

Developing High Performance Teams (HPT) through Employee Motivation, Interpersonal Communication Skills, and Entrepreneurial Mindset Using Organization Development Interventions (ODI): A Study of Selected Engineering Service Companies in Thailand

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Abstract

Noteworthy transformation of organization design has been observed globally during the past few decades. Distinctive cultural context in each geographic region and industry require a different structure of the organization to function well. Moreover, increasing competition in the rapidly changing business landscape nowadays presents significant challenges for organization restructuring for improved outcomes and performance. Growing transformation around team structure has captured the focal attention of academics and professionals in various cultural contexts and industries. Leading global conglomerates utilize team structure as part of their structure beneficial to improve the company's performance. This research intends to develop entrepreneurial mindset, employee motivation and interpersonal communication skills to achieve higher performance teams through the organizational development interventions (ODIs) for the selected engineering services company. The ODIs were implemented during January until May 2016 includes the four major interventions; business and communication knowledge training, motivation through job enrichment, team development activities with technical problem solving and entrepreneurial team project and dialoguing with teams and observation. Implementation of the ODIs has created the positive development on employee motivation, interpersonal communication skills, entrepreneurial mindset and team performance. After the quantitative analysis, employee motivation, interpersonal communication skills and entrepreneurial mindset statistically significantly predicted team performance. Furthermore, team performance found to be a positive relationship with the perceived performance by the customer.

Keywords: high performance teams (HPTs), team performance, entrepreneurial mindset, employee motivation, interpersonal communication skills, team development

Introduction

During the past few decades, noteworthy transformation of organization design and structure has been observed through various literatures globally. Different cultural characteristics in each geographic region and industry require a different form and structure of the organization in order to function well. It is widely accepted that increasing competition in the rapidly changing business environment nowadays presents

significant challenges for organization restructuring for improved outcomes and performance. Since the beginning of the industrial revolution, industry has shifted its focus from capital intensive in the early machine-driven age to information intensive for the service-driven generation prior to the current innovation driven industry (Miles et al., 1997). As the consequence of social development, different organization structures have been developed and implemented such as functional form, divisional form, matrix form and network form.

Lawler, Mohrman and Ledford (1995) describe the significant movement of organization structure from organizing around the traditional structure and individuals toward a cellular team based structure. Literature from Mile et al. (1997) on organizing around the cellular structure offers the groundbreaking concept for managing an organization in the new era. According to Mile et al. (1997), the team as a cellular unit can be a metaphor as a living person who can act solely on one's roles in order to achieve the distinct vision. Team can be defined as a combination of mutual responsibility of members committed for a common goal with complementary sets of skills (Katzenbach & Smith, 1993). Such structure brings several benefits to the organization for better coping with the accelerated changes in the modern business surroundings.

Extending from the foundation concept of team, growing transformation around team structure has captured the focal attention of academics and professionals in various cultural contexts and industries. Leading global conglomerates such as General Electric and Procter & Gamble are examples of multinational companies that utilize team structure to improve the company's performance (Thiel, 2009). Glassop (2002) summarizes the benefits of team structure for the organizations which include boost in performance, improved productivity, diminished absenteeism and reduced turnover rate.

Recent literature from Tayko (2015) on developing High Performance Teams (HPTs) asserts that the robust change and complex competition in today's business demand leaders to seek sustainability of their business. Therefore, the leader needs new ways of managing people in order to cope effectively with such robust changes. In that sense, HPTs serve as one of the important vehicles for use by management to direct sustainably within their business. According to Tayko (2015), HPTs refers to groups highly focused on developing goals for excellence and exceed other typical performing teams. Furthermore, these teams regularly serve their related stakeholders with higher results than expected. MacMillan (2001) and Thiel (2009) supports the six necessary characteristics of HPTs which includes clear roles, common purpose, effective processes, accepted leadership, solid relationship, and excellent communication. Tayko (2015) concludes that HPTs outpace the typical expectation of performance and results in a strong bond within member relationships with high commitment and united efforts toward extraordinary results.

Organizing around teams is a significant area to be explored in the Thai cultural and industrial context. Referring to the researcher's background in engineering and business, the topic of developing high performance teams in an engineering organization is motivated by the desire to enhance Thai engineering team competencies, integrate the knowledge of Engineering, Business Administration and Organization Development toward higher performance and close the academic and industry knowledge void.

Background of the focal organization

The focal organization for this research is a major provider of maintenance services for oil tank maintenance in Thailand for more than ten years hereinafter called "CLV". The company is located near the oil and refinery plants in the eastern part of Thailand. It is well known for its proficiency of operation, technology and consultancy for oil tank maintenance projects. The current organization structure includes four departments; maintenance department, engineering department, business planning department and human resource and administration department.

Looking at the maintenance department as the focal area of this research, it is divided into ten teams. Most of them are grouped to fit well with customer's location for the appropriate time to serve. During some complex engineering projects, cross-functional teams are formed to serve for such specific project. These maintenance teams are assigned to manage and conduct the oil tank maintenance process on a contract basis. The specification in the contract determines the scope of the project, service specification, budget, delivery time and inspection guideline. Due to the different geographical locations of the various customers, the company assigns the project to each team based on a location classification fitting well with the customer's factory. According to the nature of its task, performance of these maintenance projects are generally measured through three key indicators; on time delivery, on budget as planned and fewer customer complaints.

Organizational diagnosis

Organizational diagnosis is the process of understanding on how the focal organization is presently functioning. Moreover, it provides the needed information for designing an appropriate change intervention. The researcher applied SWOT analysis and the STAR assessment.

The STAR assessment

The STAR framework defines the five aspects of design policies of the company including people, rewards, processes, structure and strategy. These factors are governed by the executives and affect behavior of the employee. This section presents the STAR analysis for the selected organization.

1) Strategy

As a family owned company, strategic planning and policy of the Company are not a solid process. The management of the company tends to follow the strategy of the owner. Its corporate strategy mainly focuses on the technical aspect with less attention on the commercial focus. Current project performance is measured through the three key indicators, number of customer complaints, cost and time.

2) Structure

The company utilizes a functional structure through the four departments that groups the similar specialization together. The maintenance department applies team structure as its internal structure that consists of lead engineer, engineers, and technicians.

3) Processes

Work processes are coordinated within and among the departments through personal relationship without a systematic coordinating process. It could be observed a highly centralized decision making process controlled by the owner. The owner of the company usually accomplishes decision-making while employees tend to follow.

4) Rewards

Employees are divided into two clusters; non-technical employees include human resources, information technology, business development and sales, and technical employees include lead engineers, engineers and technicians. The current reward and compensation system pays technical employees more and motivates non-technical employee through profit sharing scheme.

5) People

The people policy of the company covers only compensation and recruiting processes. No systematic employee development process was observed during the assessment. Most of the employees in the maintenance department are from the technical background with strong engineering mindset and less commercial focus and soft skills. During the recruiting process, the human resource manager put the priority on the candidates that are located near the company and customer's location in the eastern part of Thailand. Looking at the employee development process, there are no systematic development process of these technical employees. Most of the training has been done through on the job training (OJT).

The organizational assessment through the STAR framework assists the researcher to systematically examine the current situation of the selected organization. CLV has a strong technical background with a long-term trust from the customer due to their good quality of maintenance projects. However, the strong centralized decision-making and the nature of a family owned business places a limitation on employee creativity and low motivation during routine work.

Based on the STAR assessment, it is suggested that the Company should further utilized a decision making process that is more flexible and includes all levels of employees and reduce the amount of dependence on the hierarchy for all decisions. This requires the development of communication skills and working processes within each team, among teams and with the customers. Also, the strong technical background can support the business needs and entrepreneurial mindset. This could provide opportunities for the company to enhance their communication development and entrepreneurial mindset toward achieving higher performance.

The SWOT analysis

The SWOT analysis is the environmental scanning process used to observe, appraise and disseminate the needed information regarding the internal environment of the organization and external environment of the organization (Wheelen & Hunger, 2010). This section presents the SWOT analysis for the selected organization.

Strengths

- **Strong customer based and long term satisfaction** - The Company was set up more than ten years ago. Their portfolios during the past decade have created strong customer satisfaction as a result of the good quality of work and its attractive service cost.
- **Long service period of the employee with low turnover rate** - Due to the family like working environment, employees work for the company for a long time. The company experiences a low turnover rate. Most of the employees stay near the company's campus and customer. Less time and travelling expenses result in higher satisfaction.
- **Strong engineering experience with the latest technology and equipment** - Employees are experienced and well trained through on the job training. Moreover, the executives focus on latest technology and equipment, thus benefiting their customers with shorter project periods and opportunities for cost saving.

Weaknesses

- **The decision making of the company is centralized** - As is customary in the nature of Thai family owned businesses, centralized decision-making is usually observed. Most of the employees and managers tend to follow the owner's decisions. This could lower the creativity of the employees and slow the response to a customer requirement.
- **Lack of interpersonal communication skills and employee motivation** - It is observed that CLV work processes rely on personal relationships among the

employees. There is no formal communication and coordinating processes except for accounting and finance work. The technical people of the organization show lack of presentation and interpersonal communication skills. Customer's feedback during the past few years mentioned about the lack of communication skill. This inefficient work process leads to routine work and low motivation of the technical people.

Opportunities

- **Regional economic integration through the ASEAN Economic Community (AEC) offers the opportunities for expansion of engineering service** - The regional economic integration of AEC brings the new opportunities for Company to grow internationally within the region.
- **Team development toward higher performing team** - In accordance to the nature of its tasks, maintenance projects usually drive through the utilization of team. The development of individual and team level into high performing teams could result in higher effectiveness of the whole organization.
- **Developing entrepreneurship mindset and business skills for the employee** – The company desire to grow internationally will require teams to adopt entrepreneurship skills. Therefore, developing entrepreneurship mindset and related business skills is necessary if the employees are to think creatively and in an innovative way so as to deliver maintenance projects that exceed customer expectations.

Threats

- **Thailand domestic oil refinery capacity remains static since 2008** – Oil consumption is affected by the current economic situation. The current utilization of domestic refinery capacity is about 90 percent. The management of CLV believes that it will take time for future capacity expansion.
- **Instability of Thailand politics and social unrest** - It is widely accepted that Thai political situation has experienced instability and social unrest for a decade. The social status has created fluctuating economic growth and slow industrial expansion thus inevitably affecting domestic energy consumption.
- **Increasing competition for maintenance project from international and domestic players** - With a developing new open market system and the regional economic integration, international players can enter into the Thailand market. Domestic competition tends to be more serious competition.

The SWOT assessment helps the researcher to reveal the key issues that affect to current operation of the company. The emerging AEC offers an opportunity for the

company to expand its operations to overseas. To capture these coming opportunities, the company needs to develop their team as higher performing teams through enhancing entrepreneurial mindset, increased employee motivation and increased interpersonal communication skills for their technical people. In another way, the emerging of AEC also brings significant challenges in many aspects for Thai industry and manufacturers. The development of high performing teams at CLV could enhance their capability to cope with coming challenges and competition. The company has to step up its capability to ensure their strong competitive position and secure customer responsiveness.

The need for action research

The utilization of the organizational assessment reveals a clear understanding on how the focal organization is presently functioning. The company has a strong technical background with a good track record with customers. Most of the employees are loyal to the company with a low turnover rate due to family and warm working environment. However, internal work processes rely on personal relationships, lack of solid communication and coordination processes.

The practice of High Performance Teams (HPTs) should be applied within the maintenance department of the company to achieve higher business outcomes and company sustainability. In order to achieve this high performance level, findings from the organizational assessment suggest that CLV needs to strengthen entrepreneurial mindset, employee motivation and interpersonal communication skills seeking high performing teams. With the purpose of the research, a systematic inquiry through action research model should be purposely applied to the focal company.

Action research utilizes a planned change process ordinarily used for improving practices and conditions in a specific context of the organization (Parkin, 2009; Lingard et al., 2008). Building the skills and mindset through an action research for the employee and team could enhance CLV and develop a collection of high performance teams.

Problem Statement

This research intends to develop entrepreneurial mindset, employee motivation and interpersonal communication skills in order to achieve higher performance teams through the organization development interventions (ODIs) for the selected engineering services company in Thailand.

Research Objectives

1. To assess and diagnose the existing situation of the focal organization on entrepreneurial mindset, employee motivation, interpersonal communication skills and team performance.

2. To identify, design and conduct an appropriate Organization Development Intervention (ODI) based on the initial organizational assessment on entrepreneurial mindset, employee motivation, interpersonal communication skills and team performance.
3. To investigate the relationship of entrepreneurial mindset, employee motivation and interpersonal communication skills on team performance.
4. To investigate the differences on the pre-ODIs and the post-ODIs of entrepreneurial mindset, employee motivation, interpersonal communication skills and team performance.

Research Questions

1. What is the existing situation of the focal organization with regard to entrepreneurial mindset, employee motivation, interpersonal communication skills and team performance?
2. What are the appropriate ODIs to enhance entrepreneurial mindset, employee motivation, and interpersonal communication skills on team performance?
3. Is there a relationship between entrepreneurial mindset, employee motivation, interpersonal communication skills on team performance?
4. Is there a difference between the pre-ODIs and the post-ODIs of entrepreneurial mindset, employee motivation, interpersonal communication skills and team performance?

Research Hypothesis

To test the effect of entrepreneurial mindset, employee motivation and interpersonal communication skills on team performance prior, during and after the ODIs, hypotheses are synthesized as follows.

H1o: Employee motivation, interpersonal communication skills, and entrepreneurial mindset are not statistically significantly predicting team performance.

H1a: Employee motivation, interpersonal communication skills, and entrepreneurial mindset are statistically significantly predicting team performance.

H2o: There is no significant relationship between team performance on perceived team performance by the customer.

H2a: There is a significant relationship between team performance on perceived team performance by the customer.

H3o: There is no impact between the pre-ODIs and the post-ODIs on employee motivation, interpersonal communication skills, entrepreneurial mindset and team performance.

H3a: There is an impact between the pre-ODIs and the post-ODIs on employee motivation, interpersonal communication skills, entrepreneurial mindset and team performance.

Review of Literature

High performance teams (HPTs) and team performance

Katzenbach and Smith (1993) describe team as a combination of members with mutual responsibility that committed to a common goal. Seeing that each individual cannot achieve their goal solely due to limitation of skills and abilities, the combined member's experience and skills offers source for interdependency (Thompson, 2007). Tuckman (1965) developed the four-stage model of team development; forming, storming, norming and performing. Later on the fifth stage, adjourning, was added to the model (Tuckman & Jensen, 1977).

High performance teams refer to teams that regularly deliver an extraordinary result compared with other normal teams (Katzenbach & Smith, 1993). Kur (1996) suggests that HPTs continually satisfy the needs for products and services of their stakeholders and usually outperform similar teams. Recent literature from Tayko (2015) concluded that rapidly change in today's business environment has created new challenges for management to drive their businesses sustainably. Such robust change calls for new ways to develop employee competencies in high performing teams. Tayko (2015) defines HPTs as teams highly focused on their goals that achieve superior business results. HPTs usually deliver higher expected results and outperform all other similar teams. Boulden (2012) asserts that HPTs show high levels of innovation and collaboration that deliver superior team results. Thiel (2009) as cited in Tayko (2015) and MacMillan (2001) see six important characteristics in HPTs; excellent communication, solid relationships, effective processes, accepted leadership, clear roles and common purpose. Tayko (2015) concludes that HPTs exceed the normal expectation of performance and results and create a strong bond of relationship among the members that are committed to mutual goals and perform cohesively to achieve extraordinary results. From the customer aspect of the engineering project, perceived team performances are measured by overall satisfaction, project phase and task phase, project schedule, project cost and team member's performance (Azmy, 2012).

Entrepreneurial mindset

Entrepreneurial mindset refers to a way of thinking in an innovative and creative manner to capture the opportunities in an uncertain business environment seeking organization success and wealth (Dhliwayo & Vuuren, 2007). Wennekers and Thurik

(1999), Ireland et al. (2003) and Senge (2007) support that entrepreneurship mindset is an essential behaviorism to maintain the competitiveness of economic growth through a value creation process. Such a mindset occurs and can be applied in both established organizations and a startup firm (Stevenson & Jarillo, 1990).

McGrath and MacMillan (2000) state that essential features of entrepreneurship mindset include engaging member's energy for execution of task and intensely seeking the best opportunities and alternatives. Mathisen and Arnulf (2014) add that entrepreneurial mindset includes elaborating mindset (goal-setting phase), implementing mindset (action developing during the planning phase), and compulsiveness mindset (tendency to fade from awareness on uncertain opportunity).

From the team aspect, Pearsall and Ellis (2006), and Hirst, Van Knippenberg and Zhou (2009) state that entrepreneurial teams are more likely to succeed and achieve superior performance than individual entrepreneurs. Within these teams, the combination of members with entrepreneurial mindset offers more variety of experience and education background as well as social and human capital that offer the holistic viewpoint in managing business and social uncertainties (Chowdhury, 2005; West, 2007).

During the past two decades, engineering has become an integrated discipline that links technical development to solve human needs (Melsa et al., 2009; Lamancusa et al., 2008). This revolution has positioned a new paradigm for engineering education and industry that requires more entrepreneurial thinking in order to capture the opportunities based on their technical knowledge.

Creed et al. (2002) purports that engineering service also plays a significant role in transforming the service industry. High growth in the use of outsourced services for production and services during past decade has been observed. To cope effectively with this fast changing business environment, engineering people need an entrepreneurial attitude in order to utilize their technical knowledge to catch the technologically driven opportunities (Byers, Dorf & Nelson, 2010; Ravasi & Turati, 2005). Secundo et al. (2013) provides the four clusters of entrepreneurial engineer: (1) business competences, (2) entrepreneurship attitudes, (3) professional skills and (4) technology skills.

Elia et al. (2011) and Goldberg (2006) define "entrepreneurial engineer" as an engineer who develops new ideas to capture new technology based business opportunities that create value for society. Krielwell and Mekemson (2010) conclude that entrepreneurial engineers' focus on product and service offers benefits to fulfill unmet customer needs. Moreover, the researcher summarized characteristics of entrepreneurial engineers to include creativity, integrity, strong technical knowledge, learning skill, communication skill and ability to commercialize their idea to generate value added products and services.

Interpersonal communication skills

Interpersonal communication is defined as a transactional process of communication in order to manage people's relationships (Beebe et al., 2011). Interpersonal communication skills are learnable behaviors and can be improved by training, feedback and practice. Rungapadiachy (1999) states that interpersonal communication skills are needed skills for effective communication with others.

During the past decade, several literatures point out the needed characteristics engineers need to develop. Apart from the strong technical skills of engineers, soft skills are also mentioned as needed competencies that ensure a successful engineering career (Mannan, 2014). Male, Bush and Chapman (2010) state that teamwork, problem-solving, self-management and communication skills are the deficient competencies of engineers nowadays. Bodmer et al. (2002) purports that communication skills and leadership are needed skills for engineers. Enhancing communication skills for engineers can be done by several methodologies including oral presentation, peer review, role-play, video and various modern technologies (Seetha, 2012). Oo, Proust and Lim (2012) support that essential communication skill for engineers include oral presentation, public speaking, writing and team communication.

Employee Motivation

Motivation is the force that stimulates someone to do something (Broussard & Garrison, 2004). Motivation is described as the forces that accelerate people's behavior to satisfy their needs (York, 1976). Burke (1987) concluded that unsatisfied needs bring the significant source of motivation. In the contrasting way, satisfied needs bring no tension for individuals to create motivation. Once the person is engaged in an interesting activity the motivation level to complete the task is high.

Employee motivation refers to the forces that encourage the employee to put an effort for a particular job and remain active in the position (Simons & Enz, 1995). Additionally, the eagerness to strive for high effort toward the achievement of organizational goals is also derived from employee motivation. A motivated employee has aligned the organizational goal with his individual goal with a dedicated effort toward such direction. These people have delivered their full potentiality and progressively seek ways to improve their work. As a consequence, increased portion of motivated employees within the organization leads to improved success and sustainability. In order to energize an employee to perform well, Ferguson (1987) and Hamner and Organ (1987) present that an effective manager must know the related motivational factors that help their subordinate to align individual goals with organization purpose.

Herzberg's two-factor theory

Herzberg (1959) highlights the motivational sources that are relevant to the achievement of task and job. Job dissatisfaction and satisfaction were the result of the two interdependent factors; hygiene factors (administration and company policy, supervision-technical, working conditions, interpersonal relations, personal life, job security, status, salary) and motivating factors (achievement, recognition, work itself, responsibility, advancement, possibility of growth).

Herzberg (1959) delimits that motivating factors bring employee job satisfaction while hygiene factors lead the employee to job dissatisfaction. Such motivating factors tend to be intrinsic factors while hygiene factors are related to extrinsic factors. Later on, Herzberg (1968) concludes that vertical loading or job enrichment could enhance employee motivation through enablement and more responsibility. Ramlell (2004) supports that through job enrichment programs employees can experience wider responsibility, growth, achievement, and recognition resulting in higher motivation.

Job enrichment

Job enrichment has become one of the management activities employed to improve employee motivation and company growth. Motivating factors through job enrichment refers to the method of adding wider responsibility to the employee. Job enrichment offers a systematic way of stimulating employee's effort by increasing managing autonomy and expanding employee's responsibility. Greater needs and variety in skills of employees serve as the foundation for achieving higher effectiveness through job enrichment program (Kamal et al., 2008).

In organization development purpose, job enrichment can reduce related demotivating factors by decentralizing the decision making and allowing employees to control their own task toward higher performance in the workplace (Derek & Laura, 2000; Garman, Davis-Lenane & Corrigan, 2003). Al-Nsour (2012) concluded that job enrichment leads to better work motivation, competitive advantage, job satisfaction and greater employee commitment. Cherati, Mahdavi and Rezaeian (2013) conclude that the implication of job enrichment lead to higher commitment and effectiveness of workers for organizational goal. Robbins and Judge (2011) and Hellriegel and Slocum (2011) conclude the five paths for job enrichment program include natural teams formation, natural grouping, vertical loading, establishing client relationship, and opening feedback channels.

Conceptual Framework

The outcome of the organizational diagnosis reveals challenges to improved business results and sustainability of the engineering services sector that the focal

organization can overcome through the practice of the HPTs. This organization development research aims to enhance the capability of the selected organization at the team level and individual level. Entrepreneurial mindset, employee motivation and interpersonal communication skills are focused as the key variables for the planned ODIs. Action research through the ODIs could strengthen the capability of its engineering workforce since these employees are the corporate intelligence assets for company success.

Employee motivation refers to the force that eagerly drives the employee to put a strong effort toward the achievement of the organizational goal (Simons & Enz, 1995). In this dissertation, employee motivation is based on Herzberg's theory of job content factors include Growth, Opportunities for advancement, Responsibility, Work itself, Recognition and. These factors are widely accepted as the motivating factors that lead to job satisfaction. The ODIs through the job enrichment, including natural grouping, vertical loading, establishing client relationship and opening feedback channels, is expected to enhance the employee motivation level of selected participants of the focal company.

Interpersonal communication skills refer to a process of communication in order to manage people's relationships (Beebe et al., 2011). Rungapadiachy (1999) states that interpersonal communication skills are needed skills for an effective communication with others. Important communication competencies for engineers include oral presentation, public speaking, writing and team communication (Oo, Proust & Lim, 2012).

Entrepreneurial mindset is defined as the way of thinking in a creative and innovative manner beneficial to capture the business opportunities among an uncertain environment (Dhliwayo & Vuuren, 2007). Mathisen and Arnulf (2014) add that entrepreneurial mindset includes elaborating mindset (goal-setting phase), implementing mindset (action developing during the planning phase), and compulsiveness mindset (tendency to fade from awareness on uncertain opportunity).

Developing teams into HPTs is the focused attention for this research. For this research, team performance is measured through the six key characteristics as mentions by Tayko (2015) including clear roles and responsibilities, common purpose, effective processes, accepted leadership, solid relationship and excellence communication. From the customer aspect of the engineering project, perceived team performances are measured by overall satisfaction, project phase and task phase, project schedule, project cost and team member's performance (Azmy, 2012).

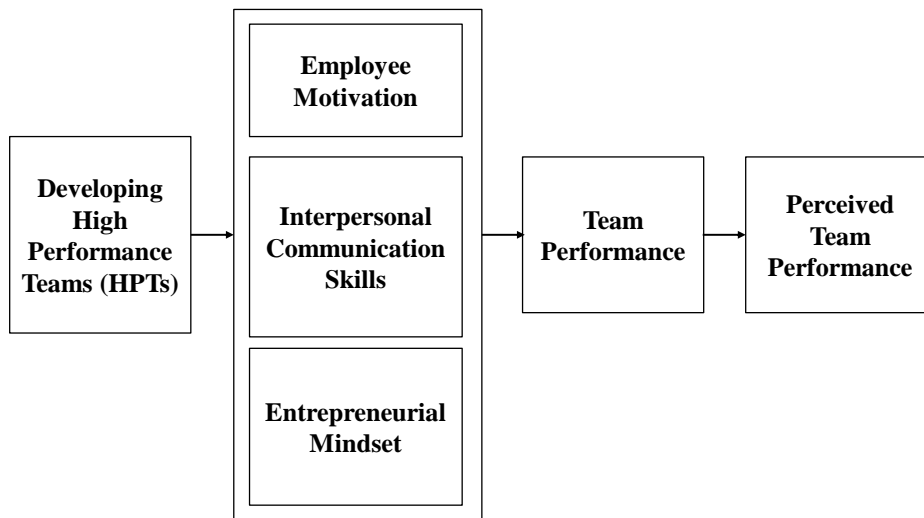


Figure 1 Conceptual framework (Researcher, 2016)

Action Research Framework

This research utilizes the action research methodology through the organization development interventions. The research is divided into three steps; the pre-ODIs, the ODIs and the post-ODIs. The pre-ODIs step consists of the organizational assessment, observation and interview with the purpose to understand how the focal organization is presently functioned.

The ODIs step involves planned activities in both team level and individual. In the individual level, interventions consist of dialoguing, observation, motivating through job enrichment and business and communication knowledge training. These activities aim to develop team member behaviors and skills for supporting high performance teams. At the team level, related interventions include team development through technical problem solving and entrepreneurial team project. After the planned intervention period, the post-ODIs step takes place to evaluate the result of the development program.

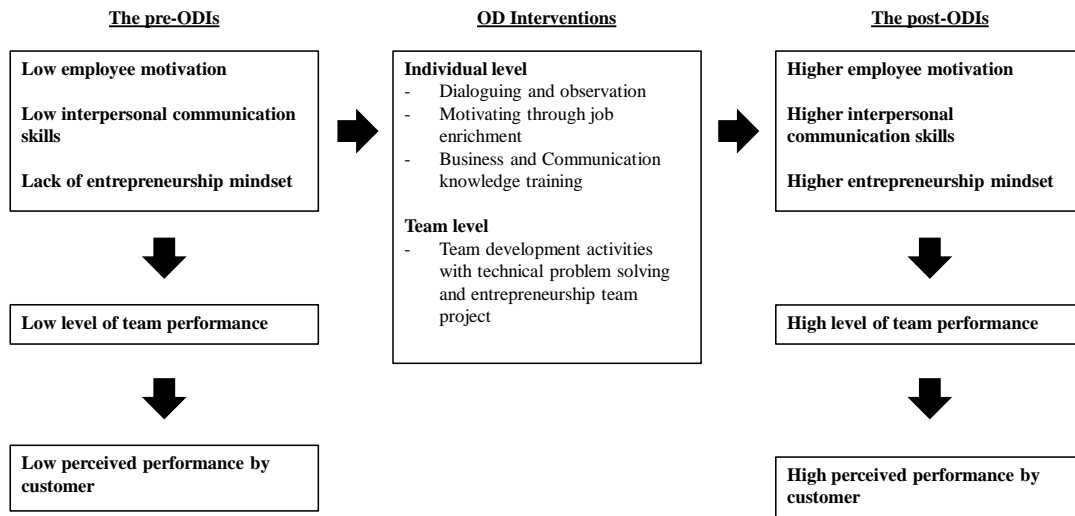


Figure 2 Action research framework (Researcher, 2016)

Research Methodology

The pre-ODI process

The pre-ODIs process aims for a transparent understanding on how the focal organization is presently functioning and discovers the key issues for conducting appropriate organization development interventions. The initial assessment utilizes the STAR framework and the SWOT analysis as the assessment frameworks. This pre-ODIs stage employs both qualitative and quantitative methods through semi-structured interview, questionnaire and observation for problem identification and data accumulation.

The ODI process

According to the change process by Kurt Lewin which includes the three steps of change; unfreezing, moving and refreezing. The OD process begins with the initial meeting with the participants to discuss about the needs and benefits of the development for the employees, teams and company. The result of the pre-ODIs also point out and jointly discuss with the collaboration among team leaders and team members. This session helps the participants to understand and be aware of the needs for change which could reduce the forces for maintaining for the existing level. Then, the moving stage takes a place in order to move the behavior and skills of the participants during the ODIs

stage to the desired level. Related interventions during this stage include dialoguing with teams and observation, business and communication knowledge training, job enrichment, and team development activities with technical problem solving and entrepreneurial team project. After the ODIs stage had been implemented, the researcher gave a feedback of the development to the management team and the owner of the company with a recommendation of future development plan for extending the OD process for the organization wide in the final refreezing stage.

The Post-ODI process

After the ODIs stage had been implemented, the post-ODIs stage focused on the assessment of the development of the intervention. The process placed emphasis on the outcome of the planned intervention. During this stage, the participants were engaged in the evaluation activities including semi-structured interview, questionnaires and. The researcher then performed the computation process to compare the pre-ODIs and post-ODIs result for the related variables.

Subjects of study and sources of data

The target respondents of the study were divided into three groups, (1) employees in the maintenance department with the ODIs, (2) employees in the maintenance department without the ODIs, and (3) customers of the company.

The ODIs covered these three teams (30 employees) in the middle level of team performance in order to bring them toward higher performance. Another two teams (16 employees) included the participants without the ODIs to compare the result of the research variables between the group with the ODIs and without the ODIs. The third group of participants comprised of thirty representatives from six corporate customers that the three teams with the ODIs served during the research period including purchasing officers, engineer, technicians and manager.

Analysis of Findings

Quantitative analysis of the research variables for employees with the ODIs and the customer

Table 1 summarizes mean and qualitative rating of the selected research variables through between the pre-ODIs and the post-ODIs for employees with the ODIs and customers of these teams.

The ODIs could change the perception of the respondents from uncertain level to agree level include employee motivation, entrepreneurial mindset and team performance. The mean of these variables have changed from 3.16 to 3.61, 3.02 to 3.51 and 3.18 to 3.63 respectively. While the remaining factors; interpersonal communication skills and

perceived team performance remain the same level of perception at uncertain and agree level respectively. However, the ODIs brought the improvement of all research variables.

Table 1

Mean and qualitative rating of the research variables (employees with the ODIs)

Research variables (Employees with ODIs)	The pre-ODIs		The post-ODIs		Mean Diff
	Mean	Qualitative Rating	Mean	Qualitative Rating	
Employee motivation	3.16	Uncertain	3.61	Agree	0.45
Interpersonal communication skills	2.99	Uncertain	3.38	Uncertain	0.39
Entrepreneurial mindset	3.02	Uncertain	3.51	Agree	0.49
Team performance	3.18	Uncertain	3.63	Agree	0.45
Perceived team performance	3.42	Agree	3.78	Agree	0.36

Quantitative analysis of the research variables for employees without the ODIs

To compare the development of the participants with the ODIs and without the ODIs, questionnaires were utilized to collect the data from the two teams of employee without the ODIs. Table 2 illustrates mean and qualitative rating of these respondents.

During the pre-ODIs and the post-ODIs, perception of these respondents remained the same level at uncertain level in all variables. Mean of employee motivation, interpersonal communication skills, entrepreneurial mindset and team performance have changed from 3.08 to 3.04, 2.90 to 2.93, 2.96 to 3.02 and 3.15 to 3.09 respectively. This could represent the fluctuation of trend regarding to the selected research variables for the teams without the ODIs.

Table 2

Mean and qualitative rating of the research variables (employees without the ODIs)

Research variables (Employees without ODIs)	The pre-ODIs		The post-ODIs		Mean Diff
	Mean	Qualitative Rating	Mean	Qualitative Rating	
Employee motivation	3.08	Uncertain	3.04	Uncertain	-0.04
Interpersonal communication skills	2.90	Uncertain	2.93	Uncertain	0.03
Entrepreneurial mindset	2.96	Uncertain	3.02	Uncertain	0.06
Team performance	3.15	Uncertain	3.09	Uncertain	-0.06

Qualitative analysis from the semi-structured interview and observations

Interviews were done during the pre-ODIs and the post-ODIs while observation was utilized throughout the research period. Summary from lead engineers, engineers and team member point of view are presented as follows.

Key findings from lead engineer interviewed

- **How would you describe current team performance under your supervision and what are the key success factors for achieving good performance of maintenance project?**

Lead engineers agree that prior to the ODIs, all team tasks focus on the three primary indicators; project time, project cost and quality. Short project duration and good quality of the maintenance work could lead to better satisfaction from the customer while project cost could lead to their favorable budget management. Lead engineers believe that the company will grow in the same pace as the organic growth of the industry. As the result, their teams had delivered the typical performance compared with others.

All lead engineers mentioned that the ODIs equipped them with the holistic view point of team performance according to the HPTs characteristics. This offers the new aspect of seeing and managing team for them. Majority of the lead engineers point that people is the most important factor for their operation. Developing team based on these five stages of team development could allow their subordinate to work better in both individual level and team level. Better communication within team, among departments and with customer also observed which result in higher level of customer satisfaction and differentiate themselves from others.

- **How would you motivate your subordinates?**

Prior to the ODIs, majority of the lead engineers mentioned that they motivated their team member after the project delivery through the recognition, dinner, party and special holiday. As developed through the ODIs, lead engineers pointed out that motivating his subordinates is an important issue to keep them motivated and passionate for delivering the high performing tasks. All lead engineers stated that they should motivate the employees both during and after the project completion. Apart from the monetary incentive, discussion with the subordinates to understand the needs of individuals, bringing the challenging job through the job enrichment with appropriate resources could bring more motivation to them.

- **How would you describe the current situation of interpersonal communication skills of your team?**

Majority of lead engineers mentioned that team members demonstrate the smooth interpersonal communication and their work partly succeeded due to the good informal communication. Lack of presentation skills on their work and speaking skills were also mentioned as the opportunities for improvement. After the ODIs, lead engineers mentioned that they found better communication between their subordinates and customers. Communication in team is better in both meeting and outside the meeting. However, speaking and public speaking should have continuous development.

- **How would entrepreneurial mindset equip your viewpoint and team toward higher performance?**

Majority of lead engineers mentioned that engaging in the entrepreneurial team project and business knowledge training made teams to think out of the box from their typical tank maintenance projects. Based on their technical expertise and company's equipment, they can deliver more engineering and maintenance activities in the customer's plant. Seeing the whole customer's plant as the window of opportunities, thinking out of the existing service boundary and initiate the new services that they haven't been covered before. This could lead to the new business and new offering for the customers which can support team performance and organization as a whole. Entrepreneurial mindset development and business knowledge training should be implemented to organization wide and embedded in the company business plans.

Key findings from team members interviewed

- **How would you describe current team performance that you belong to and what are the key success factors for achieving good performance of the maintenance project?**

Majority of engineers and technicians mentioned that each member are assigned specific tasks and scope as part of the whole maintenance project. Early completion of their task will help the project to finish ahead of the plan. The primary key indicators of

their tasks include task schedule, resource plan and actual unit used of the raw materials. Interaction among related stakeholders is one of the success factors for their tasks. Part of the success could be due to the good personal relationship. Good relationship among team members lead to smooth execution for the whole project. Team development activities during the ODI stage process equip team members with the appropriate skills and experience to function well.

- **What are the situations and factors that motivate you for higher results?**

It can be summarized that Thai CLV's employee motivation comes from the three sources; self-development and family, boss and the company, and customers. Prior to the ODIs, the employees mentioned that they receive the recognition from their manager after the delivery of the project. If they perform the task well, their manager provides the recognition with non-monetary incentive. During the poor performance situation, no recognition and motivation were mentioned. During the ODIs, employees feel more comfortable to speak with their boss. Several employees mentioned that job enrichment brought them the challenges for new knowledge and opportunity to work with the new people in the new area as well as opportunity to meet with new people. This could refresh their mindset and open for the challenge for the new task and experience.

- **How would you describe your interpersonal communication skills and key issues for development?**

Several staffs mentioned that current communication in team rely on the smooth interpersonal communication. Communication during informal meeting is more effectiveness than during formal meeting. It can be observed that during the formal meeting, the members tend to avoid expressing their ideas and speak less. Team members tend to prefer the informal communication about work. On their fieldwork, staffs point out that communication after the project kick off is quite difficult due to the different shift of working and also the limit of communication channel at the site. Communication with the customer is one of the key issues that team members and engineers mentioned. Ability to communicate and the limit channel bring the difficulty for the member to communicate and update both working problem and progress to their boss and customers.

After the ODIs, team members demonstrate more effective communication in team. It can be observed that the members focus on their formal meeting through the weekly meeting. Formal meetings are more effective and openly discussion in similar environment as the previous informal meeting. Several members mentioned that effective formal meeting and better presentation skills and speaking helps the members focus on the formal meeting rather than discussing in informal way. Writing skills via e-mail also mentioned as an area developed. Their customers also reflected their development on communication through the higher satisfaction of the questionnaires.

- **How would entrepreneurial mindset equip your viewpoint and team toward higher performance?**

Prior to the ODIs, several employees mentioned that they had some entrepreneurial sense due to their family business background. Most of these business operations are in the family level and local business scale. However, they did not have the idea to bring their business idea toward the implementation in the workplace. As a consequence, they tend to focus on the existing business scope with less attraction on the new business or the initiation of the new idea. According to the ODIs on developing entrepreneurial mindset and business knowledge, the employees perceive the business mindset and commercial viewpoint that open their thinking process and viewing the same thing in the different way. Majority of the respondents mentioned that they went to work with the exploration idea manner of how we should expand our business and viewing the whole customer's factory as the area of opportunities.

As the result of the entrepreneurial team project that was presented to the owner, the two team initiatives on the new business idea included (1) expanding its engineering and maintenance fieldwork and (2) new service on analysis and consultancy for engineering project. The owner mentioned that these initiatives could fulfill the business opportunities during the low season of the tank maintenance such as during the raining season and slow move of the oil stock due to the slow market demand. This could bring the opportunities for Thai CLV's business sustainability.

In summary, the employees believe that team with the entrepreneurial mindset could help them toward the better financial outcome and bring them both direct benefits (higher salary and better bonus) and indirect benefits (better compensation and opportunity to grow in the industry and within the company).

Hypothesis testing

This section presents the hypothesis testing. The result of the analysis through the multiple regressions analysis, Pearson's correlation and Wilcoxon sign ranked test are illustrated in the following discussions.

H1o: Employee motivation, interpersonal communication skills, and entrepreneurial mindset are not statistically significantly predicting team performance.

H1a: Employee motivation, interpersonal communication skills, and entrepreneurial mindset are statistically significantly predicting team performance.

To test the hypothesis 1 whether employee motivation, interpersonal communication skills, and entrepreneurial mindset are statistically significantly predicting team performance, a multiple regression was run to predict team performance from employee motivation, interpersonal communication skills, and entrepreneurial mindset. These variables significantly predicted team performance, $F(3, 26) = 68.797, p < 0.001, R^2$

= 0.888 at $p < .05$. Therefore, rejected H1o and accepted H1a. Employee motivation, interpersonal communication skills, and entrepreneurial mindset are statistically significantly predicting team performance.

H2o: There is no significant relationship between team performance on perceived team performance by the customer.

H2a: There is a significant relationship between team performance on perceived team performance by the customer.

To test the hypothesis 2 whether there is a significant relationship between team performance on perceived team performance by the customer, a Pearson's correlation was run to determine the relationship of team performance and perceived team performance. There was a strong, positive correlation between team performance and perceived team performance ($r = 0.776$, $N = 30$, $p < 0.000$). Therefore, rejected H2o and accepted H2a. There is a significant relationship between team performance on perceived team performance by the customer.

H3o: There is no impact between the pre-ODIs and the post-ODIs on employee motivation, entrepreneurship mindset and interpersonal communication skills and team performance.

H3a: There is an impact between the pre-ODIs and the post-ODIs on employee motivation, entrepreneurship mindset and interpersonal communication skills and team performance.

To test the hypothesis 3 whether there is an impact between the pre-ODIs and the post-ODIs on employee motivation, entrepreneurship mindset and interpersonal communication skills and team performance, the analyses through the Wilcoxon's signed rank tests were run to determine the relationship among the variables.

- A Wilcoxon signed ranks test analysis indicated that the employee motivation during the post-ODIs, Mean = 3.61, were statistically significantly higher than during the pre-ODIs, Mean = 3.16, $Z = -4.789$, $P < 0.000$.
- A Wilcoxon signed ranks test analysis indicated that the interpersonal communication skills during the post-ODIs, Mean = 3.38, were statistically significantly higher than during the pre-ODIs, Mean = 2.99, $Z = -4.591$, $P < 0.000$.
- A Wilcoxon signed ranks test analysis indicated that the entrepreneurial mindset during the post-ODIs, Mean = 3.51, were statistically significantly higher than during the pre-ODIs, Mean = 3.02, $Z = -4.711$, $P < 0.000$.
- A Wilcoxon signed ranks test analysis indicated that the team performance during the post-ODIs, Mean = 3.63, were statistically significantly higher than during the pre-ODIs, Mean = 3.18, $Z = -4.783$, $P < 0.000$.

- A Wilcoxon signed ranks test analysis indicated that the perceived team performance during the post-ODIs, Mean = 3.78, were statistically significantly higher than during the pre-ODIs, Mean = 3.42, $Z = -4.672$, $P < 0.000$.

According to the Wilcoxon signed rank test of the research variables; employee motivation, interpersonal communication skills, entrepreneurial mindset, team performance and perceived team performance were significantly higher during the post-ODIs than during the pre-ODIs. Therefore, rejected H_0 and accepted H_3a . There is an impact between the pre-ODIs and the post-ODIs on employee motivation, entrepreneurship mindset and interpersonal communication skills and team performance.

Summary, Conclusion and Recommendations

This study reveals that the implementation of the ODIs; dialoguing with teams and observation, business and communication knowledge training, motivation through the job enrichment, and team development activities with technical problem solving and entrepreneurial team project has created the positive development on entrepreneurial mindset, employee motivation, interpersonal communication skills and team performance for the participants. Employee motivation, interpersonal communication skills and entrepreneurial mindset statistically significantly predicted team performance.

Team performance was found to have a strong positive relationship with the perceived performance by the customer. Therefore, the six dimensions of team performance, (1) clear roles and responsibilities, (2) common purposes, (3) effective team process, (4) accepted leadership, (5) solid relationship and (6) excellence communication, should be implemented as a primary set of indicators to measure the internal team effectiveness. Moreover, perceived team performance by the customer includes (1) overall satisfaction, (2) project phase and task phase, (3) project schedule, (4) project cost and (5) team member performance should be carefully monitored during the maintenance project period to ensure the good level of perceived performance by the customer. Apart from these team indicators, team managers also play significant roles of leading the Thai teams and should be intentionally developed to lead the HPTs successfully.

Recommendations for the company and the industry

- Organizational diagnosis should be periodically reviewed for the company for more understanding on the opportunity and the threat with further appropriate development intervention. Moreover, Vision, mission, objectives and performance indicator should be clearly defined for each team and department to ensure the same understanding of mutual organization goal and alignment to employee level.
- The result of the ODI reveals the significant impact on employee motivation, interpersonal communication skills, entrepreneurial mindset, and team

performance for team and perceived team performance by the customer. Higher team performance results in higher perceived team performance by the customers. Therefore, the continuous development should be intentionally utilized to increase the effectiveness of these individuals and teams.

- Job enrichment could bring opportunities for the employee to learn the new skills and new responsibilities. As the nature of the engineering business, participants in the job enrichment also mentioned about their viewpoint on the process improvement and cost reduction opportunities. This could be beneficial for both team performance and overall organizational bottom line.
- Equip the technical people with the business knowledge and entrepreneurial mindset allows the knowledge of the business value chain for the technical people. This could help the company grow sustainable during the rapidly change and increasing competition in the market.
- Smooth communication is the nature of Thai people. However, this culture brings some limitations in the formal meeting and conversations. The development of interpersonal communication skills could enhance their ability to communicate better. After the ODI, better communication and open sharing have been observed during the formal meetings.

Recommendation for further study

- Further study should consider the development of HPTs in larger engineering service company and another cultural context to see the difference and appropriate approach of ODIs for developing HPTs among various organization climates. Larger number of the participants should be considered to gain a deeper understanding toward other factors and the nature of HPTs. Moreover, different variables may be applied to the research to expand the extent of understanding of the independent variables toward HPTs.
- Leadership of team issues such as characteristics of organization leader and team leader development should be another area to be explored. As the nature of Thai organizations and teams, the team leader is the significant person who governs, leads, controls, motivates and guides his subordinates. According to the rapidly change in the business landscape and increasing competition among the competitors, team leaders need to be developed continuously to lead team and organization successfully. ODIs could be a tool that equips the overall organization toward the future vision.
- The linkage of team performance and perceived team performance to the financial indicators of the company should be studied to connect the team performance to the financial outcome of the company.

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