# Entrepreneurs' Adaptability to Competitiveness in the Orchid Industry: A Case Study of Thailand

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## Abstract

A study of entrepreneurs' adaptability to competitiveness in the orchid industry is to study the major qualifications of orchid entrepreneurs to improve orchid industry's competitiveness. The research methodology employed qualitative and quantitative methods. For qualitative method, the researcher compiled secondary information and conducted in-depth interview. For quantitative method, the researcher developed questionnaires and sent to Thai orchid industry entrepreneurs. The data were analyzed by calculating the appropriate statistical values. The findings of the desirable qualifications and traits of entrepreneurs are leadership, increase of efficiency, strong drive for responsibility, concern for subordinates, self-guidance, and determination.

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**Keywords:** Entrepreneurs' Adaptability, Competitiveness, Thai Orchid Industry

# Background

Presently, the Netherland is the top orchid exporter in the world. In 2008, it recorded a total export value of 120 million US dollars, most of which were temperate climate flowers, namely, Cymbidium. Major markets in Europe include France, Italy, Germany and the UK. Thailand is the world's second largest orchid exporter but the largest exporter of tropical orchids including Dendrobium, Mokara, and Oncidium. Thailand has exported orchids since 1965 and is the world's largest orchid flower exporter. Thailand's orchid flower production capacity is 44,000 to 45,000 tons per year. The Dendrobium is most popularly cultivated genus in Thailand, constituting 80% of the total orchid production areas. There are approximately 300 exporters and 2,000 small farmers in Thailand. Thailand's total orchid farming area is approximately 480 acres, producing approximately 45,000 tons per year. For potted orchids, there are 50 exporters at most and approximately 500 small farmers. Although orchid farms are scattered throughout the country, the major farming area is in the vicinity of Bangkok. The largest orchid flower production area is in NakhonPathom province, followed by SamutSakhon, Bangkok, Rathchaburi, Nonthaburi and Ayuttaya provinces, respectively (Office of the Agricultural Adviser, Washington D.C., 2010-2011: 2-3). In 2009, Thai orchid exports represented 24,614.41 tons in volume and approximately 78 million US dollars in value. Major import markets include China, Japan, the USA, Italy, India, Taiwan, the Netherlands and Vietnam (National Orchid Commission, 2011-2016).

Although Thailand is one of the world's top exporters of tropical orchid flowers, most entrepreneurs and farmers have encountered problems (National Orchid Commission, 2011-2016), including the following production problems. Producers often (1) do not proper utilize pesticides, especially in farms located near communities; (2) lack modern technological developments to improve and maintain product quality, extend product life and increase productivity; and (3) fail to continuously develop new species and introduce them into the market. Furthermore, (4) production volume fails to meet market demand because the Dendrobium flowers in the rainy season, resulting in an oversupply and price drop during this part of the year, while the products are in short supply and cannot meet foreign demand in the dry season. (5) Production costs are rising due to the sharp increase in the prices of such production factors as fertilizer and pesticides, while the prices of the products remain constant or decrease, sometimes failing to exceed the cost of standard quality. In addition, there is (6) a shortage of skilled labor with dependable knowledge to take proper care of orchid plants. Finally, (7) certain

orchid production areas have suffered from floods, as well as air and water pollution caused by factories nearby, resulting in slow growth, deformed stems and low production.

In addition, processing problems include a lack of innovation of processing technology to add value to the analysis of problems relating to the existing markets; inadequate air freight during the holiday season when in high export costs; and the use of chemicals on orchids before exporting which reduces the quality of orchids delivered to consumers. Export problems include (1) trade barrier measures imposed by trading partner countries, and (2) destination countries complaints about flower quality.

In the above discussion of the problems faced by the Thai orchid industry, many of the issues relate to the production, processing, and export, as well as personnel in relevant public and private sectors. Thus, entrepreneurial development is crucial to enhancing the competitiveness of the Thai orchid industry. The researcher is therefore interested in studying entrepreneur development in the Thai orchid industry in terms of which qualifications are required and how to produce successful entrepreneurs to improve competitiveness.

# Objective

To study the major qualifications of orchid entrepreneurs to improve orchid industry's competitiveness.

## Literature reviews

To study the role of entrepreneurs, we may study the role of the leadership because entrepreneurs are owners and act as leaders to manage their organization and the people in there. They need to critically reflect on how to work successfully in terms of the definition and role of a leader in the literatures. Many academics have provided definitions of a leader (Simon, Smithburg, & Thompson, 1971; Fiedler, 1967; Terry, 1960; Koontz &Donnel, 1959; Richard &Greenlaw, 1961). Simon, Smithburg and Thompson (1971) defined a leader as a person be able to bring people tighter to achieve a desired goal. Fideler (1967) suggested that a leader is a person who efficiently initiates or promotes changes in his group and facilitates productive relationships among group members. Dejnozka (1983) stated that a leader is a person who has been selected or appointed to control a group's activities to ensure the achievement of the group's targets. Stogdill (1950) defined a leader as a person who is able to encourage people to collaborate and achieve objectives that are perceived as desirable. Richard and Greenlow (1961) defined a leader as a person

who influences the behaviors, attitudes, beliefs, or values of others to achieve a goal in a specific situation. Tannenbaum, Weschler, and Massarik (1959) contended that leaders influence followers primarily through interpersonal interactions and communication to achieve one or more objectives.

In summary, a leader can be defined as a person who changes other group members' motives or competencies. This definition of leadership implies the use of influence and interpersonal relationships to affect followers' behaviors and actions. This definition also indicates that an effective leader is a person accepted or recognized as the group leader as a result of his characteristics in a given context, such being more extroverted, knowledgeable and intelligent than his peers.

Based on the definition of leader shown above, the researcher proposes several components of a leader and identifies the factors that are beneficial for the group. Bowers and Searshore's studies identified four factors of effective leadership. They are support, interaction, goal emphasis, and work facilitation. Regarding support, effective leaders of this type support their subordinates and help them advance their careers. These leaders emphasize their concerns for people such as having employee orientation, making them feel comfortable and creating a supportive working environment. Leaders emphasizing interaction create a friendly atmosphere. Leaders with a goal emphasis: motivate or stimulate their subordinates' dedication to achieve goal outputs or the successof the organization (production orientation). To this end, all subordinates are encouraged to actively work to achieve the group goals. Finally, leaders with a work facilitation emphasize on emphasis: their teams in the actual accomplishment of the group's and organization's goals through efficient management, planning and cooperation form all segments in the organization. This emphasis can be considered a mixture of adopting a production orientation and initiating a structure favoring success.

Based on the key traits of a leader presented in this paper, the benefit of the consideration leadership style is that leaders build positive, friendly relationships with their subordinates. They trust and respect one another. This leadership style is people-oriented. The initiating structure leadership style seeks high levels of productivity. Leaders' relationships with colleagues conform to the role and duty assigned according to the organization structure, procedures and communication channels. This leadership style is task-oriented which may best describe Thai entrepreneurs.

Moreover, the researcher also searched for the traits of a leader that best predictable success. Many studies address the critical characteristics of a leader (Teda, 1936; Rucker, 1977; Stogdill, 1982). For example, Tead (1936) presented several characteristics of a leader including a physical nervous energy; a sense of purpose and direction; enthusiasm; diligence; friendliness and integrity; technical master; knowledge, experience and determination; decisiveness; and cognitive intelligence. Rucker (1977) suggested eight leadership characteristics: wealth; well-being; enlightenment; skills; rectitude; respect; affection; and power. Stogdill (1982) reviewed many studies on leadership traits and concluded that some traits appear frequently when leaders are described. For example, most leaders are tall, well-built, strong healthy and well-dressed. Furthermore, leaders are often more intelligent and self-confident, and exhibit good personality integration or adjustment. Finally, leaders are powerful, honorable and of high reputation, contribute extensively to the group; and demonstrate empathy and interpersonal sensitivity.

In conclusion, qualities of a leader described above help the leader to achieve his goals. The personal characteristics that are essential to the success of a leader are superior intelligence, emotional maturity, motivation, problem-solving skills, managerial skills, leadership skills and the desire to lead. These characteristics can help leaders to adapt to a changing business environment.

# Research methodology

To gather information in accordance with the objectives, the researcher complied secondary information and conducted in-depth, semi-structured interviews with successful Thai orchid industry entrepreneurs who operate full-cycle businesses, from cultivating to exporting. The study was also based on interviews with grower groups not registered as companies, and professionals from educational institutions that offer orchid courses.

The researcher developed questionnaires to use with the Thai orchid industry entrepreneurs as a sample groups. The data were analyzed by calculating the appropriate statistical values, arithmetic means and standard deviations (SD), and by conducting percentage and factor analysis.

#### Findings

The findings of this study include general information related to Thai orchid industry entrepreneurs as well as qualifications and desirable attributes of Thai orchid entrepreneurs.

## General information

This study sought to gather information from groups of Thai orchid industry entrepreneurs, including producers, producers/exporters, agricultural extension officers, officials of the Royal Horticulture Society of Thailand and relevant orchid association presidents among others.

As shown in Table 1, the majority of the respondents were producer and exporters in Bangkok and the vicinity (43.3%), followed by Ratchaburi (19.2%), Kanchanaburi (11.7%), relevant parties in the Thai orchid industry (11.7%), SamutSakhon (10.0%), and Phethchaburi (4.1%).

**Table 1** Sample groups: producers/producers and exporters classified by province, and relevant parties in the orchid industry

Province/ Relevant parties	Percentage
Bangkokand the vicinity	43.3
Ratchaburi	19.2
Kanchanaburi	11.7
Relevant parties	11.7
SamutSakhon	10.0
Phetchaburi	4.1
Total (N=120)	100.0

# Desirable qualifications and traits of Thai orchid entrepreneurs

Based on the 31 desirable qualifications and traits of Thai orchid entrepreneurs, the sample groups strongly agreed on the following 25 characteristics: (1) problem solving skills; (2) honesty, diligence, thrifty, strong drive for responsibility; (3) determination/high desire for achievement; (4) use of appropriate technology to increase work efficiency; (5) continual planning; (6) continual self-development; (7) support of subordinates and self-development; (8) confidence creation among colleagues; (9) discreet decision making; (10) communication skills (instructing, training); (11) coordination skills; (12) clear understanding of the orchid business; (13) access to support networks relevant to the orchid business; (14) financial management capabilities; (15) self-confidence; (16) role modeling for subordinates; (17) farsightedness/ creativity; (18) concern for subordinates; (19) adaptability to the environment; (20) clear, systematic business plan; (21) ability to select a suitable business size; (22) full family support; (23) awareness of the industry's situations; (24) know-how to lead the business toward success; and (25) courage to face problems/ obstacles (means: 2.64, 2.63, 2.63, 2.49, 2.48, 2.47, 2.46, 2.45, 2.42, 2.40, 2.40, 2.39, 2.38, 2.38, 2.37, 2.37, 2.37, 2.36, 2.33, 2.32, 2.32, 2.28, 2.28, and 2.28, respectively).

The sample groups agreed to six other characteristics: (1) awareness of one's strengths relative to industry competitors; (2) plan in place to produce new orchids types; (3) awareness of one's weaknesses relative to competitors; (4) marketing management abilities; (5) strong willpower and risk-taking and (6) ability to accurately predict future competition outlook (arithmetic means: 2.23, 2.22, 2.19, 2.18, 2.16, and 2.13, respectively) (Table 2).

**Table 2** Arithmetic mean and standard deviation, qualifications and desirable traits of Thai orchid entrepreneurs

Desirable qualifications and traits	Arithmetic mean	Standard deviation
1. problem solving skills/responsibility	2.64	0.48
2. honesty,diligence,thrifty	2.63	0.48
3. determination/high desire for achievement	2.63	0.49
4. use of appropriate technology to increase efficiency	2.49	0.58
5. continual planning	2.48	0.50
6. continual self-development	2.47	0.52
7. supportof subordinates to self-development	2.46	0.55
8. confidence creation among colleagues	2.46	0.50
9. discreet decision making	2.45	0.52
10. communication skills (instructing, training)	2.42	0.53
11. coordination skills	2.40	0.54
12. clear understanding of the orchid business	2.40	0.68
13. access to support networks relevant to the orchid business	2.39	0.57
14. financial management capability	2.38	0.54
15. self-confidence	2.38	0.58
16. role modeling for subordinates	2.37	0.50
17. farsightedness/creativity	2.37	0.49
18. concern for subordinates	2.37	0.58
19. adaptability to the environment	2.36	0.49
20. clear, systematic business plan	2.33	0.66
21. ability to select a suitable business size	2.32	0.67
22. full family support	2.32	0.50
23. awareness of the industry's situation	2.28	0.64

Desirable qualifications and traits	Arithmetic mean	Standard deviation
24. know-how to lead the business toward success	2.28	0.65
25. courage to face problems/obstacles	2.28	0.71
26. awareness of one's strengths relative to peers	2.23	0.74
27. plan in place to produce newer kinds of orchids	2.22	0.66
28. awareness of one's relative to peers	2.19	0.73
29. marketing management abilities	2.18	0.66
30. strong willpower and risk-taking	2.16	0.55
31. ability to accurately predict future competition	2.13	0.72

N=120

This study analyzed the qualifications and traits that the sample groups strongly agreed were desirable with an arithmetic mean of 2.28-2.64 using factor analysis to obtain a small set of variables from a large set of variables (most of which are correlated with one another). The Kaiser-Myer-Olkin measure of sampling adequacy and appropriateness of factor analysis was 0.72, which can be interpreted as moderate.

Table 3 shows 25 variables, with six factors that can explain the variance (having eigenvalues higher than 1). These factors explained 75.93% of the total variance observed.

Factor 1: Leadership – with a sum of eigenvalues equal to 11.83, this factor explained 47.3% of the total variance using the following eight variables: (1) continual self-development; (2) adaptability to the environment; (3) determination/high desire for achievement; (4) role modeling for subordinate; (5) communication skills (instructing and training); (6) continual planning; (7) self-confidence; and (8) concern for subordinates.

Factor 2: Increase of efficiency- with a sum of eigenvalues equal to 2.03, this factor explained 8.10% of the total variance. The cumulative percentage the first two factors was 55.4%. This factor was composed of four variables; (1) use of appropriate technology to increase efficiency; (2) access to support networks relevant to the orchid business; (3) clear understanding of the orchid business; and (4) ability to select a suitable business size.

Factor 3: Strong drive for responsibility –with a sum of eigenvalues equal to 1.53, this factor explained 6.12% of the total variance. The cumulative percentage of the first three factors was 61.52%. This factor was composed of two variables: (1) clear, systematic business plan; and (2) know-how to lead the business toward success.

Factor 4: Concern for subordinates- with a sum of eigenvalues equal to 1.36, this factor explained 5.44% of the total variance. The cumulative percentage of the first four factors was 66.96%. This factor was composed of one variable, support of subordinates' self-development.

Factor 5: Self-guidance- with a sum of eigenvalues equal to 1.19, this factor explained 4.79% of the total variance. The cumulative percentage for the first five factors was 71.75%. This factor was composed of two variables; (1) problem solving skills and (2) honesty, diligence, thrift and strong drive for responsibility.

Factor 6: Determination – with a sum of eigenvalues equal to 1.04, this factor explained 4.18% of the total variance. The cumulative percentage for the first six factors was 75.93%. This factor was composed of one variable, courage to face problems/obstacles.

**Table 3** Factor analysis: Desirable qualifications and traits of Thai orchid entrepreneurs

Factor	Factor Loading	Eigenvalues	%of Variance Explained	Cumulative % of Explained
1. Leadership aspect		11.83	47.30	47.30
1.1 continual self-development	0.80			
1.2 adaptability to the environment	0.78			
1.3 determination/high desire for achievement	0.71			
1.4 role modeling for subordinates	0.69			
1.5 communication skills (instructing, training)	0.69			
1.6 continual planning	0.68			
1.7 self-confidence	0.66			
1.8 caring of/concern for subordinates	0.61			
2. Increase of efficiency aspect		2.03	8.10	55.40
2.1 use of appropriate technology to increase efficiency	0.73			
2.2 access to support network relevant to the orchid business	0.71			
2.3 clear understanding of the orchid business	0.69			
2.4 ability to select a suitable business size	0.68			

Factor	Factor Loading	Eigenvalues	%of Variance Explained	Cumulative % of Explained
3. Strong drive for responsibility aspect		1.53	6.12	61.52
3.1 clear, systematic business plan	0.91			
3.2 know-how to lead the business toward success	0.74			
4. Concern for subordinate aspect		1.36	5.44	66.96
4.1 support of subordinates ' self-development	0.76			
5. Self guidance aspect		1.19	4.79	71.75
5.1 problem solving skills	0.82			
5.2 honesty, diligence,t hrifty,	0.68			
strong drive for responsibility				
6. Determination aspect		1.04	4.18	75.93
6.1 continual self-development	0.89			

N=120. Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

In this study, professionals and entrepreneurs also identified the following desirable characteristics of successful entrepreneurs. The Father of Thai Orchids, Professor Rapee Sagrik, asserted that successful entrepreneurs in Thailand's orchid industry today and in future "must be energetic and diligent. They must be interested in continuously learning. They must think independently, having the capability to develop and diversify and avoid sticking to traditional values. They must learn what competitors are thinking by "hands doing, eyes looking, ears listening" and develop and build a human labor force for the orchid industry." (Rapee Sagarik, interviewed on 10 December 2013). The Chairperson of Excel Orchid Co., Ltd., Tipakorn Sangutha indicated that Thai orchid entrepreneurs "...must prioritize the quality of orchids starting from the beginning stage, i.e., harvesting, to the final stage, - packing and use proper fertilizer and disease control. Entrepreneurs must respond to the needs of customers. For example, the delivery of orchids must be in the amount required by the customers and must be punctual. They must have a dogged determination and energy to constantly develop themselves and search for new

species and packaging approaches. In addition, the government must play an important role in enhancing the orchid import-export business. Educational institutions must educate students and stakeholders involved in the orchid business. For example, they should help to improve the quality of orchids to achieve distinguished characteristics such as improved shape and vase life to meet customers' needs. (Tipakorn Sanguthai, interviewed on 9 November 2012). An owner of an orchid farm, Thitikorn Chansorn said that entrepreneurs must be able to determine a suitable size for a business as labor problems have increased, in terms of a shortage of workers and an increase in labor cost. Furthermore, the entrepreneur should adopt new technology to maintain low costs. The government could organize training course to increase the knowledge of workers and supervisors to increase competiveness (Thitikorn Chansorn, interviewed on 17 November 2012). "Love what you are doing" (Suwan Hiranworawutthikul, interviewed on 26 November 2012). The Chairman of Kitjaren Company stated that entrepreneurs must have a good understanding of orchids, and be ready to learn from other orchid owners. You don't need to initiate everything on your own, but take care of the personal welfare of your workers to prevent an overly high turnover. Adapt to change be ready to accept and adjust to the difference between older and younger generations." (Sompong Taweesuk, interviewed on 17 November 2012).

## Conclusion

The survey study found that the sample group identified 25 qualifications and traits as being most important with arithmetic means of 2.28 – 2.64: (1) problem solving skills; (2) honesty, diligence, thrift and a strong drive for responsibility; (3) determination/high desire for achievement; (4) use of appropriate technology to increase efficiency; (5) continual planning; (6) continual self-development; (7) support of subordinates' self-development; (8) building confidence among colleagues; (9) discreet decision making; (10) communication skills (instructing and training); (11) coordination skills; (12) clear understanding of the orchid business; (13) access support networks relevant to the orchid business; (14) financial management capabilities; (15) self-confidence; (16) role modeling for subordinates; (17) farsightedness/creativity; (18) concern for subordinates; (19) adaptability to the environment; (20) clear, systematic business plan; (21) ability to select a suitable business size; (22) full family support; (23) awareness of the industry's situation; (24) know-how to lead the business toward success; and (25) courage to face problems/obstacles.

The desirable qualifications and traits of entrepreneurs weighted the highest by the sample group were analyzed using the factor analysis method. Six factors explain 75.93% of total variance. Therefore, the desirable qualifications for Thai orchid industry entrepreneurs should be as follows:

- 1) Leadership: (1.1) continual self-development, (1.2) adaptability to the environment, (1.3) determination/high desire for achievement, (1.4) role modeling for subordinates, (1.5) communication skills (instructing, training), (1.6) continual planning, (1.7) self-confidence, and (1.8) concern for subordinates.
- 2) Increase of efficiency: (2.1) use of appropriate technology to increase efficiency, (2.2) access to support networks relevant to the orchid business, (2.3) clear understanding of the orchid business and (2.4) ability to select a suitable business size.
- 3) Strong drive for responsibility: (3.1) clear, systematic business plan, (3.2) know-how to lead the business toward success.
  - 4) Concern for subordinates: (4.1) support of subordinates' self-development
- 5) Self-guidance: (5.1) problem solving skill, (5.2) honesty, diligence, thrift and strong drive for responsibility
  - 6) Determination: (6.1) courage to face problems/obstacles.

In qualitative terms, this study found that successful

Entrepreneurs must love their job and be energetic. Thus, the results correspond to the overall traits suggested by Professor Dr. RapeeSagarik: "must be constantly learning, have an independent mind, be able to develop and diversify, avoid sticking to traditional values, learn what competitors are thinking about-"hands doing, eyes looking, ears listening."

#### Discussion

In this section, the researcher would like to discuss increasing the competitiveness of the Thai orchid industry from two approaches: entrepreneurs' competitiveness and the support of the government and educational institutions. It is believed that the traits of leaders in the orchid industry are necessary to increase sales opportunities and the customer base and the support of the government, and educational institution will facilitate the development of entrepreneurs who can compete successfully in the business world.

The research findings will be discussed in terms of six factors that can explain the variance in desirable entrepreneur qualifications.

Factor 1, leadership reflects an entrepreneur's demonstration of adaptability, a role modeling and communication with others. This factor allows the entrepreneur to lead and communicate with employees, support his employees in their accomplishment of goals through efficient management, plan and cooperate with others. Desirable qualities include an ability to accurately predict the future, develop the organization's mission and find ways to accomplish the stated goal. It also reflects leader's ability to communicate his vision to employees. It is worth emphasizing that the entrepreneur must have strong people skills and be able to communicate his vision and motivate his team to follow him. Leaders should not be afraid of problems, and should cultivate trust and respect. The entrepreneur must know how to achieve the organization's vision or individual goals along the way.

Factor 2, efficiency reflects the entrepreneur's ability to efficiently use technology such as the internet and databases for orchid business planning to support his business. The entrepreneur needs to know about technology because it can increase employees productivity, enhance decision making, improve team collaboration, and create business partnerships and facilitate organizational transformation. In addition, the results evidence the desirability of working efficiently by focusing directly on the orchid business plan and optimally utilizing energy and resources as well as strengthening operational structure to ensure that employee and other stakeholders are working together toward success.

Factor 3, responsibility concerns the entrepreneur's ability to describe the codes of practice and system that businesses are developing to manage their environmental, and ethical responsibilities in response to pressures from stakeholder, emerging global standards and general social trends. Some issues, linked to labor and ecology are included. When people engage in the orchid business, the entrepreneur must ensure that the business demonstrates quality responsibility. The quality includes the internal and external chains of supplier, processing and the customer. Highly skilled laborers who know to take care of orchid plants and steps to improve the environment for better orchid plants growth are crucial.

Factor 4, concern for subordinates involves the entrepreneur's ability to support his subordinates. Leaders must motivate their subordinates. For example, the entrepreneur should get to know each employee and the needs/desires that drive them. One subordinate may driven by her financial needs, while another may work to achieve a sense of charity or a desire to compete and win. Knowing what a subordinate works to achieve can help the entrepreneur to tailor tasks and provide care to her. A leader should exhibit trust by giving each employee as much autonomy and control over her own work as possible. This may not be viable in every situation, but it will show subordinates that the leader trusts that they can do good work without constant involvement and direction. Subordinates will have more pride in their work when they complete it on their own. Leaders should become involved by learning more about the workplace. Employees should receive feedback when they increase efficiency by finding a faster way to do something or develop an innovative product. In addition, the entrepreneur should influence the behavior, attitudes, beliefs or values of others to achieve success.

Factors 5 and 6, self-guidance and determination relate to the entrepreneur's ability to facilitate and encourage employee development. The emphasis on employee development includes the entrepreneur encouraging employees to pursue academic training. Furthermore, a few interviewers mentioned that the entrepreneur should be willing to learn about and improve the quality of orchids.

All six factors are interrelated in a number of ways. There are highly positive correlations and support between leadership, efficienct increase, responsibility, support of subordinates, self-guidance, and determination. The current results are consistent with the definition of leadership of Simon, Smithburg, and Thompson (1971); Fiedler, (1967); Terry, (1960); Koontz and Donnell, (1959); and Richard and Greenlaw (1961).

The above results show that the development of desirable entrepreneurial traits for the orchid business would improve Thailand's competitive advantage in the global market place. In addition, the Father of Thai orchids and some Thai producers and businessmen mentioned the importance of government agencies and educational institutions involved with the orchid industry.

Government agencies such as ministries and departments and higher educational institutions could provide competent entomologists to help solve insect and pathogenic problems which are difficult to prevent or eliminate. An association of orchid producers could collectively request support from these agencies for increasing know-how and worker development. Mentoring in organizational planning and knowledge exchange among orchid producers are central to promoting group relationships, boosting business, reducing unfair competition, and identifying common personnel development approaches, thereby increasing their capability to compete with capitalists both at home and abroad.

Higher educational institutions that offer orchid farming courses and conduct orchid research in accordance with the National Orchid Promotion Strategy will continue to provide training courses for interested persons and entrepreneurs, including those who plan to invest in the industry or work with orchid firms provide a better understanding of how to grow orchids effectively and how to overcome insect problems. These agencies, government agencies, associations of orchid producers and institutions demonstrate the real interest in the areas of marketing, production, and promotion. This education will help entrepreneurs feel much more comfortable and have more confidence to become involved in this business.

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