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Human Capital Development towards Innovative Organization of Eastern Polymer Group Public Company Limited

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Abstract:

The purposes of this research are 1) to study the components of the human capital development influencing innovative organization of Eastern Polymer Group Public Company Limited, 2) to compare the components of human capital development influencing innovative organization classified by demographic profiles, and 3) to study the relationship between the components of the human capital development and innovative organization of Eastern Polymer Group Public Company Limited. Quantitative method was applied in conducting this research. The samples of this research are 500 personnel from the operational level, managing level and executive level. The research instrument in this study is the questionnaire; and the statistics used in this research are consisted of frequency, percentage, mean, standard deviation, t-test, One Way Analysis of Variance (F-test), Pearson Correlation, and Multiple Regression Analysis.

The research results show that the components of the human capital development influencing innovative organization of Eastern Polymer Group Public Company Limited with the highest mean are transformational leadership, consisting of charisma leadership, inspiration motivation, intellectual stimulation, and individualized consideration, followed by learning organization, consisting of personal mastery, mental models, shared vision, team learning, and system thinking. The component factors of the transformational leadership and the learning organization have the relationship with the innovative organization with the statistical significance at the level of .01. The component factors of the human capital development influencing innovative organization of Eastern Polymer Group Public Company Limited in terms of the personal mastery, team learning, and individualized consideration should be developed as these factors will positively affect the innovative organization.

Keywords: Human capital, innovation, EPG, learning organization, transformational leadership

1. Introduction

The sustainable advance and growth in developing organization require the resource of “4M”; money, material, method, and man. The most important “M” in developing the organization is “man”, who is full of skills, abilities, and performance (Morakotsin, 2009). Thus, the organization should support and promote the regularity and the continuity of personnel development in order to increase the operational performance, and to maintain the long-term competitive capacity of the organization. Every type of business cannot avoid the competition, consequently each organization tried to create the competitive advantage by improving and developing the organization through various methods, such as creating the recognition, learning, human capital management, and having the organization leader who is clever and skillful, also a good person (Chuang, 2004) under the rapid change of the world environments (Fahy, 2002).

The trend of business competition nowadays is directing to human capital development which is the real investment in the competition at the basis of the business operation or it is said “human capital management”; by that each organization has its own appropriate direction in managing its human capital (Young, 2005). Each organization creates the human capital to be the strong point of the organization driving to the success of the business and to the sustainable development to be the acceptable world-class organization. The strategies about human capital operation in the organization consist of human capital management and human capital development. The organizational development, therefore, takes an important part for developing the personnel to have knowledge and abilities, and for extracting the personnel performance to be used in fully developing the organization (Sricharoenpramong, 2013). Due to the fact that personnel are firstly important factor in operation, the change of the personnel’s thought is counted as the asset. Although it is the intangible asset, it can create the added value to the tangible asset (Sawadsalungkharn, 2012). The personnel development should be relevant and assist in supporting the core strategy of the organization, by focusing on creating the environments that support the personnel to learn and to develop the wisdom capital with

the creation of the learning organization which has the systematic knowledge management, including setting plan to persuade the personnel to learn by themselves via the appropriate support and counsel from the organization (Na Takuatung, 2007).

The human resources development in this modern age in the world society or the society of wisdom prioritizes human as a center of the development because human is the only one resource which is animate and lively. The organization which has the quality human capital and the suitable qualification to the core competency of the organization will drive the organization to be in the expected direction. In addition, the globalization renders the organization to be in the midst of the severe change, the strategy is the very important factor to conquer the competitor and to create the competitive advantage; this strategy is that it is human who thinks in whichever style. This means that it is human who propels, impels, and thinks; beginning at the high executives downing to the manager and to the employees. Even though the personnel's thought changes in various styles, at last, human should have knowledge and comprehension and readiness to accept the change to walk in the planned direction (Wongsansri, 2009).

The organization should develop its capability to cope with the change, by that everyone in the organization should be eager in finding the necessary things in solving the problems and in improving the working style. The knowledge, abilities, and wisdom of the personnel should be managed and used in developing the work to be beneficial to the organization or to be on the base of knowledge management. To become the learning organization, the executives must understand the important component or factor of learning organization (Thienthai, 2009). To prioritize the personnel development in the aspect of knowledge, ability, and concept has an influence on developing to be the innovative organization. The success in operating the business requires the development of the development of personnel's working performance, and thinking in order to always launch the new creativity (Chutiwong, 2011). Hence, becoming the learning and innovative organization is about creating new organizational culture. The good leader should be able to succeed in creating the change with the cooperation from every personnel. Above all, leadership is team working (Ulrich and Smallwood, 2013). The organization leader should fully participate in regularly leading every personnel in the organization, and should substantially perform to be the role model to the personnel, so that they realize that this is an important thing which will become the organizational value in the future (Wiryapinij, 2013).

Thereby, from the background and its importance, Eastern Polymer Group Public Company Limited, as the creatively innovative organization, considered the change that occurred both inside and outside the organization, which can cause an effect on the working of the personnel. The EPG prioritized the creation of human capital, and the innovative human for developing the organization and creating the sustainability to the business. EPG, thus, conducted the research about the human capital development towards innovative organization by studying the components of human capital development influencing innovative organization, consisting of learning organization and transformational leadership. The research results will be useful in developing the performance of the personnel to be omniscient and up-to date to the change and to lead the organization to successfully reach the goals.

2. Literature Surveys

The learning organization is the place where the personnel can be developed to learn together (Senge, 1990) Garvin (1993) said that the learning organization is the organization that has the skills in creating, acquiring, interpreting, transferring, and retaining. Slater and Narver (1995) described that the learning organization is compared to the development of new knowledge influencing the behavior with the primary agreement that learning takes an important part in changing the behavior leading to the improvement of action. In 2000, Senge (2000) expanded the meaning of learning organization that it is where the personnel used their capability to continually create the expected work to freely express the opinion, and to exchange the learning method among the personnel. According to Senge (2000), there are five important characteristics of the learning organization; personal mastery, mental models, shared vision, team learning, and system thinking. According to the concept of the development of the learning organization of Marquardt (2002), the globalization and technologies lead to the economic change; this causes the organization to have the capability in learning and quickly adapting to that change in order to create and maintain the competitive advantage. The organization should have the thinking model about working and learning. The learning is the result of working via the 5 sub-system; learning, organization, people, knowledge, and technology; which all these five sub-system should have a relationship and should develop together.

According to the theory about transformational leadership of Burns (1978), the leadership is the process that the leader has an influence on the follower and vice versa. The transformational leader tried to upgrade the recognition of the follower by enhancing the thought and moral value with the concept that the transformational leadership can be expressed by everyone in every position in the organization. According to the theory about transformational leadership of Bass (1985, 1998), Bass defined the leadership in the aspect of the effect of the leader to the follower. The leader can change the follower by supporting the follower to realize the importance and the value of the working result or to enhance the demand of the follower by persuading them to be interested in the organization more than self-interest. The results of this influence can increase the confidence and respect in the leader and be easy to be persuaded to do anything more than firstly expected. Avalio and Bass (1991) presented the full model of leadership, which consists of 1) transformational leadership; this type requires the specific behavior "Four I's", idealized influence or Charisma Leadership, inspiration motivation, intellectual stimulation, and individualized consideration, 2) transactional leadership; the leader will reward or punish the follower depending on the working result, and 3) laissez-faire leadership or non leadership behavior.

The organizational innovation is the beginning of new method in operating business; this is a broad concept covering the dimension of strategy, structure, and behavior (Crossan and Apaydin, 2010). Camison and Villar-Lopez (2014) studied the relationship between the organizational innovation and the performance of the technological innovation; the results confirmed that the organizational innovation supported the development of the performance of the technological innovation for the product and process, which led to the better operation of the organization. The product innovation is the beginning of the new or improved

products and services. Nieto and Santamaria (2010) explained that the product innovation can be developed from that the organization wanted to reach the new market before the competitors and to meet the customer's demand including the expectation of the executive to process new market. The process innovation means the operation of the new shipping or production including the significant change. The process innovation also tried to reduce cost but increase the quality and shipping or produce new or improves products (Tidd and Bessant, 2009). Phang-nga (2012) suggested the direction in creating the innovative organization in 3 aspects; 1) innovative leader, combining from visionary leadership and transformational leadership; 2) innovative vision, taking an important part in supporting and connecting to reach the highest goal of the organization; and 3) innovative people, being the primary policy of the organization to exchange the knowledge, experience, skills in developing the organization to be up-to-date to the change and the competition.

3. Research Methodology

The researcher applied the quantitative method in conducting this research. Secondary data were derived from revising the concept and theory from books, academic articles, journals, and related researches. The samples of this research are 500 personnel from the operational level, managing level and executive level. The research tool of this study is the questionnaire; and the statistics used in this research are consisted of frequency, percentage, mean, standard deviation, t-test, One Way Analysis of Variance (F-test), Pearson Correlation, and Multiple Regression Analysis.

4. Research Results

4.1. Demographic Profiles

The research findings show that a total of samples in this research were 500 people, which 59.40% were male and 40.60% were female. As for age, 49.20% aged between 31 – 40 years. As for working level, 84.40% worked in the operational level. As for the office, 34.40% worked for EPP. As for working period, 39.00% have worked for 11 – 20 years. As for the knowledge about the learning organization, 56.20% are in the moderate level. As for the knowledge about transformational leadership, 56.60% are in the moderate level respectively.

4.2. The Analysis of Learning Organization

The personnel perceived that the level of practice of learning organization, in total, was in the level of frequent (\bar{X} = 3.67, S.D. = .541). In particular, team learning had the highest mean (\bar{X} = 3.96, S.D. = .609), followed by personal mastery (\bar{X} = 3.95, S.D. = .596), mental model (\bar{X} = 3.61, S.D. = .609), shared vision (\bar{X} = 3.60, S.D. = .591), and systematic thinking (\bar{X} = 3.44, S.D. = .591) respectively (see table 1).

Factors	\bar{X}	S.D.	Translation	Ranking
Personal mastery (X_1)	3.95	.596	frequent	2
Mental model (X_2)	3.61	.619	frequent	3
Shared vision (X_3)	3.60	.591	frequent	4
Team learning (X_4)	3.96	.609	frequent	1
Systematic thinking (X_5)	3.44	.591	frequent	5
Total	3.67	.541	frequent	

Table 1: Mean and standard deviation of learning organization in total and in particular

4.3. The Analysis of Transformational Leadership

The personnel perceived that the level of practice of transformational leadership, in total, was in the level of frequent (\bar{X} = 3.82, S.D. = .550). In particular, inspiration motivation had the highest mean (\bar{X} = 3.99, S.D. = .640), followed by charisma leadership (\bar{X} = 3.83, S.D. = .607), individualized consideration (\bar{X} = 3.81, S.D. = .736), and intellectual stimulation (\bar{X} = 3.65, S.D. = .594) respectively (see table 2).

Factors	\bar{X}	S.D.	Translation	Ranking
Charisma leadership (X_6)	3.83	.607	frequent	2
Inspiration motivation (X_7)	3.99	.640	frequent	1
Intellectual stimulation (X_8)	3.65	.594	frequent	4
Individualized consideration (X_9)	3.81	.736	frequent	3
Total	3.82	.550	frequent	

Table 2: Mean and standard deviation of transformational leadership in total and in particular

4.4. The Analysis of Innovative Organization

The personnel perceived that the level of influence of learning organization and transformational leadership to the innovative organization, in total, was in high level (\bar{X} = 4.00, S.D. = .686). In particular, the level of influence of transformational leadership to the innovative organization had the highest mean (\bar{X} = 4.01, S.D. = .740), followed by the level of influence of learning organization to the innovative organization (\bar{X} = 4.00, S.D. = .758) respectively (see table 3).

Factors	\bar{X}	S.D.	Translation	Ranking
1. The level of influence of learning organization to the innovative organization	4.00	.758	high	2
2. The level of influence of transformational leadership to the innovative organization	4.01	.740	high	1
Total	4.00	.686	high	

Table 3: Mean and standard deviation of innovative organization

4.5. The Comparison Analysis of the Components of Human Capital Development Influencing Innovative Organization Classified by Demographic Profiles

With regard to the components of human capital development influencing innovative organization classified by gender, the personnel with different gender have the same attitude towards the components of human capital development both in total and in particular (see table 4).

Factors	Gender	n	\bar{X}	S.D.	t	df	p
1. Learning organization	Male	297	3.65	.537	1.315	498	.189
	Female	203	3.71	.547			
2. Transformational leadership	Male	297	3.83	.566	.611	498	.542
	Female	203	3.80	.527			

Table 4: Comparison result of the attitude towards the level of practice to the components of human capital development classified by gender

With regard to the components of human capital development influencing innovative organization classified by age, the personnel with different age have the different attitude towards the components of human capital development. In particular, both the learning organization and transformational leadership with the statistical significance at the level of .05 (see table 5).

Factors	Variance Source	SS	df	MS	F	p
1. Learning organization	Between Groups	4.114	3	1.371	4.786*	.003
	Within Groups	142.104	496	.287		
	Total	146.218	499			
2. Transformational leadership	Between Groups	4.872	3	1.624	5.511*	.001
	Within Groups	146.138	496	.295		
	Total	151.010	499			

Table 5: Comparison result of the attitude towards the level of practice to the components of human capital development classified by age

* Statistical Significance at the level of 0.05

With regard to the components of human capital development influencing innovative organization classified by working level, the personnel with different working level have the different attitude towards the components of human capital development. In particular, both the learning organization and transformational leadership with the statistical significance at the level of .05 (see table 6).

Factors	Variance Source	SS	df	MS	F	p
1. Learning organization	Between Groups	3.373	2	1.687	5.868*	.003
	Within Groups	142.844	497	.287		
	Total	146.218	499			
2. Transformational leadership	Between Groups	4.868	2	2.434	8.277*	.000
	Within Groups	146.142	497	.294		
	Total	151.010	499			

Table 6: Comparison result of the attitude towards the level of practice to the components of human capital development classified by working level

* Significant at 0.05

With regard to the components of human capital development influencing innovative organization classified by office, the personnel with different office have the different attitude towards the components of human capital development. In particular, both the learning organization and transformational leadership with the statistical significance at the level of .05 (see table 7).

Factors	Variance Source	SS	df	MS	F	p
1. Learning organization	Between Groups	11.706	5	2.341	8.598*	.000
	Within Groups	134.512	494	.272		
	Total	146.218	499			
2. Transformational leadership	Between Groups	9.306	5	1.861	6.488*	.000
	Within Groups	141.703	494	.287		
	Total	151.010	499			

Table 7: Comparison result of the attitude towards the level of practice to the components of human capital development classified by office
* Significant at 0.05

With regard to the components of human capital development influencing innovative organization classified by working period, the personnel with different working period have the different attitude towards the components of human capital development. In particular, both the learning organization and transformational leadership with the statistical significance at the level of .05 (see table 8).

Factors	Variance Source	SS	df	MS	F	p
1. Learning organization	Between Groups	2.757	3	.919	3.177*	.024
	Within Groups	143.461	496	.289		
	Total	146.218	499			
2. Transformational leadership	Between Groups	3.694	3	1.231	4.145*	.006
	Within Groups	147.316	496	.297		
	Total	151.010	499			

Table 8: Comparison result of the attitude towards the level of practice to the components of human capital development classified by working period
* Significant at 0.05

With regard to the components of human capital development influencing innovative organization classified by the level of knowledge about learning organization, the personnel with different level of knowledge about learning organization have the different attitude towards the components of human capital development. In particular, both the learning organization and transformational leadership with the statistical significance at the level of .05 (see table 9).

Factors	Variance Source	SS	df	MS	F	p
1. Learning organization	Between Groups	4.478	2	2.239	7.851*	.000
	Within Groups	141.740	497	.285		
	Total	146.218	499			
2. Transformational leadership	Between Groups	7.561	2	3.781	13.099*	.000
	Within Groups	143.448	497	.289		
	Total	151.010	499			

Table 9: Comparison result of the attitude towards the level of practice to the components of human capital development classified by the level of knowledge about learning organization
* Significant at 0.05

With regard to the components of human capital development influencing innovative organization classified by the level of knowledge about transformational leadership, the personnel with different level of knowledge about transformational leadership have the different attitude towards the components of human capital development. In particular, both the learning organization and transformational leadership with the statistical significance at the level of .05 (see table 10).

Factors	Variance Source	SS	df	MS	F	p
1. Learning organization	Between Groups	3.764	2	1.882	6.567*	.002
	Within Groups	142.453	497	.287		
	Total	146.218	499			
2. Transformational leadership	Between Groups	7.009	2	3.504	12.095*	.000
	Within Groups	144.001	497	.290		
	Total	151.010	499			

Table 10: Comparison result of the attitude towards the level of practice to the components of human capital development classified by the level of knowledge about transformational leadership
* Significant at 0.05

4.6. *The Analysis of the Relationship Between the Components of the Human Capital Development and Innovative Organization of Eastern Polymer Group Public Company Limited*

The group of the variables has the relationship as follows:

1. The internal correlation between the component variables of learning organization has the relationship with the statistical significance at the level of .01; by that the correlation is between .510 and .811. The highest internal correlation is the relationship between personal mastery (X₁) and team learning (X₄).
2. The correlation between the components of the human capital development in the aspect of learning organization and innovative organization of Eastern Polymer Group Public Company Limited have the relationship with the statistical significance at the level of .01; by that the correlation is between .202 and .739. The highest correlation of the components of the human capital development in the aspect of learning organization and the innovative organization is the relationship between personal mastery (X₁) and innovative organization (Y) (see table 11).

Variables	X ₁	X ₂	X ₃	X ₄	X ₅	Y
X ₁	1	.557**	.517**	.811**	.523**	.739**
X ₂		1	.665**	.510**	.557**	.202**
X ₃			1	.598**	.672**	.245**
X ₄				1	.523**	.709**
X ₅					1	.287**
Y						1

Table 11: *Correlation between the component variables of the human capital development in the aspect of learning organization and innovative organization of Eastern Polymer Group Public Company Limited*

** Significant at 0.01

The group of the variables has the relationship as follows:

1. The internal correlation between the component variables of transformational leadership has the relationship with the statistical significance at the level of .01; by that the correlation is between .557 and .711. The highest internal correlation is the relationship between charisma leadership (X₆) and intellectual stimulation (X₈).
2. The correlation between the components of the human capital development in the aspect of transformational leadership and innovative organization of Eastern Polymer Group Public Company Limited have the relationship with the statistical significance at the level of .01; by that the correlation is between .271 and .503. The highest correlation of the components of the human capital development in the aspect of transformational leadership and the innovative organization is the relationship between individualized consideration (X₉) and innovative organization (Y) (see table 12).

Variables	X ₆	X ₇	X ₈	X ₉	Y
X ₆	1	.708**	.711**	.557**	.336**
X ₇		1	.665**	.618**	.331**
X ₈			1	.613**	.271**
X ₉				1	.503**
Y					1

Table 12: *Correlation between the component variables of the human capital development in the aspect of transformational leadership and innovative organization of Eastern Polymer Group Public Company Limited*

** Significant at 0.01

4.7. *The Analysis of the Components of the Human Capital Development Influencing Innovative Organization of Eastern Polymer Group Public Company Limited*

The component variables of the human capital development have an influence on innovative organization with the statistical significance at the level of .01 (F = 179.157, p = .000), by that the component variables of the human capital development consist of personal mastery, mental model, shared vision, team learning, intellectual stimulation, and individualized consideration. When this was created in Multiple Regression Analysis, it can describe the variance of the innovative organization at 68.20% (Adjust R² = .682);

its rest 31.80% is the results from other variables which are not considered. The equation is as; the forecast equation of human capital development towards innovative organization = .571 X₁ – .264 X₂ – .128 X₃ + .421 X₄ – .118 X₈ + .162 X₉. It can be explained that the component variables of the human capital development influencing on innovative organization. EPG should focus on developing personal mastery (X₁), team learning (X₄), and individualized consideration (X₉), which will positively affect the innovative organization (see table 13).

Variables	Innovative Organization				p
	b	SE	β	t	
Constant	1.045	.132		7.926**	.000
Personal mastery (X_1)	.657	.053	.571	12.409**	.000
Mental model (X_2)	-.292	.043	-.264	-6.824**	.000
Shared vision (X_3)	-.149	.048	-.128	-3.093**	.002
Team learning (X_4)	.474	.054	.421	8.855**	.000
Intellectual stimulation (X_8)	-.137	.048	-.118	-2.828**	.005
Individualized consideration (X_9)	.151	.035	.162	4.294**	.000
$R^2 =$.686			F =	179.157**
Adjust $R^2 =$.682	SE =	.387	p =	.000

Table 13: Important weight of the component variables of the human capital development influencing innovative organization
** Significant at 0.01

5. Conclusion and Discussion

The component variables of the human capital development can predict innovative organization; this is relevant to the hypothesis. The component variables of learning organization consist of personal mastery and team learning, positively affect the innovative organization; this is relevant to the concept of Wick and Leon (1993) that the learning organization is the organization for learning, transforming the organization to be the leader of industry, improving performance to be successful, using intentional learning in creating the success to the organization under various learning systems, increasing the learning in the action, using knowledge to develop new competencies and capabilities. In addition, it is relevant to the concept of developing the learning organization of Marquardt (2002) about knowledge and learning of the organization that the knowledge management consists of knowledge acquisition, knowledge creation, knowledge storage, analysis and data mining, knowledge transfer and dissemination, and knowledge application and validation. The successful learning organization will systematically apply the knowledge and relevantly use the technology. According to Senge (2000), there are five important characteristics of the learning organization; one of these characteristics is personal mastery that the organization members have knowledge, abilities, skills, good attitude in working, self-confidence, vision, resourcefulness, and the ability to analyze and to make a decision with the data and truth, and also the professionalism in working. Marquardt (2002) also said that learning is the main sub-system of learning organization, and it should be in the individual level, group level, and organization level, with important skills such as systems thinking, mental models, personal mastery, self-directed learning, and dialogue. According to Marquardt (2002), one of the levels of learning is group/team learning which means the increase of knowledge, ability, skills, and group performance. The learning organization has a duty to enhance skills and knowledge that the team requires, such as the quality process, technique in solving problem and making a decision, the teamwork, and the support to think creatively. Team should create knowledge by analyzing the complicated problems and operating with new method, including solving the holistic problem. Team can also learn from the past experience and try new method and fast and effectively transmit the knowledge among the team. The success of team will lead to cooperative learning atmosphere and standard. Moreover, the team learning will reach the peak if there is reward, and also the communication and unity in working.

The action learning is the most effective method of team learning. The component factors of transformational leadership; individualized consideration positively affects the innovative organization; this is relevant to the concept in studying the transformational leadership of Northouse (2000) that the concept of the transformational leadership has the significant meaning which demonstrates the process leading to the change and the transformation of each individual. It is also relevant to the concept of Bass (1998) that the transformational leadership is the leader, who can persuade the follower to overlook the self-interest via idealized influence or charisma, inspirational motivation, intellectual stimulation, and individualized consideration. The leader will enhance the level of ideological maturity of the follower about achievement, self-actualization, and well-being of society, organization and others. Additionally, the theory about transformational leadership of Bass (1985, 1998), the word "Idealized Influence" replacing "Charisma", which means the highest idealized influence is unselfishness that both the leader and follower should dedicate themselves to the organization. Bass (1985, 1998) suggested the reason that House (1977) and (Conger and Kanungo; 1988, 1998) said that creating charisma is to collect all the transformational leadership; idealized influence or charisma, inspirational motivation, intellectual stimulation, and individualized consideration. Avolio and Bass (1991) presented the full model of leadership, which one of the type of leadership is transformational leadership, mentioned about the individualized consideration. The leader acts as a coach or an advisor of the follower for developing the capability of the follower. In addition, the leader should provide the occasion to the follower to learn new things, create good atmosphere in supporting and realizing the difference of each individual. The leader should also support the two-way communication and managing by walking around to have the interaction to each follower. The leader is concerned about the worry of each person, and takes individual as a whole person, not the production factor. The leader should have empathy to appoint the work in order to develop the follower; the leader can give the advice to the follower and support them to be advance in their responsibility.

The operation of Eastern Polymer Group Public Company Limited focuses on the theory that "Create the organization with morality, manage it with quality". The first priority is to create the organizational culture with the morality in service; comparing everyone as the family members of EPG. Because of fairness and equity, most personnel have work for EPG for more than 10 years, accumulating skills, knowledge, professionalism, and experience, and also being ready to develop themselves in the aspect

of the transformational leadership and to develop the organization to become the learning organization in order to be the innovative organization.

6. Recommendation

With regard to the aspect of learning organization and the transformational leadership, the personnel in every level should be supported about knowledge for the personnel who aged less than 40 years old and working in the operational level; the personnel in the managing level should be supported about the personal mastery, team learning, and the individualized consideration, as followed;

1. The personal mastery; supporting the training to the personnel to have positive thinking by creating the good experience which will lead to the good attitude and to develop the personnel about their skills, professionalism in working to be able to make a decision by themselves and to learn to be up-to-date to support the excellence in working.
2. The team learning; supporting the training to the personnel to know the teamwork, to accept each other's work, and to understand the role and duty of each position with the support to develop and to create team consisting of leader, follower and consultant for reaching the work goal. The personnel should learn to work together and to exchange the experience with the concept of creating the understanding about teamwork in every level.
3. The individualized consideration; an important factor of creating transformational leadership is to support to develop the skills depending on each one's requirement in order to stimulate the capability, working method, willingness, intention of the personnel by considering the morale and ethics with the knowledge and abilities.

7. References

1. Avolio, B.J., & Bass, B.M. (1991). *The Full Range of Leadership Development*. Binghamton, NY: Bass, Avolio & Associates.
2. Bass, B.M. (1985). *Leadership and performance beyond expectations*. New York: The Free Press.
3. Bass, B.M. (1998). *Transformational Leadership: Industrial, military, and educational impact*. Mahwah, NJ: Lawrence Erlbaum Associates.
4. Burns, J. M. (1978). *Leadership*. New York: Harper and Row.
5. Camison, C., & Villar-Lopez, A. (2014). Organizational innovation as an enabler of technological innovation capabilities and firm performance. *Journal of Business Research*, 67, 2891–2902.
6. Chuang, S-H. (2004). A resource-based perspective on knowledge management capability and competitive advantage : an empirical investigation. *Expert Systems with Applications*. 27(3), 459.
7. Chutiwong, N. (2011). Analysis of Factors Influencing Becoming the Innovative Organization in Thailand. *Journal of business management*, 130, 47 – 58.
8. Conger, J.A., & Kanungo, R.N. (1988). *Charismatic Leadership: The elusive factor in organizational effectiveness*. San Francisco: Jossey-Bass.
9. Conger, J.A., & Kanungo, R.N. (1998). *Charismatic Leadership in organizations*. Thousand Oaks, CA: Sage.
10. Crossan, M. and Apaydin, M. (2010). A multi-dimensional framework of organizational innovation. *Journal of Management Studies*, 47(6), 1154–1191.
11. Fahy, J. (2002). A resource-based analysis of sustainable competitive advantage in a global environment. *International Business Review*, 11(1), 57–78.
12. Garvin, D. (1993). Building a Learning Organization. *Harvard Business Review*, 71(4).
13. House, R.J. (1977). A 1976 theory of charismatic Leadership. In Hunt, J.G., & Larson, L.L. (Eds.), *Leadership: The Cutting Edge*. Carbondale: Southern Illinois: University Press.
14. Marquardt, M.J. (2002). *Building the Learning Organization : A Systems Approach to Quantum Improvement and Global Success*. New York : McGraw-Hill.
15. Morakotsin, P. (2009). Human Resource and Organization Development. *Journal of Human Resource Development*, 5(1), 88 – 102.
16. Na Takuatung, O. (2007). *Training Technique for Effectively Developing the Personnel*. Bangkok: Technology Promotion Association (Thailand-Japan).
17. Nieto, M. J., & Santamaria, L. (2010). Technological collaboration: Bridging the innovation gap between small and large firms. *Journal of Small Business Management*, 48, 44–69.
18. Northouse, P. G. (2000). *Introduction to Leadership: Concepts and practice*. Thousand Oaks, CA: Sage.
19. Pang-nga, A. (2012). Direction to Create the Innovative Organization. Retrieve from <http://www.citu.tu.ac.th/>.
20. Sawadsalungkharn, P. (2012). *Human Capital and Modern Human Resource Development*. HR Training and Consultant Co, Ltd. Retrieve from http://www.hrtraining.co.th/article_detail.php?id=60.
21. Sricharoenpramong, S. (2013). Direction of Operational Development of Human Capital for Developing the Service Quality of Thai Airways. Retrieve from <http://libdcms.nida.ac.th/thesis6/2556/b180589.pdf>.
22. Senge. (1990). The Leader's New Work: Building Learning Organization. *Sloan Management Review*, 32(1), 7–23.
23. Senge, P.M. (2000). *Schools That Learn : a Fifth Discipline*. New York: Doubleday.
24. Slater, S.F and Narver, J. C. (1995). Market orientation and the learning Organization. *Journal of Marketing* , 59, 63-74.
25. Thienthai, J. (2009). *Management: from Executive View*. Bangkok: McGraw-Hill
26. Tidd, J., & Bessant, P. (2009). *Managing Innovation: Integrating Technological, Market and Organizational Change* (4th ed.). Chichester: John Wiley & Sons.
27. Ulrich, D. and Smallwood, N. (2013). *Leadership Sustainability*, US: McGraw-Hill.
28. Wick, C. W. and Leon, L. S. (1993). *The Learning Edge: How Smart Managers and Smart Companies Stay Ahead*. New York: Mc.Graw-Hill.
29. Wiriyanij, M. (2013). *Learning Organization and Knowledge Management: Obstacle and Problem of Knowledge Management in Thailand*. Prachachat, 34.
30. Wongsansri, P. (2009). *Organization and Organizational Management*. Bangkok: Suan Dusit Rajabhat University.
31. Young, S. (2005). 10 steps to successful human capital management. *Strategic Human Resources Review*. 5(1), 24 – 27.