

# THE EFFECT OF HUMAN CAPITAL DEVELOPMENT ON SUSTAINABLE ORGANIZATION OF THAI SMES

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## Abstract

The purpose of this research is to study causes and effects of Human Capital Development that lead to sustainable organization of Thai SMEs firms in Phetchaburi Province. Data has been collected by questionnaires and interviews from 214 local entrepreneurs, and analyzed in the forms of mean, standard deviation, percentage and frequency. Testing hypothesis by multiple and simple regression analysis, it showed that Human Capital; composing of Intelligent Capital, Social Capital and Emotional Capital have been developed from Knowledge, Skills, Attitude, Social Capital and Quality of Life. All of these variables caused by Internal Organization Factors, especially Leadership and Organizational Culture. For External Organization Factors, the two crucial variables were Technology and Social. A Sustainable Organization (defined by Corporate Performance, Stakeholder Satisfaction, Employee Engagement, Efficiency System and Democratic Circumstance) is influenced by Human Capital Development. The research suggested that the persons involved should take the issue of Human Capital Development to generate the comparative advantage business strategy not only for local firm's survival, but also for a sustainable development organization.

**Keywords:** Sustainable Organization; Human Capital Development;  
Organization Factors; Thai SMEs

## Introduction

The concept of Human Capital is not new. Economists have used it as far back as Adam Smith in the eighteenth century. Economists who specialize in Human Capital theory have won Nobel Prizes; Gary Becker is perhaps the most well-known scholar in Human Capital theory exploring the ways individuals and society drive Economic benefits by investment in people. The management community has a broader view of Human Capital. For example, Human Capital is defined (Phillips and Phillips, 2014) as the return of an organization's gains from the loyalty, creativity, effort, accomplishments, and productivity of its employees or saying in another word 'the relationship between what organizations invest in employees and the organization's emerging success.

Although technology changes the world at all time, the importance of Human Capital exists by many reasons (Feimianti and Anantadjaya, 2014); 1. People cause and solve problems, these result in organization development. 2. Technology can't replace human resource entirely, people are still essential for making critical decisions, solving complicated problems and ensuring that the processes work correctly. 3. Sometimes human skills are upgraded according to the issues that arise when transactions technology or equipment fails.

The term Human Capital is defined as a key element in improving firm assets and employees in order to increase productivity as well as to sustain competitive advantage (Evans, 2007). Human Capital development involves processes that relate to training, education and other inventions to raise the level of knowledge, skills, abilities, values, and Social assets of employees which will lead to the employee's satisfaction performance and eventually on firm performance.

Learning from literature review, Human Capital development is influenced by:

1. Internal Organization Factors like Leadership, Organizational Culture, Training and Development, Talent Management, and Staff Commitment
2. External Organization Factors such as Politics, Economic, Social, Technology Law and Regulation, and Environment.

Moreover, if Human Capital was developed by composition of Knowledge, Skills, Attitude, Social Capital, and Quality of Life, it resulted in Sustainable Organization, ability of the firm to endure and grow by adapting to a changing Environment, in the forms of Corporate Performance, Stakeholder

Satisfaction, Employee Engagement, Efficiency System, and Democratic Circumstance as shown in the previous research (Eccles et al., 2012).

This study used a survey from Thai successful SMEs in Phetchaburi Province, Thailand (Rattanapongpinyo, 2018), the major province in western area which had Gross domestic product of 65 billion thousand Baht in 2016 with 130,800 Baht per capita income. Petchaburi or Piply in the old days has a long history. It is a lower central region province composed of 6,225,138 square kilometer, located far from Bangkok 123 kilometer near the shore of Thai gulf. The terrain has been used for agriculture, fruit garden and livestock. For seashore landscape, the local people work in fishery, tourism and related businesses. Different identities of each district or amphoe: Mueang Phetchaburi, Khao Yoi, Nong Ya Plong, Cha-am, Tha Yang, Ban Lat, Ban Laem and Kaeng Krachan (OSMEP, 2018), lead to variety in doing business which make it interesting in studying this traditional civilization province.

From the report of NESDB (2018), Phetchaburi Province contributed to GDP as the 3<sup>rd</sup> ranking of the western region and 26<sup>th</sup> ranking of the country. The major sectors were services, manufacturing, agriculture, trading and transportation by 26.8, 23.1, 14.5, 8.6 and 5.1 percentage of GPP respectively. The survey of OSMEP (2018) showed that there are 99.6 percent of all SMEs and 85.3 percent of employment in Phetchaburi. However, as the same problems in others, this province confronted the situation as not many firms could survive and thrive in the long run. The benefits of this research contribute to constructing a Sustainable Organization by paying attention to Human Capital development factor in this area.

## **Research Objectives**

The objectives of this research are

1. To study the definition of the Sustainable Organization.
2. To study level of Sustainable Organization of the SMEs in Phetchaburi Province.
3. To analyze Internal organization and External Organization Factors that affect Human Capital Development.
4. To analyze Human Capital Development that affect Sustainable Organization.

## **The Scope of the Study**

1. Content scope:
  - Human Capital Development including Knowledge, Skills, Attitude, Social Capital, and Quality of Life.
  - Internal Organization Factors including Leadership, Organizational culture, Training and Development, Talent Management, and Staff commitment.
  - External Organization Factors including Politics, Economic, Social, Technology, Law and Regulation, and Environment.
  - Sustainable Organization including Corporate Performance, Stakeholder Satisfaction, Employee Engagement, Efficiency System, and Democratic Circumstance.
2. Population scope: This research used 214 samples of local entrepreneurs who were the owner of successful SMEs firms that have operated more than three years in Phetchaburi, the Major Western Provinces of Thailand.
3. Time scope: It took eight months from January till August 2017, to conduct the research whereas data analysis was done in the later month.

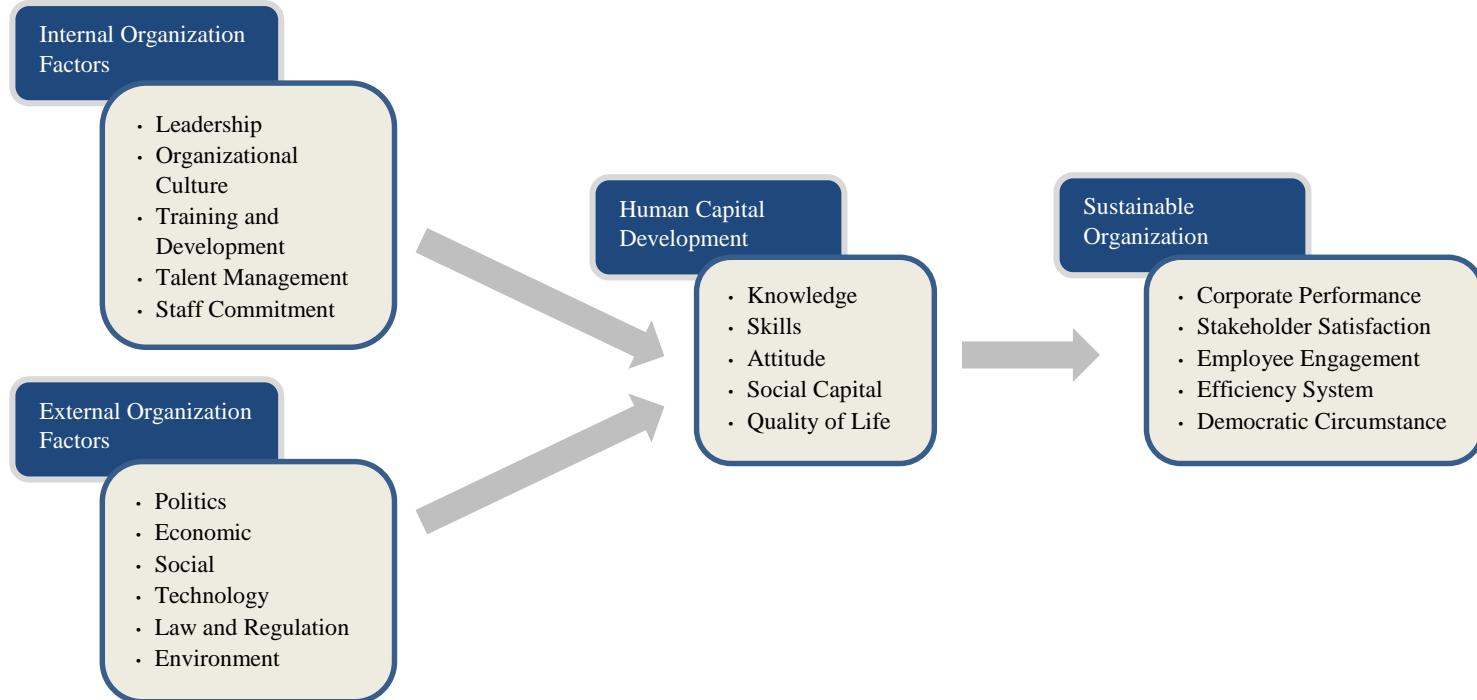
## **Research Assumptions**

The Research assumptions were

1. Internal Organization Factors and External Organization Factors significantly affect Human Capital Development.
2. Human Capital Development significantly affect Sustainable Organization.

## **Conceptual Framework**

By reviewing related literatures, this study selected one that suitable for explaining each variable: Human Capital Development (Luephong, 2012), Internal Organization Factors (Phimphsingh, 2015), External Organization Factors (Team FME, 2013), and Sustainable Organization (Eccles et al., 2012), then the researcher could synthesize the research conceptual framework as shown in the figure below:



**Figure 1:** Conceptual Framework

## **Operational Definitions**

Thai Successful SMEs: The small and medium enterprises located in Phetchaburi Province (OSMEP, 2018), which had experienced in doing business and could survive and thrive after three years of operation (Rattanapongpinyo, 2017 and 2018).

Human Capital Development: The development in Human Capital that considered to be one of the most vital elements of Sustainable Organization. The process of developing Human Capital requires creating the necessary Environments in which employees can learn better and apply innovative ideas, acquire new knowledge, develop skills, improve behaviors and attitudes and fulfil Quality of Life (Luephong, 2012).

Internal Organization Factors: The factors or conditions or surroundings within the boundary of the organization are the element of the internal Environment of the organization. The Internal Organization Factors consists mainly of Leadership, Organizational Culture, Training and Development, Talent Management, and Staff Commitment (Phimphsingh, 2015).

External Organization Factors: The factors outside the organization are the elements of the external Environment. The organization has no control over how the external Environment elements will shape up. The External Organization Factors are composed of PESTLE: Politics, Economic, Social, Technology Law and Regulation, and Environment (Team FME, 2013).

Sustainable Organization: The reduction of organizational risk that increases the likelihood that an organization will survive and thrive in the future, coupled with ability of the firm to endure and grow by adapting to a changing Environment. Sustainable Organization including the status of Corporate Performance, Stakeholder Satisfaction, Employee Engagement, Efficiency System, and Democratic Circumstance (Eccles et al., 2012).

## **Literature Review**

Most of the research about Human Capital Development concentrated in Definition of Human Capital and its measurement, Dae-Bong (2009), ROI:

Measuring the contribution of Human Capital, Evans (2007). However, for management community, it geared to expand the role of Human Capital development as the key strategy for successful organization as seen in the works of Phillips and Phillips (2014).

Another interesting topic reviewed in this research was the relationship between Human Capital and Corporate Performance that is shown in the form of financial performance, for example: The Causal relationship between Human Capital and Stock performance as found in A quantitative study on Stockholm Stock Exchange (Larsson and Morling, 2015), The influence of Intelligence capital on the firm's value with the financial performance as intervening variable (Nuryaman, 2015), Intellectual capital, financial profitability, and productivity: An exploratory study of the Indonesian pharmaceutical Industry (Basuki and Kusumawardhani, 2012), The effect of Intellectual capital on financial performance of banks listed in Tehran Stock Exchange (Ameneh et al., 2015), Value creation of Intellectual capital: Financial performance analyses in Indonesian publicly-listed consumer goods industry (Feimanti and Anantadjaya, 2014),

For Sustainable Organization, well-crafted demonstration can be found in the work such as 'how to become a sustainable company' (Eccles et al., 2012), Organizational sustainability: what is it, and why does it matter? (Whales, 2013), From the Sustainable Organization to Sustainable Knowledge-Based Organization (Leon, 2013), and Sustainable entrepreneurship: Definitions, Themes, and Research gaps (Greco and Jong, 2017).

For case studies in Thailand, Mitryodwong (2016) found that the compositions of Human Capital in Factors affecting Human Capital Development of Royal Thai Air Force Personnel. Lalitsasivimol (2016) presented that the structural equation model of Human Capital Development affects the competitive advantage for performance success of Private business in Songkhla Province by Balance Scorecard. Sucharithanarugse and Paranakian (2016) studied about Factors affecting the Human Capital in the local administrative organization and discovered that Staff Commitment was an important factor. Suktam (2015) proposed the process of Human Capital

Development by Buddhist approach in the age of globalization Model and practice approach. Phimphsingh (2015) explained that Internal Organization Factors plays a major role in Factors affecting Human Resource Development for Academic Staff at Suratthani Rajabhat University which is in line with the study of Polseela et al. (2015), in The Human Capital model of Community hospitals. The other researches concerned the topic of Human Capital Development role and Thailand future, for example: The preparing of Human Capital development in private university for ASEAN community integration (Waranonwanich, 2015), The relationship model between intellectual capital, knowledge management and organization excellence of Thai higher education (Singhsri, 2015), Effect of modern Human Capital development strategy on operational efficiency of Hotel businesses in Thailand (Saengsuwan et al., 2013), and The competency development of human resources (Luephong, 2012)

## **Research Methodology**

### **Area Selection**

This study was a quantitative research. It was done in the form of survey research. The sample was selected from the SMEs entrepreneur's who were the owner's of successful SMEs or could survive long term in Phetchaburi (Rattanapongpinyo, 2018), the Major Western Provinces of Thailand that covered about 20% of total firms and employed 0.27 million labors or about 90% of total employment in this area.

### **Source of Information**

Based on the total qualified population number of SMEs in Phetchaburi, there were 22,394 firms in 2016 (OSMEP, 2018). This research determined the sample sizes by Taro Yamane's approach and the proper sample size is 400, however the returned samples were 214. Other than primary data from the questionnaire and interview, the researcher also gathered the secondary source data from literature review such as researches, books and academic articles.

## **Research Tools**

The researcher used questionnaires from valid measures that have been published before to collect data alongside with interview session from the SMEs entrepreneurs. In the questionnaire structure, it was divided into 6 parts that composed of Personal data, Human Capital Development, Internal Organization Factors, External Organization Factors and Sustainable Organization for the closed-end part while the other related suggestions are the open-end part. The questionnaire has been tested its internal consistency by from 30 SMEs entrepreneurs in Prachuap Khiri Khan. Cronbach's Alpha Coefficient, was 0.92 for the confidence interval of overall questionnaire parts. The Cronbach's Alpha Coefficient for each part was 0.87, 0.94, 0.79, 0.0.82 and 0.96 respectively.

## **Data Analysis**

All questionnaire data were processed by SPSS software, the results were analyzed and shown in the forms of percentage, mean and standard deviation for descriptive statistics. Then the mean values were taken to interpret the meaning by being based on five criterions for Human Capital Development, Internal Organization Factors, External Organization Factors and Sustainable Organization. Lastly, the paper tests these hypotheses:

- Internal Organization Factors and External Organization Factors significantly affect Human Capital Development (tested with multiple regression analysis).
- Human Capital Development significantly affect Sustainable Organization (tested with simple regression analysis).

## **Research Results**

### **Personal Data of Samples**

From the survey results, it found that:

- Most of them are service firms followed by manufacturing firms, agriculture firms and trading firms.
- 90.7% of the SMEs are small enterprises, with capital no more than 50 million Baht and employed 15-50 labors (OSMEP, 2018).

- Only 51.4% registered as a company, business operation is more than 5 years.
- Age of entrepreneurs are in the range 35-45 years, male and married, and having bachelor degree or above.
- Significant sources of finance came from total shareholder's equity, financial institutions and the others. Most entrepreneurs own workplace.

### **Definition of Sustainable Organization**

The conclusion from the interview, Sustainable Organization means the capacity of organization to endure and grow by adapting to a changing Environment include reduction of organizational risk that increases the likelihood that an organization will survive and thrive in the future, coupled with the mitigation of any harm to the things and people around it.

### **Level of Sustainable Organization of the SMEs in Phetchaburi Province**

Analyzed by the survey data, the samples focus on the importance of Corporate Performance, Stakeholder Satisfaction, Employee Engagement, Efficiency System and Democratic Circumstance consecutively as seen in Table 1. All these factors were composed of Sustainable Organization status.

**Table 1:** Components of Sustainable Organization

Components	Mean	Standard Deviation
Corporate Performance	3.92	0.83
Stakeholder Satisfaction	3.86	0.74
Employee Engagement	3.72	0.77
Efficiency System	3.53	0.86
Democratic Circumstance	3.29	0.92
<b>Total</b>	<b>3.34</b>	<b>0.71</b>

*Source:* Adapt from Eccles et al., (2012)

## Internal Organization and External Organization Factors Affected to Human Capital Development

Both of Organization factors significantly affect Human Capital Development at 0.05 significant level with adjusted  $R^2$  of 0.62. Internal Factors had more effect than External Factors as shown by B value. The statistical analysis is shown in Table 2 below.

**Table 2:** The Statistics Analysis of Organization Factors Affected to Human Capital Development

Variable	B	Std.error	Beta	t	Sig
Constant	0.731	0.259		2.826	0.006
Internal Factors      X <sub>1</sub>	0.348	0.101	0.359	3.427	0.001
External Factors      X <sub>2</sub>	0.257	0.099	0.274	2.595	0.011

$R^2 = 0.743$ ,  $R^2$  adjust = 0.616, Std. Error of Estimate = 0.7232

Among these Internal Organization Factors, Leadership and Organizational Culture came as the first two, then Staff commitment, Training and Development, and Talent Management at last, as shown in Table 3.

**Table 3:** The Statistics Value of Mean and Standard Deviation of Internal Organization Factors

Internal Organization Factors	Mean	Standard Deviation
Leadership	3.90	0.59
Organizational Culture	3.74	0.71
Training and Development	3.26	0.76
Talent Management	3.22	0.74
Staff commitment	3.53	0.55
<b>Total</b>	3.49	0.70

Meanwhile, the two important External Organization Factors were Technology and Social, followed by Economic, Environment, Law and Regulation, and Politic in orderly, as shown in Table 4.

**Table 4:** The Statistics Value of Mean and Standard Deviation of External Organization Factors

External Organization Factors	Mean	Standard Deviation
Politics	3.27	0.75
Economic	3.57	0.71
Social	3.65	0.78
Technology	3.81	0.86
Law and Regulation	3.34	0.73
Environment	3.38	0.85
<b>Total</b>	<b>3.61</b>	<b>0.69</b>

### **Human Capital Development Affected to Sustainable Organization**

Human Capital, composed of Intelligent Capital, Social Capital and Emotional Capital, was developed in Knowledge, Skills, Attitude, Social Capital and Quality of Life. It influenced the Sustainable Organization demonstrated at 0.05 significant level. The adjusted R<sup>2</sup> is 0.74.

**Table 5:** The Statistics Analysis of Human Capital Development Affected to Sustainable Organization

Variable	B	Std.error	Beta	t	Sig
Constant	1.068	0.281		3.798	0.021
Human Capital Development	X <sub>1</sub>	0.726	0.103	0.527	7.034

R<sup>2</sup> = 0.815, R<sup>2</sup> adjust = 0.738, Std. Error of Estimate = 0.62736

## **Discussion**

### **Research Process Discussion**

The research process was successful because of its clear framework and scope, use of various instruments such as questionnaires and interviews, researching by efficient methods like Cronbach testing, using useful checking facts and data with secondary sources and having approved the results by related persons. Anyone can use this research methodology to study any other case which a similar context.

### **Research Result Discussion**

#### **Definition and Components of the Sustainable Organization**

Stevenson (2015) explained that Sustainable Organization is able to survive, to continue to do its work and play a decisive role in lives of its beneficiaries over time. Moreover, the growing might mean to have a larger staff, more projects or more significant projects, but it could also mean to grow in experience, skills and expertise as well as move into new technical areas while staying the same size.

Stevenson (2015) identified more aspects of the components of Sustainable Organization, but it looked like the same elements discovered in this research for examples,

- Robust financial, management, administrative and other systems such that the organization can continue to provide quality services, apply for and absorb funds, and remain active. (Corporate Performance)

- A professional and knowledge staff that one can position for future projects. (Employee Engagement)

- The capacity to be innovative and effective. (Efficiency System)

- A strong network of partnerships with international and local community and faith-based organization. (Corporate Performance)

- Meeting the needs/demands of the beneficiaries they serve. (Stakeholder Satisfaction, Democratic Circumstance)

## **Internal Organization and External Organization Factors Affected to Human Capital Development**

The finding revealed that Internal Organization Factors affect Human Capital Development more than External Organization Factors according to Phimphsingh (2015). However, when considering in details, the previous research like Sucharithanarugse and Paranakian (2016) showed that Staff Commitment was an essential factor that opposed to Leadership and Organizational Culture discovery in this presented research.

In External Organization Factors, Technology and Social context were the two dominant ones which are consistent with the researches of Waranonwanich (2015) and Singhiri (2015) in concerning the role of Human Capital development in the future.

## **Human Capital Development Affected to Sustainable Organization**

All compositions of Human Capital affect Sustainable Organization, confirmed by Evans (2007), Dae-Bong (2009), and Phillips and Phillips (2014). The relationship between Human Capital Development and Sustainable Organization explained in many papers before such as Eccles et al., (2012), Whales, (2013), and Greco and De Jong, (2017). For case study in Thailand, Lalitsasivimol (2016) presented the structural equation model and found that Human Capital Development affect the competitive advantage for performance success of private business in Songkhla Province by Balance Scorecard and indicated the same result.

## **Research Limitation**

This research should have 400 samples determined by Taro Yamane's approach, but the completed and returned samples were 214 samples or 53.5%. Moreover, some returned samples could not be classified by subsectors like services, manufacturing, agriculture, trading and transportation because there were not enough firms that qualified.

## **Conclusion and Recommendation**

### **Conclusion**

The results showed that Human Capital, composing of Intelligent Capital, Social Capital and Emotional Capital, was developed in Knowledge, Skills, Attitude, Social Capital and Quality of Life, is associated with Sustainable Organization (that defined in 5 dimensions; Corporate Performance, Work-life satisfaction, Employee Engagement, Efficiency System and Democratic Circumstance), Moreover Internal Organization Factors significantly affect Human Capital Development and have more effect than External Organization Factors.

### **Recommendation**

This research suggested that the related persons should pay attention to the behind factors especially the role of leader in supporting and constructing cultural-fit management, while concerned with the Social context changing to promote Human Capital development to achieve Sustainable Organization as a final goal of his corporate.

In Micro aspects, SMEs firms should take the issue of Human Capital Development, that emphasized in Attitude, Quality of Life, Skills, Social Capital and Knowledge consecutively, as the priority in order to generate the comparative advantage business strategy not only for local firm's survival, but also for a sustainable development organization.

As regards the next research, the interested researcher is advised to keep studying on how to determine suitable forms of Sustainable Organization to match up the country development. Another valuable topic for future research to consider would be how to plan Human Capital Development for future workforce and fulfil the required skills and other compositions response in the next century.

### **Acknowledgement**

Cooperation from all of the informant sources is appreciated. If this research is worth to the society, the researcher will dedicate this worthiness to all grateful and respectful related people. However, for any mistakes that happened in this research, the researcher would like to accept humbly and apologize for any inconvenience.

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