

A METHODOLOGY OF ORGANIZATIONAL MANAGEMENT STRATEGY AND HUMAN RESOURCE MANAGEMENT FOR EFFECTIVE ORGANIZATION

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Abstract

A single dimension oriented type of research is the most commonly used research up to this period, which only analyzes the relationship of two variables; the dependent and independent. Yet, a single dimension oriented research often neglects the study of strategy application that includes the short and long term planning. Hence, this paper aims to propose a methodology in an organizational management strategy and human resource management in order to achieve sustainability while introducing a research framework for an efficiency maximization. For the sake of an effective application according to a particular context, the study has revealed that constructing a conceptual research framework is significantly crucial to increase an optimum use of a research. Hence, such construction requires consideration of the underlying factors. This is because each factor is volatile to both internal and external cause at any circumstances. Besides, that

particular factor can serve as a dependent and independent variable at the same time. As of study availability, the number is still small tapping on the causal factor analysis, and this leads to inefficiency and uncertainty in application and sustainable policy formulation. Therefore, this methodology comes to play a significant role in the latter application and guidance for public administration researches. This implication aims to transform Thailand's research infrastructure toward development research (Research and Development: R&D)

Keywords: Organizational management strategy, human resource, efficiency

Introduction

With the constant change of the world's concerns, organizational management also needs to constantly adapt with the change. Public or private organization, will have to encounter these challenges directly or indirectly that may arise through different

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dimensions, be it economically, socially and environmentally. Every organization, therefore, requires clear goals and objectives as well as establishes the organizational strategy to achieve those determinations. In each organization, there are groups of people, who come to work together, and are different from one another, yet they share a common goal for a success. Based on the organizational strategy, the organization always requires the cooperation of many parties to move the organization forward and help achieve the maximal effectiveness in order to attain a sustainability (Scholz 1978, Zhu et al. 2006).

In the management of either public or private organizations, one of the main factors for a successful organization is to have executives with knowledge, capacity and skills in management, especially in term of leadership. With such qualities, it leads the organization with unity and cooperation to reach the common goal (House. 1971). Leadership is a quality acquired by executives and professional leaders as a powerful tool to influence others. One of indicators of professional managers is the work result and efficiency contributed by their leadership, such measure shall come with responsible individuals, and they are referred as “chief

or superior” who are vital with a managerial responsibility to ensure the success. The chief sometimes is called “executive or leader”. The leaders are crucial for the organization as the success depends on their capacity to optimize resources, including employees, budgets and equipment while the ability of the leaders to coordinate all human resource to work together for the success is another quality to observe. In addition, the factors affecting the organizational management for efficiency and effectiveness with sustainability can viewed below.

Content

With a number of relevant studies, most researches agree that an organizational management strategy and human resource management depend on various factors affecting their efficiency and effectiveness as to achieve the sustainability. The above causality can be explained as follows (Grace 2008, House and Robert 1971):

1. Leadership is significantly essential for the successful management (Suganthi et al. 2015). Leadership is the process by which leaders use their influence or power to induce or persuade subordinates in the organization or any group of people under any circumstances in order to perform their duties as efficient as possible with the aim of

achieving the organizational goals. Therefore, the leadership is an important factor for the management and executives. This is because it acts as an indicator of a successful organization; the success will be determined by the managerial skills and administrative art of the organizational leaders. Leadership is an essential quality that management and executives must have where the leaders and the followers have mutual interaction and work towards the same path, as it plays a vital role on meeting the organizational objectives, this trait can also be nurtured within individuals. Relatively, such quality is perceived as the art of management for the executives in which it requires a continuous improvement as the present changes take place (Suganthi and Samuel 2012).

In any successful organizations, executives with effective leadership quality always have the biggest contribution on achieving success. Thus, in order to implement the strategies, leadership has to come along in an effective persuasion, motivation, corporate values, and culture so that employees will be working towards the organization's desired objectives. (Suganthi et al. 2015). The executives as leaders of the organization must act in a way that demonstrate the obligation to coordinate all employees from every part of departments in the organization. If

considering the performance of the organization, the leaders without capacity would demotivate their co-workers or subordinates, affecting the expected performance with an additional reduction of work efficiency. Whereas the leaders with great qualities would enhance the performance of the organization while motivating and encouraging other co-workers and employees. This will prepare those employees with working capacity, yet it becomes a booster for the organization to succeed in the operation (Sutthichaimethee and Tanoamchard 2015).

There are many types of leaders at work; there are directive leaders, supportive leaders, participative leaders, or even achievement-oriented leaders (Likert). Being leaders who are acceptable by subordinates will urge their subordinates work willingly and perform the works effectively. This is also evidenced by leadership-oriented studies pertaining to leadership in government agencies, business organization and industries, which claimed that leadership affects the efficiency of the organization. Additionally, the study of Sutthichaimethee and Tanoamchard (2015) agreed that the reformed leadership has a positive effect on leaders' effectiveness and competitiveness. The study conducted by Sutthichaimethee et al. (2015) has found that exchanged leadership and transforma-

tional leadership highly affect the quality of work performances among employees. Besides, Sutthichaimethee and Sawangdee (2016) claim that such a transformational leadership and organizational effectiveness have a significant relationship.

2. An organizational culture is another factor that helps create guidelines for the organization in the adaptation of the external environment. In addition, it helps integrate all the elements within the organization for the organizational stability, survival and effectiveness (Sutthichaimethee and Sawangdee 2016a, b). Most local and international scholars agree that the organizational culture is a code everyone in the organization must adhere to. If any organization has a strong organizational culture, it will increase the efficiency of the organization (Denison, 1990; Kotter and Haskett, 1992; Knapp, 1998). Also, such an organizational culture is a vital factor enabling the organization in attaining a competitive advantage (Scholz, 1978). Since the organizational culture is the center of the entire operation, it helps incorporate the core values that will later result in the organizational structure and various tasks assignments. Moreover, it constructs the code of conduct for the members in the organization. Another important note is that the organizational

culture also represents the participation, awareness and working norms, as well as the interpersonal interaction in the organization (Arroba and Kim, 1992), thus it becomes an effective tool to nurture members' behavior within the organization (Owens, 1995). The organizational culture influences every move of the organization, paving the basis to measure the success and failure of the organization. The organizational culture is an internal benefit within one's self, and it is difficult to change. Such a culture is a tool to increase the effectiveness of the organization, and it is a way to bring excellences to the organization. This illustrates the signal lighting the acknowledgement and adherence. The said culture helps to strengthen engagement with other employees and boosts the acceptance and engagement within the organization. (Sutthichaimethee and Ariyasajakorn 2017)

3. An organizational attachment is what the executives and academicians pay attention most. This is because such attachment can be used as criteria to predict the rate of entry from work better than a criteria of job satisfaction. Surprisingly, it is a connector between the needs of individuals and the organization, in addition to the good indicator of organizational effectiveness (Huang et.al

2007). The organizational attachment is an important factor facilitating in the attainment of the organizational objectives. Since the workers are highly attached to the organization, they are willing to sacrifice to perform their duties better than those who are less attached. In order to develop such attachment, the individuals' need is fulfilled and valued by the organization, and this becomes a duty of the leaders to materialize the actions to response it for the sake of the organization (Sutthichaimethee and Tanoamchard 2016).

4. Workers are people who play the role of work performer to response the organizational objectives, yet they are the influencer over the success of the organizational leaders and organization (Kelly, 1988). The workers have been recognized as someone who is responsible for themselves and the organization. In addition, they are there to facilitate and support the leaders for organizational operations (Dixon and Westbrook, 2003). In general, the workers are the party that receive the orders from leaders or supervisors, along with duties to collaborate well with other colleagues. Moreover, they are perceived to help support the leaders by carrying their assignment without fails (Sutthichaimethee et.al 2016).

The center of every successful organization is formed by the visional executives in the management through an effective performance, and with a clear operational processes and management pace with the determination to produce a work with quality and efficiency. Not to mention, the working environment or atmosphere is conducive, which motivates the personnel committed and satisfied (Sutthichaimethee 2016, Sutthichaimethee and Sawangdee 2016). Based on the study of Katz and Kahn (1978), it studied the important factors affecting the efficiency of work performance. The study shows that the key component of organizational effectiveness and efficiency, if compared the inputs to the output, is the achievement of organizational goals which can support in the organizational trainings, experiences and connections, and that contributes to the organizational efficiency.

Through the study of relevant researches available from the past to the present, it has indicated that an effective organizational management and human resource management is believed significant for the sustainable development. Therefore, this study complies guidelines for the organizational management at most efficiency and effectiveness in order to create a

sustainability, and this is the focus of this paper to utilize the guidelines for a maximal sustainability.

High Performance Organization (HPO)

Katzenbach and Smith (1993) discussed the High Performance Organization (HPO) as a successful organization over competitors for at least 10 years, which such success can be expressed in both monetary and non-monetary form (de Waal and Sultan, 2012). In addition, high-performance organizations often perform far better than any other organizations (Huselid, 1993).

The HPO can be determined by the ability to generate returns, market shares and the presentation of new products. The concrete measurement for such an organization can be done through financial ratio, return of asset, return on equity, Tobin's q ratio, sales and many other (Yildiz and Karakaş, 2012). Besides, it can also be measured from capacities of accounting, marketing and operation. The accounting capacity can be measured by current ratio, quick ratio, inventory turnover, debtors to sales ratio, creditors to purchase ratio (Otley, 2002). While the marketing capacity can be measured by customer satisfaction, customer loyalty, brand equity and feedback loops (Clark, 2002). To the capacity of operation, it can be measured by productivity, quality, time, cost and

flexibility (Neely and Austin, 2002).

de Waal (2012) has identified other important factors in order to constitute the high potential organization. The factors comprise of 1) continuous improvement and renewal, constantly working on innovation in the production process, including launching new products and services; 2) openness and action orientation, communicating and exchanging between both executives and employees, including offering opportunities for employees to engage in important tasks; 3) management quality, executives must have trust in colleagues, be honest and role model for others in making a decision, including being a coach to boost self-confidence and leadership empowerment; 4) workforce quality, having employees trained to absorb changes along with a flexibility, responsible for action and able to switch jobs between themselves; and 5) long-term orientation, emphasizing long-term relationship with all stakeholders from customers to supplier, while empowering employees for progress and creating a safe working environment.

In order to allow the organization function at high performance, the organization needs to adapt and absorb changes in various aspects, comprising work design, practical strategy application,

customers focus and creativity management. Talking about work design, it must have a span of control by specifying the appropriate scope of responsibility, a span of accountability by measuring the outcome, a span of influence by having employees aware of what to achieve and prioritize, and a span of support by defining appropriate scope of work in each segment (Simons, 2006). While applying practical strategies means the organization must ensure the vision and mission set by the organization are realistic and achievable (Mankins and Steel, 2006). The customer orientation often creates values for the organization as the good interaction between employees and customers is created. Therefore, the organization must improve the quality of the employees at the operational level as to reduce potential errors while developing the potential at the same time (Fleming, Coffman and Harter, 2006). Whereas creativity management is considered as one of important capital, because creative people can turn ideas into valuable products and services. They create satisfaction for customers. Thus, the organization must ensure that all possible factors negatively affecting the creativity of personnel are eliminated (Florida and Goodnight, 2006).

Therefore, when any organization claims

to be a high performance organization, it has to be evaluated based on various considerations and make a comparison with other organization within the same industry or sector. If any organization aims to be a high performance organization, it should constantly develop itself and give importance to both external and internal changes. The continuous improvement requires the capability and cooperation of executives and personnel. The human resource management system has to be organized and aligned with the organization's context. The organization shall be committed to respond to changes and enhance competitive advantage. This particular strategy is basically a proactive or strategic human resource management, which will later be discussed in the next section.

Resource-Based View Management

Every organizations, that can create competitive advantages, must have a capacity to perform greater than any other organizations. They stand out differently from other competitors and organizations in the industry, especially in term of following organizational resources. They comprise of 1) physical resources, including technology, machinery and equipment, production capacity and financial system, 2) organization resources, including

organizational structure, planning, controlling system, coordination and personnel management system, and 3) human resources, such as skills, decisions and intelligence of employees in the organization (Barney & Wright, 1998). In addition, humans can accumulate knowledge and apply it to solve problems and promote creativity and innovation.

From reviewing various literatures, human resource management is seen to focus on creating competitive advantage of the organization, comprising human resources and human resource management system (Huselid, 1993; Karami, Analoui and Cusworth, 2004), which is also known as functions or practices of HR. This includes recruitment, training and development, as well as works of compensation and reward. According to a study of Huselid, Jackson and Schuler (1997), it can be concluded that organizational effectiveness is related to capabilities and features of HR personal. Also, this study found the relationship between the efficiency and effectiveness of human resource management, cash flow and marketing value. While Barney (1998) has indicated that customer satisfaction is related to satisfaction of the employees within the organization.

Therefore, in order to create a sustain-

able competitive advantage and high performance, the organization needs the guidelines as a management tool for human resource, which is considered as a core resource to the competitiveness and ability of the organization today.

Strategic Human Resource Management

In the past, structuring the organizational structure may focus on order of command, work division (Williams, 2009). In the early or scientific management time, this tradition was primarily made as part of activities related to employment and fulfillment of business needs, such as psychological tests for categorizing group of employees and supporting welfare improvements (Ulrich and Dulebohn, 2015).

The strategic human resource management is the integration of human resource management with the organization's strategic decision-making process in managing the organizational environment (Karami, Analoui, & Cusworth, 2004). In fact, it is a way to increase the organization's performance and obtain competitive advantage through the aforementioned management (Gannon, Doherty and Roper, 2012). Besides, such management is a view of personnel treated as the core organization resource for the

Table 1: the differences in personnel practices of the organization.

Areas	Capital Aspect	Resource Aspect
Focus of HR	<ul style="list-style-type: none"> - Administrative efficiency - Work design of HR - Integrating HR with organizational strategy 	HR is a value creator within organization together with employees, while incorporating customers, stakeholders and community for external value
Relation of HR to organization	- HR is observed as a tool to drive internal efficiency.	<ul style="list-style-type: none"> - Understanding organizational context - Creating HR value via the perspective of customers and investors
Goals or Results of HR	- Generating talented people and developing employee productivity	<ul style="list-style-type: none"> - Improving the ability of employees (Competency, Commitment and Dedication) - Enhancing the ability of the organization (Culture and Working process) - Promoting a leadership
HR Priority	<ul style="list-style-type: none"> - Adjusting duty structure of HR - Re-engineer HR Practices - Upgrading the expertise of HR - Tracking and measuring the progress of HR 	<ul style="list-style-type: none"> - Forming HR as a service unit in Organization - Proposing an integrated arrangement and new HR working process for personnel, information and assignments - HR is ensured of competency, value transfer, adjustment to the external environment

Source: it is adapted from Ulrich & Dulebohn (2015).

success and outstanding performance. The strategy can be divided into many categories, including Corporate Strategies, Restructuring Strategies, Growth Strategies and Stability Strategies (Belcourt and McBey, 2010).

The organization can create competitive advantage based on human resources from two different perspectives; treating personnel as a cost by calculating the percentage out of the budget, and viewing personnel as a resource for management and improvement (Ulrich, 1987). With different perspectives, it results in different personnel practices in the organization, as illustrated in Table 1.

The strategic human resource management will engage HR department with the organization's strategy, in which HR department participates in the strategy planning of the organization by three roles. HR acts as 1) a strategy adherer, 2) an information provider to the senior management for strategy planning and implementation, and 3) a strategy formula-tor or HR partner of the organization; playing both as a regulator and absorber of the strategy (Ulrich and Dulebohn, 2015). With these three different roles, it is aimed at responding the need of customers, creating a sustainable competitive advantage, and making the organization a high performance one. The

organization can implement the strategic human resource management as guided in the following section.

Guidelines in Strategic Human Resource Management

Christensen (2006) introduced the following guidelines for HR with 10 steps model.

1. Assessing the readiness of the organization for change. It is an evaluation to know how much the organization can accept changes in order to appropriately act for change.

2. Creating and making the framework and language of HR widely accepted. It is to pave the same direction of understanding and to achieve the objectives of the organization

3. HR leaders will play a role as an organization designer. HR will have an influence on the organization when they are influential in the organization. Therefore, the structure and operational process can be adjusted to quickly fit the working environment.

4. Defining a clear role and responsibility of those in lowest management level, and attracting high-level executives to create a sense of ownership of human resources strategies. While the lower level executives will help drive HR strategy and organizational strategy for a success.

5. Determining a human resource plan.

From the survey conducted, it has found that many organizations only have an HR working plan, but there is no concrete human resource plan. Therefore, the organization must determine the human resource plan with alignment of the organizational direction.

6. Viewing all 5 HR tasks in a strategic perspective. All five HR tasks include 1) manpower management and planning, 2) learning and development, 3) labor relations, 4) performance management, and 5) organizational development in support of the core competencies in line with goals, vision, missions and environment of the organization.

7. Understanding the role of talented people in various fields and specialists of the organization. The works of both groups must be consistent for the success of the organization.

8. Designing the structure of HR unit in a new format, and ensuring it consistent with the goals, vision, mission and environment of the organization.

9. Evaluating and promoting talented people in the organization.

10. Realizing any possible hindrance to change as a strategic human resource.

Conclusion

From the study of relevant studies, it

helps produce a guideline in furthering researches and applications in the organizational management. The guideline can be illustrated below.

The management and efficiency of the organization can be summarized as follow.

Production management covers the assignment of standards of operation, advice provision for the subordinates in consistence with the standard of operation, formulate the work standard, follow-up and comparison of work performance based on the standard, revision and adjustment of the control framework when a situation changes, communication in the control process, and correction of any deficiencies of the work.

Human management comes with the great duties of recruiting effective workers, selecting knowledgeable workers with abilities, setting the criteria for job appointments and assigning the right workers with the right competency. In addition, such a management covers the training and knowledge and competence development for the workers, reviewing and adjusting the right quality and quantity for human resources, rewarding subordinates based on the performance, encouraging with praise and treating fairly while reminding where applicable.

The organizational culture can be explained below.

Adaptability model: the organization has a working culture that is flexible according to the external environment which preserves the values that support the organization in maintaining production quality, emphasizes the values of decentralization of decisions and actively makes changes by encouraging and rewarding creative employees. Also, the recognition of self-involvement in relevant decision-making and the freedom to make a decision and perform a task, are particularly included in this culture.

Success-oriented model: this concept highlights the prospect of having clear vision of the organizational goals, focusing on competitions, attempting to complete the works, striving to secure the clients, playing a game of winning through connecting all parties together, and giving full effort to achieve the goals.

Kinship model: this model portrays a generosity among workers, role model in providing advice and assistance to members of the organization, adherence to fairness and strict compliance and emphasis of cooperation, caring for both employees and customers. Furthermore, it touches on giving importance to the participation of employees in the

organization, and helping each other as if they are from the same family.

Governmental model: this form of culture illustrates a clear working structure, an atmosphere where members of the organization comply with the rules and regulations and focus on coordinating, controlling and supervision. While a management style will emphasize the stability of members, the relationship from one standard to another, and the methods to organize the work order.

The organizational attachments are provided with the explanation below.

Consistent attachment: this concept shows one's willingness to participate in activities, one's attention to stay in the organization until retirement, one's absence of thought in changing job, and one's sense of belonging.

Loyal attachment: this can be understood as the workers feel proud when the organization develops, they feel a sense of belonging to the organization, they are happy when others say about their organization, they account the public interests. Also, they are willing to sacrifice for the organization's success.

The features of the workers are seen as follows.

1. Distant workers can be displayed someone who loves independence, has

their own goals and work objectives, devotes to work, uses their experience in problem-solving, and tend to generate creative ideas.

2. Adaptive workers are of those who seek to develop essential competencies, follow the command in a good manner, dislike the conflict at work, actively work based on responsibility, and adhere to policies and regulations of the organization.

3. Survival workers tend to satisfy co-workers, make friendships to avoid conflicts, take full responsibility of the assignments, have new ideas for the accomplishment, and work with an account of the organizational goals.

4. Slow workers are seen to prefer working on what is only assigned, keeping work in control and monitor, not expressing opinions, and work dependently on others.

Bibliography

- Barney, J. B. and Wright, P. M. (1998). On Becoming a Strategic Partner: The Role of Human Resource in Gaining Competitive Advantage. *Human Resource Management*, 37(1), 31-46.
- Belcourt, M. and McBey, K. (2010). Strategic Human Resource Planning. 4th ed. Toronto: Nelson Education Ltd.
- Christensen, R. (2006). Roadmap to Strategic HR: Turning a Great Idea into a Business Reality. New York: AMACOM.
- Clark, B. (2002). Measuring performance: The marketing perspective. In A. Neely, Business Performance Measurement (pp. 22-40). Cambridge: The press syndicate of the University of Cambridge.
- de Waal, A. (2012). Characteristics of high performance organizations. *Journal of Management Research*, 39-71.
- de Waal, A. and Sultan, S. (2012). Applicability of the high performance organization framework in the Middle East: The case of Palestine Polytechnic University. *Education, Business and Society, Contemporary Middle Eastern Issues*, 213-223.
- Dixon, G., and Westbrook, J. (2003). Followers revealed. *Engineering Management Journal*, 15(1), 25-19.
- Fleming, J. H., Coffman, C. and Harter, J. K. (2006). Manage Your Human Sigma. *Harvard Business Review on the High-Performance Organization*, 113-134.

- Florida, R. and Goodnight, J. (2006). Managing for Creativity. *Harvard Business Review on the High-Performance Organization*, 153-170.
- Gannon, J. M., Doherty, L. and Roper, A. (2012). The role of strategic groups in understanding strategic human resource management. *Personnel Review*, 41(4), 513-546.
- Grace, J. B. (2008). Structural Equation Modeling for Observational Studies. *Journal of Wildlife Management*, 72 (1), 14-22.
- House, Robert J. (1971). A Path Goal Theory of Leader Effectiveness. *Administrative Science Quarterly*, (3), 321-338.
- Huang, K. and Others. (2007). Structure of the Pho85-Pho80 CDK-cyclin complex of the phosphate-responsive signal transduction pathway. *Mol Cell* 28(4), 614-23
- Huselid, M. A. (1993). The Impact of Environmental Volatility on Human Resource Planning and Strategic Human Resource Management. *Human Resource Planning*, 16(3), 35-51.
- Huselid, M. A., Jackson, S. E., and Schuler, R. S. (1997). Technical and Strategic Human Resource Management Effectiveness as Determinants of Firm Performance. *The Academy of Management Journal*, 40(1), 171-188.
- Karami, A., Analoui, F. and Cusworth, J. (2004). Strategic Human Resource Management and Resource-based Approach: The Evidence from the British Manufacturing Industry. *Management Research News*, 27(6), 50-68.
- Katz, Daniel, and Kahn, Robert L. (1978). *The Social Psychology of Organization*. 2nd ed. New York: McGraw-Hill.
- Katzenbach, J. R. and Smith, D. K. (1993). *The Wisdom of Teams: Creating the High-performance Organization*. New York: McKinsey & Company, Inc.
- Kelly, R. E. (1988). In Praise of Follower. *Harvard Business Review*, (November – December), 142-148.
- Kotter, J. P. and Haskett, J. L. (1992). *Corporate and Performance*. New York: Free Press.
- Likert, R. (1967). *The Human Organization: Its Management and Value*. New York: McGraw-Hill.
- Mankins, M. C. and Steel, R. (2006). Turning Great Strategy into Great Performance. *Harvard Business Review on the High-Performance Organization*, 23-44.
- Neely, A. and Austin, R. (2002). Measuring performance: The operations perspective. In A. Neely, *Business Performance Measurement*. Cambridge: The press syndicate of the University of Cambridge.

- Otley, D. (2002). Measuring performance: The accounting perspective. In A. Neely, Business Performance Measurement. Cambridge: The press syndicate of the University of Cambridge.
- Simons, R. (2006). Designing High-Performance Jobs. Harvard Business Review on the High Performance Organization, 1-22.
- Sutthichaimethee, P., et al .(2015). Environmental problems indicator under environmental modeling toward sustainable development .*Global J .Environ .Sci .Manage.*, 14(1), 325-332.
- Sutthichaimethee, P., Tanoamchard, W. (2015). Carrying Capacity Model of Food Manufacturing Sectors for Sustainable Development from using Environmental and Natural Resources of Thailand *Journal of Ecological Engineering*, 16(5), 1-8.
- Sutthichaimethee, P., et al .(2016). Model of Environmental Problems Priority Arising from the Use of Environmental and Natural Resources in Construction Material Sectors of Thailand *Advanced Engineering Forum*, 14, 76-85.
- Sutthichaimethee, P. (2016). Modeling Environmental Impact of Machinery Sectors to Promote Sustainable Development of Thailand. *Journal of Ecological Engineering*, 17 (1).
- Sutthichaimethee, P., Sawangdee, Y. (2016). Indicator of Environmental Problems of Agricultural Sectors under the Environmental Modeling. *Journal of Ecological Engineering*, 17 (2).
- Sutthichaimethee, P., Ariyasajakorn, D. (2017). Forecasting Model of GHG Emission in Manufacturing Sectors of Thailand. *Journal of Ecological Engineering*, 18 (1), 18–24.
- Suganthi L., Iniyan S., Samuel AA. (2015). Applications of fuzzy logic in renewable energy systems – a review. *Renew Sustain Energy Rev*, 48, 585–607.
- Suganthi L., Samuel AA. (2012). Energy models for demand forecasting—a review. *Renew Sustain Energy Rev*, 16, 1223–40.
- Sutthichaimethee, P., Sawangdee, Y. (2016a). Model of Environmental Impact of Service Sectors to Promote Sustainable Development of Thailand .*Ethics Sci Environ Polit*, 16(1).
- Sutthichaimethee, P. Sawangdee, Y. (2016b). Indicator of Environmental Problems Priority Arising from the use of Environmental and Natural Resources in Machinery Sectors of Thailand .*Environmental and Climate Technologies* .17(1), 18-29 .

- Scholz, C. (1978). Corporate Culture and Strategy: The Problem of Strategic Fit. *Long Rang Planning*, 20(August), 78-87.
- Ulrich, D. (1987). Strategic Human Resource Planning: Why and How? *Human Resource Planning*, 10(1), 37-56.
- Ulrich, D. and Dulebohn, J. H. (2015). Are we there yet? What's next for HR? *Human Resource Management Review*, 188-204.
- Williams, C. R. (2009). *Principles of Management*. Mason: South-Western Cengage Learning.
- Zhu, B., Walter, S., Rosenbaum, P., Russell, D., & Raina, P. (2006). Structural equation and log-linear modeling: A comparison of methods in the analysis of a study on caregivers' health. *BMC Medical Research Methodology*, 6(1), 4.