# The Impact of Human Resource Development and Performance Improvement through Continuous Improvement among in Business Functional Areas

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Abstract- Since the researcher was seeking to identify the practices that may influence performance improvement (PI) by better supporting CI implementation success the Mediational Model was selected as the basic model for conducting mediation analysis by employing Structure Equation Modeling (SEM). The model conceptually helped the researcher better understand the mechanism by which the independent variables influenced dependent variables through testing mediators. For this study, the target population was composed of employee in steel industry. The population frame is sampled form the steel industry in Thailand. The sample size was resulting in 622 employees from the entire population of four firms of the steel producers. According to the structural model shown good practice for success performance.

# Keywords- Human resource development, Continuous improvement, Performance Improvement

# I. INTRDUCTION

Human Resources professionals play a proactive role in developing organizational strategies, supervisor's leadership skills have improved, employee's current position in the company is aligned with my individual development goals, sharing knowledge or exchanging appropriate information within the organization is encouraged. Human resources support ways to share knowledge, corporate culture is evolving in order to promote business strategies, human resources tools (e.g., HRD online, etc.) can help employees and managers easily understand and use Human Resources Core Processes, succession planning supports talent development and ensures the next generation of leaders. Each business sector can work towards achieving the company's goal by working on their own problem areas. After being aware of problem areas, each section can create a solution and implement this into their plan for success. The steel industry is one of the basic industries which is significant for all developing countries in the world. The companies have many employees. Employees with highest knowledge and ability to work in the industry will continue to be employed. Many big organizations have success in their business because they have employees with high ability and they have great strategies. They have to employ people with high ability for business competitive advantage. This study the researcher intends to present the significant organizations that drive country forward. It is certain that every organization must have a human resource department or personnel as the main units in work performance.

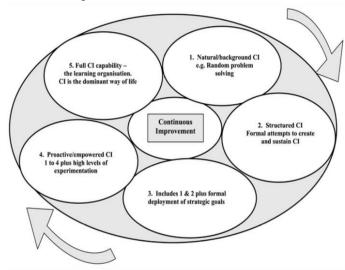


Figure 1. Adaptive learning cycle of continuous improvement. Adapted from Bessant and Caffyn (1996) source: Perter and Ross (2003)

#### II. THEORETICAL BACKGROUND

Peter and Ross [5], suggested the continuous improvement (CI) discourse has benefited countless manufacturing enterprises to improve and adapt their methods of production that organizational learning frameworks provide useful ways of thinking about TQM and CI a more holistic process towards learning suggests that efforts to improve and develop behavioral routines will be more beneficial. Bessant and Caffyn suggested Continuous Improvement (CI) is a strategy utilized in organizations to improve employee work performance. Many companies have already implemented this model which has proven to generate higher success rates. There's five stages of maturity for this model. The first stage is the "Natural/background CI." This beginning stage allows problem-solving techniques to be handled only by specialists. During this stage, solutions are not implemented for longer terms. These are quick decisions with short outcomes. No formal behavioural standards or expectations are required during this stage. Employees seek to have their problems solved by higher authority, however, outcomes may vary depending on who the employees talk to Full CI: Employees are capable of individual problem-solving. Everyone learns from their experience, good and bad. After the goals and behavioural standards are established and the staff is aware of how to function with independence, the CI model has been fully implemented and the company will begin to see major positive results. Experimentation still occurs as a way for employees to practice their autonomy.

#### III. HYPOTHESES DEVELOPMENT

Most of the research showed that people grew exponentially on an individual level and therefore it affected the whole for the greater good. To the companies benefit, if HRD could affect the companies in the following ways if they were to be involved and show support through facilitating and supporting employee, encouraging employee participation and commitment on an individual, team, and organizational level [Jorgensen & Hyland[2]].

H1: Human Resource Development (HRD) has positive effects on Continuous Improvement (CI) of functional engineer.

H2: Human Resource Development (HRD) has positive effects on Performance Improvement (PI) of functional engineer.

H3: Continuous Improvement (CI) has positive effects on Performance Improvement (PI) of functional engineer.

H4: Human Resource Development (HRD) has positive effects on Continuous Improvement (CI) of functional quality.

H5: Human Resource Development (HRD) has positive effects on Performance Improvement (PI) of functional quality.

H6: Continuous Improvement (CI) has positive effects on Performance Improvement (PI) of functional quality.

H7: Human Resource Development (HRD) has positive effects on Continuous Improvement (CI) of functional HR.

H8: Human Resource Development (HRD) has positive effects on Performance Improvement (PI) of functional HR.

H9: Continuous Improvement (CI) has positive effects on Performance Improvement (PI) of functional HR.

H10: Human Resource Development (HRD) has positive effects on Continuous Improvement (CI) of functional technician.

H11: Human Resource Development (HRD) has positive effects on Performance Improvement (PI) of functional technician.

H12: Continuous Improvement (CI) has positive effects on Performance Improvement (PI) of functional technician.

#### IV RESEARCH METHODOLOGY

### A. Conceptual framework

Conceptual framework was conducted to test relationship Human Resource Development (HRD) and Performance Improvement (PI) through Continuous Improvement (CI) among in business functional areas.

## B. Hypothesis testing

For this study, the target population was composed of employee in steel industry. The population frame is sampled form the steel industry in Thailand. The sample size was resulting in 622 employees from the entire population of four firms of the steel producers. The sample size was calculated according to the rule of structural equation model (SEM) which consider the number of free parameters as a rule of thumb to the determine sample size for research studios that use SEM. The suggested ratio of the sample size to the number of free parameters might be able to go as low as 10:1 under the normal and elliptical theory, especially when there are many indicators of latent variables, and the associated factor loadings are large. Though, there is even less experience on which to base a recommendation. [Bentler & Chou[1]]. The amount of the sample size required by the researcher was 622 people. Hypothesis testing of model of business functional areas as shown in table 1.

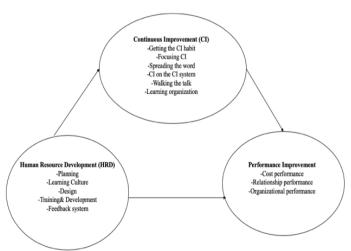


Figure 2. Conceptual Framework

Table 1 showed the direct and indirect effect of the model that HRD had a positive direct effect on CI, HRD had a positive direct effect on PI, CI had a positive direct effect on PI. As for the relationship between variables such as HRD had a positive indirect effect on PI.

TABLE I. HYPOTHESIS TESTING OF MODEL OF BUSINESS FUNCTIONAL AREAS.

Hypothesis	Estimate	S.E.	C.R.	<i>p</i> -value
H1	0.770	0.113	6.288	***
H2	0.382	0.148	2.167	*
H3	0.256	0.159	2.461	*
H4	0.827	0.080	9.292	***
H5	0.376	0.123	2.443	*
H6	0.275	0.137	2.776	*
H7	0.408	0.182	4.235	**
H8	0.490	0.365	2.853	*
H9	0.486	0.347	2.884	*
H10	0.832	0.062	12.342	***
H11	0.309	0.096	4.591	***
H12	0.370	0.108	3.012	*

<sup>\*\*\*</sup>p-value < 0.001 (statistical significance at 0.001 level)

#### V. CONCLUSIONS AND DISCUSSION

According to the research question three; Does HRD influence Performance Improvement through CI among in business functional areas? That the result of structural model three from each business functional areas were significant that HRD had an influence on Performance Improvement through CI was completed. The result form model three was significant that different with the study of Gao [3], who found that some empirical evidence showed the only HR function provided small, negative, and direct support on HRD practices that strongly and indirectly supported performance improvement fully mediated by CI abilities then the hypothesis was not support. The company has four sections including HR, engineer, technician and quality control. Each department has different levels. The highest-level positions are distributed throughout each area. When a company's workers practice the CI model, they will achieve success in multiple areas of business. The researcher studied functional areas in the company. The result showed HR function and Technician function have better performance than engineer function and QC function. HR department and technician are routine function, so CI could help them progress. Of course, all areas can benefit from CI; however, the aforementioned areas are the most important. HR function generally focus on training employees, so CI methods of training will help the educational process and result in employees are constantly improve. Technicians are professionals in their areas and are routine workers. Therefore, CI practice in this area is important so that the routine tasks consistently improve and performance is progressive. The steel industry has applied full Continuous Improvement (CI) strategies like the organization learning to achieve tremendous growth and development as an organization. However, as the strategy is improved and adjusted, repetition can remedy any faultiness. Subsequently, such fallibility can be dealt with immediately. This can build the self-efficacy required for learning experiences using strategies accurately. Although some strategies are effective in a particular country's context, other countries may experience different effects in particular parts of a strategy. The resulting different experiences can occur due to various organizational cultures. Also, work-related obstacles frequently arise. Even though one problem is solved, a new problem will predictably arise. Each business sector can work towards achieving the company's goal by working on their own problem areas. After being aware of problem areas, each section can create a solution and implement this into their plan for success. Therefore, Continuous Improvement (CI) is necessary for every organization to solve difficulties and enhance its contributions.

#### **REFERENCES**

- [1] Bentler, P. M., & Chou, C.P. *Practical issues in structural modeling*. Sociological Methods & Research, (1987). 16(1), 78-117.
- [2] Jorgensen, F., & Hyland, H. Human resource development's contribution to continuous improvement. *Proceedings of the 2007 International Research Conference for the Academy of Human Resource Development*, February 28–March 4, Indianapolis, IN. (2007).
- [3] Lin, G. Examing the impact of human resource development practices on performance improvement through continuous improvement at an automotive supplier in north America, (2011). 12.
- [4] Noe, R. A. *Employee Training and development*. (4<sup>th</sup> ed). New York: McGraw-Hill. (2010).
- [5] Peter M. & Ross C. From continuous improvement to organizational learning:developmental theory. The learning organization, (2003). 10(5),272-282.

<sup>\*\*</sup> p-value <0.01(statistical significance at 0.01 level)

<sup>\*</sup> p-value < 0.05 (statistical significance at 0.05 level)