about products and services.
- Transaction: capabilities to facilitate transactions online.
- Interaction and Customization: capabilities that enable online interactions between the users and the company, and allow users to customize products according to their personal preferences.
- Supplier Connection: electronic linkages to integrate suppliers via information sharing.

The details of above metric was later reviewed and redefined by Zhu (2004). Most details were mainly remained the same. The first-three dimensions were the same but the last has been renamed as Back-end integration. It means that e-commerce enables companies to forge tight electronic integration to facilitate coordination, fulfillment, and inventory management in back offices and with external partners. Grandon and Mykytyn (2004) developed instrument to measure the intention to use electronic commerce in SMEs. The instrument was based on Ajzen’s theory of planned behavior. The authors used SMEs in Chile as an empirical case and then claimed that it can be used for other developing countries.

All seem to agree that e-commerce development ranges from simple services to full transaction services. Establishing website is just the forefront of company to entering the virtual society. The website infrastructure can be seen as representative of the level of e-commerce adoption. In this study, I simply propose three levels of e-commerce adoption: Non-adoption, Information and Transaction based e-commerce. The main factor that distinguishes between information and transaction based e-commerce is the availability of online ordering and payment.

- Non-adoption: If the companies do not have web site, it is considered as non-adoption.
- Information based e-commerce: if companies only provide information of products/services, company history, do not own domain name, use free e-mail and do
not allow customers to place order online, Those companies are considered as Information based e-commerce.

- **Transaction based e-commerce**: in contrast, if companies provide full transaction between companies and stakeholders, own domain name, use company’s e-mail, and have staff who responsible for updating and taking care website. Those companies are considered as Transaction based e-commerce.

### 2.4 Theoretical Framework

Leadership studies currently emphasis on characteristics and specific effects of charismatic and transformational leadership (Bass 1985; Kanungo 1990; Sashkin 1988; Tichy and Devanna 1990). Bass (1997) found correlations among the various leadership styles and outcomes in effectiveness, effort, and satisfaction. Transformational leaders are more effective than those leaders practicing contingent reward. Contingent reward is somewhat more effective than active management by exception, which in turn more effective than passive management by exception. Laissez-faire leadership is the least effective. The outcome of transformational leaders in effort and satisfaction are also higher than transactional leaders. The pattern is similar to the effectiveness but less steep.

Nonetheless, most of theories still based on task and people oriented. The old theories are still valid today. Since there is no single leadership style work best for all situations, different phenomena will require different leadership style. This study will test two leadership styles that rely on task and people oriented. Then, a combination of both types will yield the level of shared leadership that is used in this study. The instrument used to identify leadership style is based on the T-P leadership questionnaire (Pfeiffer and Jones, 1974).

- **Autocratic leadership**: The style that leader will emphasis more on task not on people. The leader would make decision without consult the team. He/she will direct and tell subordinates what they are expected to do. This style is often referred in the researches but may have different name. The characteristic is the same. (e.g. Blake and Mouton, 1961, 1985; Lewin et al., 1939; Likert, 1967; House, 1971; Yetton, 1973; Hersey et al., 1996)

- **Laissez-Faire leadership**: The leader concerns more on people. He/she avoids making decision. He/she does not direct and tells subordinates to do something. Rather, he/she will let followers to decide and do whatever they want but they need to have responsibility for the outcome. (e.g. Blake and Mouton, 1961, 1985; Lewin et al., 1939; Hersey et al., 1996; Bass, 1990)

- **Shared leadership**: A combination of task and people oriented. This style will be divided into three levels: low, medium and high. This style can be used to indicate the level of task or people oriented leader concerns. Leader can probably be high task and people oriented person, medium task and people oriented person, or low task and people oriented person.

E-commerce has benefited to companies no matter how big or small companies are. Generally, small companies have limitation in human, finance, and time more than large companies. The e-commerce adoption is possibly to be less than large companies. It was reported that 36% of small businesses primarily establish websites to only advertise and promote their business compared to 9% establish website for sell or market online (Verizon quoted in Grandon and Pearson, 2004). Similarly, Pratt (2002) conducted a survey with SMEs and found that many SMEs are reluctant to conduct transactions online; more than 80% are only using the Internet to communicate (via email) and gather business information. Beveren
and Thomson (2002) stated that company size is a factor in determining the adoption of e-commerce by Australian manufacturing SMEs, with smaller firms being less likely to adopt e-commerce. What does this information mean? Does the leaders in each firm do not realize the business potential of e-commerce adoption or does it mean that they encounter significant barriers to implementing it? Does the leadership style influence the level of e-commerce adoption?

Many studies have identified the level of e-commerce adoption based on size of company, pressure from customers, suppliers or markets, organization readiness. Most of them are investigate in broader terms. There are a few investigated in a particular area like leadership style. Humphreys (2001) claimed that the behaviors associated with transformational leadership were significantly related to support for emerging technology. Furthermore, leaders who support e-commerce and emerging technology exhibited transformational leader behavior to a greater degree than did those leaders who did support e-commerce. There is still a room to investigate. This study will fill this gap. In Thailand, the food exporters range from small to large companies. The level of e-commerce of Thai food exporters has not been studied yet. So, this study aims to examine the correlation between the leadership styles and the level of e-commerce adoption.

The research framework based on the assumption that the level of e-commerce adoption in each company depends on the leadership style. So, independent variable leadership style while dependent variable is the level of e-commerce adoption. The framework is presented in figure 2-13.

![Figure 2-13 Research Framework](image_url)
CHAPTER THREE

3. Methodology

3.1 Choice of Subject

Thailand positions itself as ‘Kitchen of the world’ and the government puts more efforts to achieve this goal. As shown in the first chapter, there are more than 800,000 firms nationwide. Only 16.7% of the firms used computer in their business. 3.9% used e-commerce and only 0.3% provided online purchasing to customers. The number of e-commerce is relative small compared to other countries. The researches have shown several potential benefits to companies of all sizes. I believe that Thai companies can also somehow benefit from using e-commerce.

My preliminary purpose is to investigate the level of e-commerce adoption for all Thai exporters because I realize the potential of e-commerce. But, with the limitation of cost and time of conducting a study, I will emphasis for one area of export industry that is food exporting. The policy from government level has facilitated businesses to go global easily. E-commerce is one sector that Thai government put a lot of efforts. Nevertheless, the number of successful e-commerce in Thailand is still low. The reason might be that e-commerce has not been widely studied. Thai companies may not clearly understand the infrastructure of e-commerce. Some companies have only information-based website but they call themselves as fully e-commerce service. I personally believe that the way the leader directs the firm will affect the adoption of the firm. The way the leader behaves can be seen as leadership style. So, this study tries to examine whether there is a connection between leadership style and e-commerce adoption.

3.2 Perspective

The perspective of research is generally depended on the researchers’ past experiences and skills relating to what they are investigating. Skilled researchers have broader vision and the possibility to cover all major crucial parts of their research. Trainees, on the other hand, may underestimate what need and need not to be observed.

Leadership has not reached the grand theory that work best in all situations. Rather, most researchers seem to focus in specific part of leader’s behaviour in order to explain the style of leader. In this study, leadership style is based on classic theory of task and people such as Michigan studies, Ohio studies, Blake-Mouton Grid and XY theory of McGregor. Two opposite styles, autocratic and Laissez-Faire, are tested to identify the level of shared leadership between task and people oriented.

E-commerce adoption can be divided in several ways. The most popular method is to rely on the stage of e-commerce development. E-commerce can be so simple and more complex. Website contained only information of company requires less skills than the one that provides online transaction between company, customers, and suppliers. This study simply categorize the level of e-commerce adoption into two categories: Information-based and Transaction-based e-commerce. The factor used to distinguish them is the ability of company to provide online ordering and payment.
Of course, other factors do influence the e-commerce adoption. The study can be done in associate with company’s size, market share, IT and financial resources available, so forth. I am aware of those factors that might affect the level of adoption. Nonetheless, leadership style also influences the adoption more or less and it is not less important than those factors. The study will emphasis only leadership factor to specify the level of e-commerce adoption in Thai food exporting industry. The finding may not be generalized but it can be one part to understand the whole process of e-commerce adoption.

3.3 Preconception

The total number of registered Thai food exporters is 1,341 firms. These firms range from small company to large company and located throughout the country. From the literature review, it seems that larger companies tend to have higher level of e-commerce adoption more than smaller companies. However, I do believe that leadership style is also one factor that affects the adoption. This study will be conducted by using quantitative method and testing the hypothesis. The hypothesis statement is:

$H_1$: There is a difference in the level of e-commerce adoption between leadership styles

The preconception is that leaders with different type of leadership styles view e-commerce differently. Then, the adoption might also be different. Humphreys (2001) claimed that the behaviors associated with transformational leadership were significantly related to support for emerging technology. Laissez-Faire leadership style was included in his study but there is no report about the authocratic leadership style. It is possible to believe before testing the hypothesis that task-oriented leader and people-oriented leader have significant different viewpoint toward e-commerce and lead to different level of e-commerce adoption.

3.4 Research Method

3.4.1 Research Philosophy

The philosophy of research can be specifically classified into two broad methods of reasoning; deductive and inductive researches. Particularly in social science study, deductive research typically works from the more general to the more specific. Some have called this research as ‘top-down’ approach. On the other hand, inductive research typically moves from specific observations to broader generalizations and theories. This can be called ‘bottom-up’ approach.

These two methods of reasoning are different in a way to conduct research. Inductive reasoning is more open-ended and used to understand of new or unknown phenomena. The theory usually follows data and the finding is difficult to replicate. In contrast, deductive reasoning is more narrow in nature and is concerned with testing or confirming hypotheses. The theory will be developed through confirmed or rejected hypotheses and the finding can be replicable. Most social research involves both inductive and deductive reasoning processes at some time in the project.

This study employs deductive research. It begins by examining theories related to leadership and e-commerce. The hypothesis is developed by the assumption that the level of e-commerce adoption depends on the characteristic of leader in the firm. The study also applies quantitative research, which data will be collected through questionnaire.
3.4.2 Data Collection Method

There are several data collection methods available for researchers such as observation, experiment, interview, and survey. It is a controversial issue among scholars which methods or techniques are more suitable and appropriate. Which methods and techniques are most suitable for which research (project) depends on the research problem and its purpose (Jankowicz, 1991). Ghauri and Gronhaug (2002) stated that the choice of data collection will depend upon an overall judgement on which type of data is needed for a particular research problem. Moreover, the type of answers we are looking for will decide which type of analysis we need to do. At the outset, a researcher has to decide whether s/he wants to use a qualitative or quantitative data collection and analysis method.

Bennett (1986) explained that Research methods refer to systematic, focused and orderly collection of data for the purpose of obtaining information from them, to solve/answer our research problems or questions. The methods are different from techniques of data collection. Methods mean data collection through historical review and analysis, survey, field experiments and case studies, while techniques mean a step-by-step procedure that we follow to gather data and analyse them for finding the answers to research questions. These are concerned more with how to do things than what to do or why to do it. In business studies, techniques normally used are structured, semi-structured or unstructured interviews, surveys and observations.

In general, we can say that qualitative research is rather subjective whereas quantitative research is relatively objective. To conduct qualitative study, researchers are required to have skills such as ability to think abstractly and critically, analyse make judgement without bias. For quantitative study, the skills needed are ability to set proper hypotheses, test them with proper statistical techniques, and interpret statistical information to descriptive information. The differences between qualitative and quantitative studies can be distinguished as in Table 3-1

<table>
<thead>
<tr>
<th>Qualitative methods</th>
<th>Quantitative methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Emphasis on understanding</td>
<td>• Emphasis on testing and verification</td>
</tr>
<tr>
<td>• Focus on understanding from respondent’s/ informant’s point of view</td>
<td>• Focus on facts and/or reasons for social events</td>
</tr>
<tr>
<td>• Interpretation and rational approach</td>
<td>• Logical and critical approach</td>
</tr>
<tr>
<td>• Observations and measurements in natural settings</td>
<td>• Controlled measurement</td>
</tr>
<tr>
<td>• Subjective ‘insider view’ and closeness to data</td>
<td>• Objective ‘outsider view’ distant from data</td>
</tr>
<tr>
<td>• Explorative orientation</td>
<td>• Hypothetical-deductive; focus on hypothesis testing</td>
</tr>
<tr>
<td>• Process oriented</td>
<td>• Result oriented</td>
</tr>
<tr>
<td>• Holistic perspective</td>
<td>• Particularistic and analytical</td>
</tr>
<tr>
<td>• Generalization by comparison of properties and contexts of individual organism</td>
<td>• Generalization by population membership</td>
</tr>
</tbody>
</table>

Table 3-1 The difference in emphasis in qualitative versus quantitative methods (Reichardt and Cook, 1979)
This study employs survey technique as a tool to conduct a quantitative study. Self-administered questionnaire was developed and sent to selected sample. The questionnaire was divided into three parts: general information about respondent, leadership style questions, and e-commerce adopting and attitude.

3.5 Sampling Process

The sampling process consists of eight major activities: (1) identifying the target population, (2) determining the sampling frame, (3) resolving the differences, (4) selecting a sampling procedure, (5) determining the relevant sample size, (6) obtaining information from respondents, (7) dealing with the non-response public, and (8) generating the information for decision-making. Figure 3-1 shows the route of each activity. (Aaker et al., 2004)

3.5.1 Target Population

From the official website of the department of export promotion, Thailand, there are more than 11,000 registered exporter companies. This represents almost the whole population of Thai exporters. These companies can be classified into 17 categories: (1) Agricultural products/minerals/fuels, (2) Automotive/auto parts and accessories/machiner, (3) Building materials/hardware items, (4) Chemicals, cosmetics, toiletries, medical supplies, (5) Electronics, electrical products and parts, (6) Food, (7) Furniture, (8) Gems and jewelry, (9) Gifts and decorative items/handicrafts, (10) Household products, (11) Leather, PVC and other products/footwear/trave, (12) Pet food/stationery and others, (13) Printing service/packaging, (14) Service trade, (15) Textiles, garments and fashion accessories, (16) Toys and games, and (17) Trading company (Thailand’s exporters directory, n.d.)

There might be some exporters that have not registered with the department of export promotion. Since all import-export transactions must be anyhow reported to government
agency, most of them have to register and provide basic information to government office. This directory is reliable and can represent to target population of this study.

3.5.2 Sampling Frame

The study is interested in Thai food exporting industry. The exporter directory contains the number of registered Thai food exporters of 1,341 companies. This represents the sample frame of this research. There are four subcategories for this group: (1) Canned food/foods in containers (690 companies), (2) Chilled/frozen foods (222 companies), (3) Dried/dehydrated foods (234 companies), (4) Semi-processed foods from animals (195 companies) The proportion of subcategories is presented in table 3-2

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total number of firms</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thai food exporters</td>
<td>1,341</td>
<td>100%</td>
</tr>
<tr>
<td>Canned food/foods in containers</td>
<td>690</td>
<td>51%</td>
</tr>
<tr>
<td>Chilled/frozen foods</td>
<td>222</td>
<td>17%</td>
</tr>
<tr>
<td>Dried/dehydrated foods</td>
<td>234</td>
<td>17%</td>
</tr>
<tr>
<td>Semi-processed foods from animal</td>
<td>195</td>
<td>15%</td>
</tr>
</tbody>
</table>

Table 3-2 Number of Thai food exporters

3.5.3 Sampling Procedure

Sampling procedures can be divided into broad categories, probability and non-probability samples. In probability samples each unit has a known, non-zero chance of being included in the sample, which allows for statistical inferences. In contrast, in non-probability samples, it is not possible to make valid inferences about the population. This implies that such samples are not representative (Ghauri and Grønhaug, 2002).

For this study I am interested in probability sample techniques since the target population and sample frame are clearly defined. Aaker et al. (2004) stated that probability sampling has several advantages over nonprobability sampling. First, it permits the researcher to demonstrate the sample’s representativeness. Second, it allows an explicit statement as to how much variation is introduced, because a sample is used instead of a census of the population. Finally, it makes possible the more explicit identification of possible biases.

The details of each technique under probability sample are briefly presented here.
- **Simple Random Sampling**: It is an approach in which each population member, and thus possible sample, has an equal probability of being selected. The implementation is straightforward. For instance, put the name of each person in the population on a tag and place the tags in a large bowl. Then, mix the contents of the bowl thoroughly and draw out the desired number for the sample. Researchers may also employ the table of random number rather than using a bowl.
- **Stratified Sampling**: It improves the sampling efficiency by increasing the accuracy at a faster rate than the cost increase. The rate of increases of both accuracy and cost depends on the variable(s) used to form the groups and the strength of association between the measure of interest and the variable(s) used to form the groups. This sampling procedure can be divided into two type; (1) Proportional stratified sampling—directly proportional and inversely proportional stratified sampling, and (2) Disproportional stratified sampling.
- **Systematic Sampling**: It involves systematically spreading the sample through the list of population members. Thus, if the population contains 10,000 (= N) unit and a sample size of 1,000 (= n) is desired, every tenth (= I, sampling interval) person is selected for the sample. In general, the sampling efficiency of systematic sampling is improved by lowering costs while maintaining accuracy relative to simple random sampling. However, the ordering of the list will determine the sampling efficiency. Ghauri and Gronhaug (2002) explained that a prerequisite for applying systematic sampling is that the units in the population can be ordered in some way: records that are ordered in a file; Names that are ordered alphabetically in a telephone directory; Houses that are ordered along a road; Customers who walk one by one through an entrance; and so on.

- **Cluster Sampling**: The sampling efficiency is improved by decreasing cost at a faster rate than accuracy. It involves dividing the population into subgroups. Then, a random sample of subgroups or clusters is selected and all members of the subgroups are interviewed. Cluster sampling is useful when subgroups that are representative of the whole population can be identified.

- **Multistage Sampling**: It is a combination of above sampling techniques. It can start with cluster sampling, then stratified sampling and end with systematic sampling. When developing a sample from US census, for example, large marketing research firms develop a set of clusters of dwellings. The clusters may be counties or some other convenient grouping of dwellings. This set of clusters may then be used by the marketing research firm for up to 10 years for their national surveys.

Since the sample frame of this study is alphabetically listed in all four subcategories. The systematic sampling technique would be the most appropriate technique for the study. So, I have decided to use systematic sampling technique for this study.

### 3.5.4 Sample Size

Aaker et al. (2004) stated that the size of a sample can be determined either by using statistical techniques or through some ad hoc methods. Ad hoc methods are used when a researcher knows from experience what sample size to adopt or when there are some constraints. The factors that influence the number of sample size are budget and time available, the value of the information in the study in general, the accuracy required of the results in particular, and the variability of the population.

This study will employ statistical techniques to determine the sample size. The desired confidence level is 95% and desired confidence interval of 5. The population of Thai food exporters (as from sample frame) is 1,341. The formula used to calculate the number of sample size is:

\[
\text{Sample Size (SS)} = \frac{Z^2 \times (P) \times (1 - P)}{C^2}
\]

where:  
- \(Z = z\) value = 1.96 (95% confidence level)  
- \(P = \) percentage picking a choice = 50% or 0.5  
- \(C = \) confidence interval = 5 or 0.05
The calculation gives the number of sample size needed of 384 units. Then recalculate with the finite population of 1,341 with the following formula.

\[
\text{New Sample Size} = \frac{SS}{1 + \frac{SS}{\text{pop}} - 1}
\]

where: \( \text{pop} = \text{population} \)

The final calculation results the number of sample size needed of 299 units. So, I decided to have a sample size of 300 units. I use the systematic sampling technique to pick up the sample. The method I used can be explained as the following.

\[
\begin{align*}
\text{Population (N)} &= 1,341 \\
\text{Sample size (n)} &= 300 \\
\text{Interval (N/n)} &= 4.47
\end{align*}
\]

The interval is 4.47. The number to be selected will be between 1 – 4. I selected number 4 as the first number. Then, every fourth unit will be selected into my sample (i.e. 4, 8, 12, 16, …) until it reaches 300 units. The four subcategories of Thai food exporters are alphabetically listed. I began with the first category and continued to the last category. The number of sample for each subcategory is presented in table 3-3.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total number of firms</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thai food exporters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canned food/foods in containers</td>
<td>690</td>
<td>153</td>
</tr>
<tr>
<td>Chilled/frozen foods</td>
<td>222</td>
<td>51</td>
</tr>
<tr>
<td>Dried/dehydrated foods</td>
<td>234</td>
<td>51</td>
</tr>
<tr>
<td>Semi-processed foods from animal</td>
<td>195</td>
<td>45</td>
</tr>
</tbody>
</table>

**Total** 1,341 300

Table 3-3 Number of sample size

3.6 Data Collection

There are two types of data available when conducting a research: primary and secondary data. Primary data is the data that researchers collect by themselves. The main advantage is that the data are directly collected toward the purposes of the research at hand. However, the disadvantage is that it will take a long time to collect the data. It also costs a lot and probably difficult to access the right respondents. Primary data can be collected through the sources shown in figure 3-2.

![Figure 3-2 Source of primary data (Ghauri and Grønhaug, 2002, p.81)]
Secondary data is the data that already collected for some other purposes. This lead to the disadvantage because the data might not fit to research problem being studied. It should be used with caution. Researchers may use to answer partial of research problem. Another thing needs to be considered is the reliability of the secondary data. Nonetheless, the main advantages of secondary data are time and cost saving. Researchers may begin with secondary data to see whether it has enough information. If not, researcher may employ primary data. Secondary data can be divided into internal and external sources. If the company effectively keeps information, that information may be enough to answer the problem. The sources of secondary data are shown in figure 3-3.

<table>
<thead>
<tr>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Sales invoices</td>
</tr>
<tr>
<td>- Salespeople call report</td>
</tr>
<tr>
<td>- Salespeople expense accounts</td>
</tr>
<tr>
<td>- Credit memos</td>
</tr>
<tr>
<td>- Warranty cards</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Works</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Directories</td>
</tr>
<tr>
<td>- Periodicals</td>
</tr>
<tr>
<td>- Statistical sources</td>
</tr>
<tr>
<td>- Financial records</td>
</tr>
<tr>
<td>- Geodemographic data</td>
</tr>
<tr>
<td>- Diary panel data</td>
</tr>
<tr>
<td>- Store audit data</td>
</tr>
<tr>
<td>- Scanner data</td>
</tr>
<tr>
<td>- Advertising exposure data</td>
</tr>
</tbody>
</table>

Figure 3-3 Sources of secondary data (Churchill and Iacobucci, 2005, p. 173)

Primary data is used for this study. Using primary data provides me the opportunity to specify information needed for thesis emphasis. Consistent with the majority of the past works on leadership style and e-commerce, a survey methodology was used to collect data. The instrument for the survey is self-administered questionnaire.

300 questionnaires including stamped envelope were mailed to target samples along with the cover letter introducing the purposes of the study and asking the respondents to fill and return the questionnaire. The sample of cover letter is present in Appendix a. The questionnaire was divided into three parts:

- **Part 1** General information about respondent contains 5 questions
- **Part 2** Leadership style question contains 35 questions
- **Part 3** E-commerce adopting and attitude contains 5 questions

Sample of questionnaire is presented in Appendix b. All questionnaires were sent and received between 17 April 2005 and 7 May 2005. 212 questionnaires were received. The response rate was 70.67% Of this number, 18 questionnaires were uncompleted and unusable. The final number of completed questionnaires for analysis is 194.
3.7 **Analysis Tool**

Each question in the questionnaire is coded for analysis. This is done by using statistical computer software named SPSS (Statistical Package for the Social Sciences). The program is widely known and used in quantitative research. The feature of the program allows researchers to analyze data very easily and conveniently.

The questions used in the questionnaire are closed-response questions. Aaker et al. (2004) stated that there are two basic formats for closed-ended questions. The first asks respondents to make one or more choices from a list of possible responses. The second is a rating scale where the respondent is given a continuum of labeled categories that represents the range of responses. Part 1 and part 3 of the questionnaire are mainly the first type of closed-ended questions. The whole part 2 and last question in part 3 are the second type, rating scale.

A frequency distribution will be used to show information relating to respondents’ general background, type of leadership styles, e-commerce using inside firm, and attitude toward the advantages of e-commerce.

Then, cross-tabulation is used to identify the correlation between leadership style and e-commerce adoption based on research framework in chapter two. The statistical test used here is a Pearson Chi-square test. The results will be presented in appropriate graph and table.

In case that Chi-square yield the result that support the hypothesis, I would further expand the analysis by run regression analysis to see if there is other factors influence the level of e-commerce adoption. If the chance arises, I might be able to develop prediction equation of e-commerce adoption.
CHAPTER FOUR

4. Analysis and Result

4.1 General Information about Respondents

4.1.1 Gender and Age

From the completed and usable questionnaires of 194, 58% are male and 42% are female. The age of respondents ranges from four different clusters. The result shows the minimum age is 28 and maximum is 62 and majority (34%) is between 45 and 54 years of age.

4.1.2 Education and Management Position

Most of respondents are in top management position (CEO, Managing Director, Factory manager, General manager) with the number of 70% The number of middle management (Department manager, Assistant manager) and bottom management (Supervisor, Group leader) are 21% and 9% respectively. The survey indicates that the managers are well educated. 51% have bachelor degree and 44% have master degree.
4.1.3 Number of employees

The firms participated in the survey range from small business to large business. The majority of the firms have less than 50 employees (47%). The second largest group is the firms that have more than 200 employees (23%). The rest ranges between 50 and 200 employees.

4.2 Leadership Style

The survey instrument was based on TP leadership questionnaire. It contains 35 questions to measure the leader the level of task and people concern. The score of each task and people is used to indicate the level of shared leadership. Full scoring guide and how to interpret the score can be found in Appendix b

<table>
<thead>
<tr>
<th>Category</th>
<th>Minimum score</th>
<th>Maximum score</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task oriented</td>
<td>6</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>People oriented</td>
<td>2</td>
<td>13</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 4-1 Mean of task and people oriented leadership

The mean score for task concern is 12 points and for people concern is 9. The minimum and maximum score are shown in table 4-1. From the mean score, the leadership style of the managers in Thai food exporters is medium shared leadership. Figure 4-6 also shows the percentage of three level of leadership. The majority is medium shared leadership (80%).
4.3 E-commerce Adoption and Attitude

4.3.1 Company web site and e-mail

The empirical result shows that most companies have web site and their own e-mail. 71% say yes and 29% say no to both questions.

4.3.2 Maintenance and Online ordering and payment

When the firms were asked whether they have assigned staff or department to responsible to regularly taking care, maintaining and updating the web site, more than half say no (53%). Moreover, the survey indicates clearly that 85% do not provide online ordering and payment for customers. There is only 15% provide full transaction functions for customers.

4.3.3 Level of e-commerce adoption

When the firms were asked whether they have assigned staff or department to responsible to regularly taking care, maintaining and updating the web site, more than half say no (53%). Moreover, the survey indicates clearly that 85% do not provide online ordering and payment for customers. There is only 15% provide full transaction functions for customers.
From the result shown in 4.3.1 and 4.3.2, we can draw the level of e-commerce adoption that 56% are information based e-commerce—the firms that have web site, e-mail but do not provide online ordering and payment, 29% are non-adoption—the firms that have no web site, and 15% are transaction based e-commerce—the firms that provide full transaction services on the web site.

4.3.4 Attitude toward applying e-commerce

The managers were asked to give an attitude toward adopting e-commerce into their business. The survey yields the positive attitude of employing e-commerce. Figure 4-12 to 4-16 present the attitude of the managers through five scales. The majority seem to answer agree and strongly agree for all five questions. There are around 84% believe that e-commerce can help them increase the profit, 83% believe that e-commerce can help reducing operating costs, 94% believe that e-commerce can help the firm quickly expands business globally, 97% state e-commerce make them fast communicate with customers, and 97% also believe e-commerce can help the firm improves its image.
4.3.5 Interpretation of attitude

The study use five rating scales ranging from strongly disagree to strong agree. The numerical value of scale is between –2 to +2. To interpret the result, the four intervals are divided to five thoughts. Table 4-2 presents the interval and meaning of the value. Then, the mean of each question and interpretation are presented in table 4-3.

<table>
<thead>
<tr>
<th>Scale Interval</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2.00 – -1.21</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>-1.20 – -0.41</td>
<td>Disagree</td>
</tr>
<tr>
<td>- 0.40 – 0.40</td>
<td>No idea</td>
</tr>
<tr>
<td>0.41 – 1.20</td>
<td>Agree</td>
</tr>
<tr>
<td>1.21 – 2.00</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Table 4-2 Meaning of scale interval

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Mean</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-commerce can help increasing profit</td>
<td>0.88</td>
<td>Agree</td>
</tr>
<tr>
<td>E-commerce can help reducing operating costs</td>
<td>0.92</td>
<td>Agree</td>
</tr>
<tr>
<td>E-commerce can help the firm quickly expands business globally</td>
<td>1.31</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>E-commerce can help the firm fast communicate with customers</td>
<td>1.53</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>E-commerce can help the firm improves its image</td>
<td>1.48</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Table 4-3 Interpretation of attitude toward adopting e-commerce

4.4 Hypothesis Testing

The study wants to test is there an association between leadership style and e-commerce adoption. The research framework (see figure 2-13) is tested here. A combination of autocratic leadership (task concern) and laissez-faire leadership (people concern) makes three types of shared leadership that presented in figure 4-6. The hypothesis is tested by using SPSS program. I first test the correlation by using A Pearson Chi-square test with statistical significant level of 0.05. Cross tabulation is shown in table 4-4. The null and alternative hypotheses are stated as follows.

H$_0$: There is no difference in the level of e-commerce adoption between leadership styles.
H$_1$: There is a difference in the level of e-commerce adoption between leadership styles.
Type of e-commerce adoption \* Shared leadership Crosstabulation

<table>
<thead>
<tr>
<th>Type of e-commerce adoption</th>
<th>Shared leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low shared leadership</td>
</tr>
<tr>
<td>Non-adoption</td>
<td>12</td>
</tr>
<tr>
<td>Information based e-commerce</td>
<td>9</td>
</tr>
<tr>
<td>Transaction based e-commerce</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
</tr>
</tbody>
</table>

Table 4-4 Cross tabulation of type of e-commerce adoption and shared leadership

The data shown in above table (3x3) are computed with degree of freedom of 4. A Pearson chi-square test contributes a value of 17.36 that more than critical value of 9.49 (\(\alpha = 0.05\), df = 4). The \(p\) value is <0.002. The calculation indicates that we can reject \(H_0\). This means there is a difference in e-commerce adoption between leadership styles.

4.5 Factors Influence E-commerce Adoption

Since the result confirms the hypothesis statement of the study, I further expand the analysis by run regression model to see if there is other factors influence the level of e-commerce adoption. All independent variables were added to the model. Then the one that contributes largest \(p\) value was dropped once at a time until all variables have significant \(p\) value less than 0.05. Finally, the two factors that influence the level of e-commerce adoption are shared leadership and number of employees. Table 4-5 to 4-7 show the outcome of calculation.

Table 4-5 Regression model summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.370a</td>
<td>.137</td>
<td>.128</td>
<td>.60844</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Number of employees, Shared leadership

Table 4-6 An analysis of variance

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td></td>
<td></td>
<td>15,194</td>
<td>.000a</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td></td>
<td></td>
<td>.370</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>81,959</td>
<td>193</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Number of employees, Shared leadership

b. Dependent Variable: Type of e-commerce adoption

Table 4-6 An analysis of variance
### Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>-1.62</td>
<td>-0.785</td>
<td></td>
<td>.433</td>
</tr>
<tr>
<td>Shared leadership</td>
<td>0.406</td>
<td>0.276</td>
<td>4.094</td>
<td>.000</td>
</tr>
<tr>
<td>Number of employees</td>
<td>0.088</td>
<td>0.001</td>
<td>3.343</td>
<td>.001</td>
</tr>
</tbody>
</table>

*Dependent Variable: Type of e-commerce adoption*

The correlation is quite weak since the R value is 0.370 and R² value is 0.137 which far from 1. The model contributes F value of 15.194 and p value <0.000. The t value of shared leadership and number of employees are 4.094 and 3.343 respectively. Both variables have p value <0.05. So, I can develop prediction equation of regression model as:

\[
\hat{Y} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon
\]

\[
\hat{Y} = -0.162 + 0.406 X_1 + 0.088 X_2
\]

where

\[
\hat{Y} = \text{The level of e-commerce adoption}
\]

\[
X_1 = \text{Shared leadership}
\]

\[
X_2 = \text{Number of employees}
\]

I re-test ‘number of employees’ variable and the level of e-commerce adoption with a Pearson chi-square test. The following cross tabulation table (3x5) is computed with degree of freedom of 8. The chi-square test contributes a value of 56.18 that more than critical value of 15.5 (\(\alpha = 0.05, df = 8\)). The p value is <0.000. This means that there is a difference in e-commerce adoption between different numbers of employees—the size of the company.

### Number of employees * Type of e-commerce adoption Crosstabulation

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>Type of e-commerce adoption</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-adoption</td>
<td></td>
</tr>
<tr>
<td>Less than 50 people</td>
<td>39</td>
<td>44</td>
</tr>
<tr>
<td>50 - 100 people</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>101 - 150 people</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>151 - 200 people</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>more than 200 people</td>
<td>3</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>108</td>
</tr>
</tbody>
</table>

Table 4-8 Cross tabulation of type of e-commerce adoption and number of employees

This chapter has analyzed empirical data following the structure of questions in survey instrument. All data were transformed into appropriate graphics and tables. I also tested the hypothesis, which the result confirmed my assumption I have before doing this study. Furthermore, I developed prediction equation from variables I have in the study. Next chapter, I will discuss more detail about the finding. Then, I will draw a conclusion and implication of the study.
CHAPTER FIVE

5. Discussion, Conclusion and Implication

5.1 Discussion

The empirical study fulfills the objectives of the study. It presents the association between e-commerce adoption and leadership style, provides information to quantify what level of e-commerce adoption and what type of leadership style among Thai food exporters. The result also measures the attitude toward adopting e-commerce of the managers.

5.1.1 Leadership styles and E-commerce adoption

The finding indicates that the majority of leadership style among Thai food exporters is medium shared leadership (80%) and the current situation of e-commerce adoption is in the level of information based e-commerce (56%). As stated in introduction part, e-commerce in Thailand is still not achieved compared to other countries. The result is similar to the study of Buhalis and Deimezi (2003) who argued that e-commerce in Greece is still in its infancy. The adoption of new technologies in SMEs is generally lower than other European countries. Nonetheless, the e-commerce adoption differs from country to country. Each country has different factors that influence e-commerce development. In France, for instance, even it is seen as an early adopter in information technology such as Minitel and EDI, but by mid-2001 France was still far behind the early adopters of e-commerce over the Internet (Brousseau, 2003). So, since e-commerce is quite new issue in Thailand, I do believe that the trend of e-commerce in Thailand is viable and will move forward.

When it comes to statistical test, a Pearson Chi-square yields the outcome that there is a difference in e-commerce adoption between leadership styles. From the number of medium shared leadership, 71% of them already adopt e-commerce into their businesses but different type of adoption. The majority or 56% are in the level of information based e-commerce and minority or 15% are in the level of transaction based e-commerce. Nevertheless, the result indicates that around 29% of medium shared leadership have still not adopted e-commerce at all.

For low shared leadership and high shared leadership, the result seem to contradict each other. The majority of low shared leadership do not employ e-commerce yet. None of them provide full transaction function to customers. On the other hand, high shared leadership seems to aware of the importance of e-commerce since all of them have somewhat adopt e-commerce into their business. Even the majority (71%) is still in the level of information based but some of them (29%) already provide full transaction services for their customers.

Even though the majority is in medium shared leadership style. The empirical study shows that Thai managers, in average, concern more on task rather than people. The mean for task oriented is 12 and for people oriented is 9. Due to the fact that Thailand is developing country where the job competition is considerably high. Employees are pressured if they do not perform work well enough with the expectation of the managers. It is common and quite easy for managers to replace non-perform employees. So, it can be said that Thai managers tend to be task oriented more than people oriented leadership. Nevertheless, task oriented leadership and people oriented leadership are still valid in today business environment and both of them can be used in different working conditions. Furthermore, since most scholars and
practitioners agree that there is no specific type to leadership style work best in all situations. Each style is suitable for particular phenomena. Leader can use different styles in different situations since several studies show that leadership is ‘learn to be’ rather than ‘born to be’. I also believe that individuals can learn to act as whatever leadership styles they want to be.

In regard to the subject of this study, Humphreys (2001) claimed that the behaviors associated with transformational leadership were significantly related to support for emerging technology. Transformational leadership in his study is more likely to be people oriented concern while transactional leadership is more likely to be task oriented concern. From the finding in my study, I would argue that it is not necessary that leader who concerns more on people will adopt new technology more than the leader who concerns more on task. I found that leaders who are high in both task and people concern (high shared leadership) tend to have a higher level of e-commerce development than those who have lower task and people concern (medium and low shared leadership).

5.1.2 Attitude toward adopting e-commerce

The attitude finding seems to contradict with what the managers have already adapted e-commerce. The number of transaction based e-commerce is still low but they are aware of the advantages of applying e-commerce into their businesses. The empirical result presents the positive attitude of the managers. All seem to agree and accept the possibility that e-commerce can help them increase company’s profit, reduce operating costs, quickly expand business globally, fast communicate with customers and improve company’s image.

Most managers strongly agree that e-commerce can improve company image. The finding of this study confirms the study done by Khatibi et al. (2003) that examined e-commerce in Malaysia. The perceived benefits include competitiveness, better image, efficient processes, and better information system. Furthermore, empirical result also gets along with the list of 50 advantages of e-commerce adoption from Pires and Aisbett (2003). By properly conducting e-commerce, the company is possible to gain more on sales and customers that lead to potential to make more profit and drop unnecessary costs. Moreover, increasing profit and reducing costs are the benefits of e-commerce mostly referred in many studies. (e.g. Fellenstein and Wood, 2000; Khatibi et al, 2003; Pires and Aisbett, 2003; Turban et al, 2002).

It is widely said in many studies that the most function used on the Internet is e-mail. It facilitates people to communicate each other in a fast pace and possibly no cost at all in some firms. The empirical data indicates that majority of managers (71%) do have their own e-mail and they strongly agree that it can help them fast communicate with customers. Rowlatt (2001) noted that Internet technology could be used to build private communication network within the organization to manage workflow, coordinate activities and share information to improve process efficiency. Since we all know the principle of Internet is communication network. It is obviously seen that it can also create network both inside and outside company.

In a particular attitude of e-commerce can help the firm quickly expands business globally, as we know that there is no border barrier for e-commerce, customers can access to company web site anywhere in the world where Internet connection is available. Generally speaking, exporters, by nature of industry, are already in international business environment. E-commerce can be seen as an effective channel to expand business more rapidly. Stare (2003) argued that the general attitude on the potential for e-commerce in services trade is rather
enthusiastic and emphasizes extraordinary opportunities for its expansion. The finding shows that most managers strongly agree to this advantage of e-commerce. However, most companies are still in information based e-commerce rather than in transaction based e-commerce. As mentioned earlier that e-commerce in Thailand is still in its early stage, most companies are probably not ready to fully adapt e-commerce into their kind of business. The countries, which rely on high quality e-tradable services, are perceived to have a better position to take advantage of e-commerce in services trade than those, which rely on location-bound services (Stare, 2003).

5.1.3 Factors influence e-commerce adoption

In this study, it is not only the type of leadership style influences the level of e-commerce adoption but I also found that number of employees, from statistical test, can be one factor that possibly indicate the level of e-commerce adoption. Many studies have investigated and compared information technology or e-commerce adoption between large and small firms. Many found that larger firms are potential to have a higher level of adoption than smaller firms. (e.g. Beveren and Thomson, 2002; Grandon and Pearson, 2004; Pratt, 2002) However, some studies argued that smaller firms might use new technologies for sustaining and prospering their business more efficiency than their larger counterparts since they are more flexible in decision-making. Although smaller firms are usually seen that they have scarce resources in term of human, financial and technical resources as compared to their larger rival. They sometime apply new technology more effective than larger firm. (e.g. Daniel and Grimshaw, 2002; Lynn et al, 1999)

<table>
<thead>
<tr>
<th>Type of e-commerce adoption</th>
<th>less than 50 people</th>
<th>50 – 100 people</th>
<th>101 – 150 people</th>
<th>151 – 200 people</th>
<th>more than 200 people</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Adoption</td>
<td>unit %</td>
<td>unit %</td>
<td>Unit %</td>
<td>unit %</td>
<td>unit %</td>
</tr>
<tr>
<td>Transaction based e-commerce</td>
<td>44/48</td>
<td>18/50</td>
<td>3/50</td>
<td>3/20</td>
<td>3/86</td>
</tr>
<tr>
<td>Total</td>
<td>91/100</td>
<td>36/100</td>
<td>6/100</td>
<td>15/100</td>
<td>46/100</td>
</tr>
</tbody>
</table>

Table 5-1 Size of the firms and e-commerce adoption

The number of employees in this study can be grouped into three different sizes: small firms (less than 50 employees), medium firms (50 – 200 employees), and large firms (more than 200 employees) The empirical data indicates the distinction between small firms and large firms. Most small firms are in the first-two type of e-commerce adoption—43% are non-adopters while 48% are in information based e-commerce. On the other hand, large firms tend to pass the first stage of e-commerce development. The majority is already in information based e-commerce (86%) The size of the firm in this study can be seen as reactive driver in the study of Hawkins and Prencipe (2000). It is an internal factor or indirect pressure to maintain an e-commerce presence. The finding agrees with previous research that larger firms are likely to have a higher level of e-commerce adoption.
5.2 Conclusion and Implication

Being an effective leader in today business environment is a challenged task. The world has shifted to the digital era where social and business structures are rapidly changed. The trend of globalization forces all leaders to regularly learn more on what was changed and what is being changed. Today, companies that already adapt new business concept probably have a better application that satisfy more customers than companies that work in the old manner. What is work in the past is probably obsolete in today. One of the popular issues during the last two decades is the phenomenon of e-commerce. Since the network of Internet has facilitated people to easily communicate with each other. Business also benefit from the growth of Internet.

This study has identified what type of leadership styles and what level of e-commerce adoption among Thai food exporters. I found that most managers are medium shared leadership style, which inclines to task concern rather than people concern. The majority of Thai food exporting companies is in the level of information based e-commerce.

The thesis statement of the study is ‘what is the association between leadership styles and e-commerce adoption?’ By using appropriate statistical technique, I can conclude that leader with different type of leadership styles adapts e-commerce differently. The finding indicates that leaders who have high shared leadership tend to have a higher level of e-commerce adoption than those who have medium shared leadership which is higher than low shared leadership. It would therefore seem that the leaders who are high in both task and people concern would be early e-commerce adopters in Thailand.

Even the number of adopters who provide full transaction e-commerce is still low compared to other countries. I found that the trend of e-commerce in Thailand is viable since most managers agree and accept the advantages of employing e-commerce into their business. They have positive attitude toward e-commerce. Most of them believe e-commerce can generally help the firm increases profit, reduces operating costs, quickly expands business globally, fast communicates with customers, and improves its image. From these positive attitudes and due to the fact that e-commerce in Thailand is new and in early stage, it is possible that the number of adopters who provide full transaction e-commerce services would dramatically increase in the near future.

The study also found that the number of employees or the size of the company does affect e-commerce adoption as well. Large firms tend to have a higher level of e-commerce adoption than smaller firms. It would probably seem that larger firms have potential to adopt new business concept more than smaller firms because they may have sufficient resources to support new technology. Nonetheless, as mentioned in chapter two, other factors also influence e-commerce adoption. Many studies have suggested diverse factors including competition pressure, customers demanding, global and local forces, legislation and regulatory environment to support e-commerce, company internal resources, company’s capability in IT integration, perception of e-commerce and so forth. (e.g. Beach, 2004; Grandon and Pearson, 2004; Han and Noh, 2000; Hawkins and Prencipe, 2000; Keeling et al, 2000; Meehan, 2002; Palacios, 2003; Poon and Swatman, 1999; Teo and Ranganathan, 2004; Tsao et al, 2004; Tigre and Dedrick, 2004) For those who interest in the area of e-commerce diffusion may need to consult with other studies. The value of the study can be seen on a way to complement the knowledge of how the firms apply new technology such e-commerce.
5.3 Further research

Although the study has been carefully conducted but there are some limitations of the study as mentioned in chapter one. Several instruments are available to measure leadership style. Further researches may employ other instrument instead of TP leadership questionnaire to compare the result and probably lead to the generalization of the association between leadership styles and e-commerce adoption. This study could then become more consolidated.

The study measures only some apparent advantages of e-commerce adoption and disregard to measure the attitude toward disadvantages of e-commerce. Future studies may add more advantages to the questionnaire along with the disadvantages of e-commerce to measure the attitude of the leaders. Also, more variables may be added to identify factors and barriers that influence e-commerce adoption.

Size of the company does matter in this study but the size is based on only one criterion, number of employees. Other variables such as revenue, market share, or customers’ perception can also be used to determine the size of company. Since several features and functions of e-commerce can be automatically operated by computer, pure e-commerce companies may have less employees but make more profit than conventional companies. Further studies may have to consider other variables when identifying the size of company.
REFERENCES


Bennett, R. (1986) ’Meaning and method in management research’, *Graduate Management Research*, 3(3)


APPENDIXS

Appendix a: Cover Letter

17 April 2005

(Address of respondent)
..........................
..........................

Dear Mr/Miss ................................................
Subject: Asking a favor of filling questionnaire

My name is Mr Kittipong Sophonthumapharn, graduate student at Blekinge Institute of Technology Sweden. I am conducting a master thesis on the topic of Leadership styles and E-commerce adoption: An analysis of Thai food exporters. The result of this study will be benefit to those who are interested in current situation of Thai exporters. Moreover, the finding can be used as a case study in business administration courses.

To complete the study, I ask you for a favor to fill out the enclosed questionnaire. It is two pages questionnaire consists of 3 parts. It will take less than 10 minute to answer all simple questions. I have enclosed stamped reply envelope with this letter. I will be very appreciated if you could devote your valued time fill out the form and return it to me within **30 April 2005**

Of course all answers are confidential and will be used only in combination with those of other executives and managers for this thesis study. If you are interested in receiving a report on the findings of this research, just write your name and e-mail address on the questionnaire. I will be glad to send you a final report when it is ready.

Please return the completed questionnaire at your earlier convenience. Thank you for your help!

Sincerely

Mr Kittipong Sophonthumapharn
kittipong@hotmail.com
Appendix b: Questionnaire

**Direction:** This questionnaire consists of 3 parts. Please check ✔ or fill text into appropriate box and space

**Part 1 General information of respondent**

1. **Gender**
   - 1. Male
   - 2. Female
2. **Age ______**
3. **Education**
   - 1. High School
   - 2. Vocational
   - 4. Master
   - 5. Doctorate
   - 6. Other
4. What is your management position?
   - 1. Top management (CEO, Managing Director, Factory manager, General manager)
   - 2. Middle management (Department manager, assistant manager)
   - 3. Bottom management (Supervisor, group leader)
5. How many employees in the firm?
   - 1. less than 50 people
   - 2. 50 – 100 people
   - 3. 101 – 150 people
   - 4. 151 – 200 people
   - 5. more than 200 people

**Part 2 Leadership questionnaire**

Please check ✔ in the box that you most likely behave in the described way: always (a), frequently (f), occasionally (o), seldom (s), or never (n)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>1. I would most likely act as spokesman of the group</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>2. I would encourage overtime work</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>3. I would allow members complete freedom in their work</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>4. I would encourage the use of uniform procedures</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>5. I would permit the members to use their own judgement in solving problems.</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>6. I would stress being ahead of competing groups.</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>7. I would speak as a representative of the group.</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>8. I would needle members for greater effort.</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>9. I would try out my ideas in the group.</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>10. I would let the members do their work the way they think best.</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>11. I would be working hard for a reward or recognition.</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>12. I would tolerate postponement and uncertainty.</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>13. I would speak for the group if there were visitors present.</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>14. I would keep the work moving at a rapid pace.</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>15. I would turn the members loose on a job and let them go to it.</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>16. I would settle conflicts when they occur in the group.</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>17. I would get swamped by details.</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>18. I would represent the group at outside meetings</td>
</tr>
<tr>
<td>a</td>
<td>f</td>
<td>o</td>
<td>s</td>
<td>n</td>
<td>19. I would be reluctant to allow the members any freedom of action.</td>
</tr>
</tbody>
</table>
Part 3  
E-commerce adoption and attitude: Please check ✔ in the box that fit to your firm.

1. Does your firm have a web site?  
   1. Yes  www._________________________
   2. No (go to question 5)

2. Does your firm have your own e-mail? (not free e-mail like hotmail or yahoo mail)  
   1. Yes  2. No

3. Does your firm have staff or department who responsible for regularly taking care, maintaining, and updating the web site?  
   1. Yes  2. No

4. Does your web site provide online ordering and payment to the customers?  
   1. Yes  2. No

5. To what extent do you agree with the following statements relating to adopting e-commerce into your firm?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>No idea</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase profit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce operating costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quickly Expand business globally</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fast communicate with customers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve image of the firm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you want to receive a report please write your e-mail: ________________________________
Scoring guide for leadership style questionnaire – Part 2

T-P Leadership questionnaire

1. Circle the numbers 8, 12, 17, 18, 19, 30, 34, and 35.
2. Write the number (1) in front of the circled number IF you responded Seldom or Never.
3. Also write a number (1) in front of item numbers that are NOT CIRCLED if you responded Always or Frequently for the uncircled numbers.
4. Circle the number (1’s) which you have written in front of the following questions: 3, 5, 8, 10, 15, 18, 19, 22, 24, 26, 28, 30, 32, 34, and 35.
5. Count the circled numbers (1’s). This is your score for “Concern for People.” Record the score (Total of # 1’s) in the blank following the letter “P”.
6. Count the uncircled number (1’s). This is your score for “Task. Record this number in the blank following the letter “T”.

     T__________       P__________

Interpretation of the score

Directions: To determine your style of leadership, mark your score on the concern for task dimension (T) on the left-hand arrow below. Next, move to the right-hand arrow and mark your score on the concern for people dimension (P). Draw a straight line that intersects the P and T scores. The point at which that line crosses the shared leadership arrow indicates your score on that dimension.