An Initial Analysis of Leadership Competencies for
Organization Development Intervention: A Case Study Of Educational QA Agency

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Abstract

This research is aims to determine the leadership competencies for organization development intervention; it is a case study on educational quality assessment (QA) agency in Thailand. The objectives consisted of first, to identify and compare the current and expected perception toward leadership competencies of employees and management, and second, to identify the most important leadership competency. The nature of this research work is research and development while employing the mixed method for data collection, analysis and interpretation. The eighty-one employees completed the questionnaires and ten of them were interviewed. The content validity on the instruments were reviewed by three experts prior to the realiability, Cronbach's Alpha was tested. The result of reliability Cronbach indicated 0.968 on all questions in the questionniare. Key findings based on the survey showed that leaders "sometimes" demonstrated leading behaviors. Top three leadership competencies that are frequently perceived comprised professional knowledge, decision-making/problem-solving, and development of others. Statistically, there was significant difference between current and expected perception in every leadership competency component with the P value of 0.01. When comparing the perception between management and employee, it was found to have significant difference in driving result, strategic thinking and communication. When ranking all components of leadership competencies to determine the most important factors, the most important leadership competencies were professional knowledge, following with driving results, and strategic thinking. Qualitatively based on the interviews, employees recognized the needs for leadership competency to be develop with the emphasis on development of others, building a team, and supporting work performance. In conclusion, based on mixed methods data, the recommendations for leadership competency of the participating organization were that first, a roadmap to leadership competency development is essential, and second, customization on leadership competency in practices is to be done appropriately to minimize leadership competency gap among the management level.

Keywords: leadership competency development / educational qa agency/ a culture of
         quality/ od intervention

Introduction

The development of leadership competencies is an essential part of the organizations, leaders and managers in particular. The leader is the key person who leads employees to reach high level-performance while increasing organizational effectiveness. Regardless of private or public organization, each has its own expectations. Nonetheless, each has common ideas that leadership behavior play an important role in shaping organizational working atmosphere, a culture, and climate.

Considering the context of an education quality assurance (QA) agency both domestic and international arena, QA agency is set as a public organization, thus the agencies tend to work independently and not being controlled by any particular government. The role is to ensure quality of education institute's operation and quality of graduates to be able to fulfill demands of labor market (Santiago et al., 2008). For example, Council for Higher Education Accreditation (CHEA), USA., which is the pioneer of education quality assurance agency, plays the rols of assuring the quality of higher education in the U.S.;it also forms a quality group for QA worldwide called CHEA International Quality Group in 2012. The main goal is to provide members with an opportunity to learn and share their best practices and improve innovation for quality assurance.

Rosenbaum (2003) of African public management articulated that leadership competency in public sector is an essential part of the organization and it equips leaders with the ability to deal with challenges while improving the effectiveness of the organization activities. First, leaders should be able to convey complex ideas in oral and writing forms for complex public issues, while demonstrating the need of accountability and accommodating the expectation of various stakeholders. Secondly, leaders must learn to adapt rapidly to change, especially social issues, political circumstances, international collaboration and public-private partnership in addition to, responding to complex issues and challenges critically and creatively. Third, leaders in the public sector should foster effective collaboration and engage with both within and outside the organizations, while ensuring team-building. Fourth, leaders must recognize the importance of good governance, ethical awareness and sensitivity, and avoid conflict of interest, power and authority. Fifth, entrepreneurialism and risk-taking ability is vital for public organizations, namely improvement and change of internal work processes for effectiveness. Organizational leaders should be aware of vulnerable conditions and be able to strategize while grasping new opportunities for development. Sixth, strategic planning is necessary for translating clients' or stakeholders' needs to short and long-term plans for sustainable growth. Lastly, ability to nurture

harmonious multi-nation, multicultural environment to cope with international collaboration whereby the connectivity among nations help improve society at large.

Such ideal ledership character is a common expectation for public organization at all levels, while aiming its goal at improving organization effectiveness by leveraging collective culture. By means of improving organization effective literally interplay with the ability of the leader to lead how to lead in public QA sector; and thus clear mission and purpose, organization cultures, customer, and system are the ideals for accomplishment.

According to a recent CEB survey of employees in Asia, Adam (2013) revealed that only 17% of respondents are certain that their organization leaders are competent. The root cause of leadership gap is a lack of leadership experience and skills of Asian leaders. The cause is that the rapid growth of Asian economy is greater than a growth of Asian leaders (Adam, 2013).

Another challenge for the Asian leader is that the Asian culture hinders leadership deployment. Confucianism, one of the acceptant beliefs among Asian countries, values stability more than change and does not provide much supports of idea expression for the followers (Noronha, 2002). On the other hand, Confucianism is also perceived as a culture of quality builder, which refers to a charismatic leadership with goodness, kindness, and ethics. Therefore, it is likely to shape employees' perception toward their leader that they might have to follow their leader without exception. By this, a leader has to play both active and passive roles in order to drive a team dynamic and make use of informal relationship of a leader and followers, especially the vertical connection like father-son, to increase employee effectiveness.

Adam (2013) presented that the Asian needs the essential leadership competencies for high performing organization fulfilling the leadership capacity of team building, developing people, strategic thinking, enterprise vision, and problem solving. Adam (2013) also mentioned the needs for leadership development for Asian countris for specific areas, which are:

1) The development of the next generation of leaders through team-building and developing others: A leader has to play the role of trainer and learner in the participative training environment.

2) The issues of strategic and global situations to operational leadership by boosting the strategic thinking skill and enterprise vision: A leader should focus on both internal and external directions affecting the effectiveness of an organization.

3) The improvement of organization and employee performance through an analytical and decision making skill.

While considering the Thai context, Thai organizations are likely to believe that being high-performing organization have to embed the quality concept in the organizations. In 1975, the concepts of Deming and Juran was firstly introduced to Thai companies (Chan & Quazi, 2002). Many quality concepts, such as Thailand Quality Awards (TQA) and ISO 9000, are employed until now. Although many quality concepts are widely accepted among Thai leaders, the awareness of Thai people about quality does not consistentl demonstrate. An unavoidable factor is the value of Thai society as a homogenous society. Though key practices from West countries such as competency and knowledge management is make known to Thai public and private organizations, few understand the differences between Western and Thai practices when it comes to the real practices to better fit with Thai culture (Pimpa, 2012).

According to Thai culture dimensions of Hofstede's analysis, a low level of individualism is clearly shown in Thai society. On the contrary, Thai is likely to be one of the highest collectivistic groups. Hofstede (as cited in Pimpa, (2012) elaborating that collectivist society tends to foster strong relationships in which member takes responsibility for others. Such influence, Thai people tend to accept things as the way they are and avoid confrontation. The common character of Kreng-jai is an example that discourages personality hindering active and proactive behaviors (Laohavichien et al., 2011). Kreng-jai is defined as to take the other's feelings into account and be considerate to other people. Such characteristics potentially weakens quality and the maturity of quality practices among Thai companies. Thailand was at the bottom three of Asian countries when it comes to the application of ISO quality management (Chan & Quazi, 2002).

This challenge becomes the top issue for Thai organization because its solution is to have a charismatic leader leading for a proactive process, for better quality practices and for excellent performance. Promtan et.al. (2016) also identified the need of leadership competency development as the organization's priority. The leadership competencies in the Thai context is divided into four components (Promtan et.al., 2016):

1. Leading the Organization: Change Management, Problems Solving and Decision Making, Vision and Strategic Thinking, Creativity and Innovation, Task Management, and Organizational Knowledge
2. Leading the Self and Others: Adaptability, Listening & Understanding & Feedback, Effective Communication, Building and Retaining Talent, and Coaching and Developing Others
3. Leading for Results and Ethics: Ethics and Integrity, and Drives for Results
4. Self-Development: Continual Learning

From the view of education sector, educational institutions are encouraged to foster a culture of quality for the productivity of education while embracing quality assurance system as the framework for planning, decision and execution. A culture of quality based on a participatory and systematic orientation is defined as level of 3, which literally indicated that educational institution place the emphases on goal, context, and stakeholder needs (Pornrungroj, 2014). Education leadership relates to all levels; it is a role model that supports educators and learners to strive for excellence, and maintain good relationship with external stakeholders.

That concept is also utilized in the educational QA agency of Thailand, namel, processing the external quality assessment and encouraging institutions to provide the qualified education service to learners. The values of the education QA agency are to overcome all possible limitations, nurture creativity, enhance ethics, develop a sense of social responsibility, and improve quality awareness. (ONESQA, 2015).

Currently, the new strategy for the education QA agency has been approved by its Board of Committee with four focuses: innovation, excellence, recognition, and sustainability (ONESQA, 2018), while alignment with Thailand 4.0 as the national long-term strategy (Maesincee, 2016). The educational reformation plan of National Reform Steering Assembly in 2016 has been taked place, requiring the QA agency to be ready for change. Use of innovation is main practice for management and working process for productivity. Excellence is concerned good governance and recognition among other QA agencies to ensure the needs of the stakeholders. Lastly, sustainability in terms of its people and external assessors relates to competency development and active engagement of both internal and external customers.

Current situation

The SWOT and SOAR analysis integrated with Mckinsey 7S Framework was used to identify and analyze the current situation of the participating QA agency. Regarding the analysis, the strongest and most impactful element accelerating organization performance to achieve its goals is "styles", which refers to the leading and working styles. Due to the contradiction between the organization system and leading sytle, leaders from the government agencies tends to bring their beaucratic leading style to the QA agency, where requires autonomy as the third party of the education sector. Even though the QA agency has a strong and sound strategy, its system, structure, and style become huge obstacles to achieve the goals. Among these elements, leading sytle is the most important element that should be focus for further improvement because style is the main element which is able to align other organization elements to be united.

Statement of the Problem

According to SWOT and SOAR initial analysis, "style" is rated as the top priority that the education QA agency has to pay deep attention for improvement. Due to a common leading style with a hierarchical organization, management leads with controlling rather than facilitating, which is the obstacle to increase organization effectiveness. According to this situation, development of leadership for leaders is very critical and required to proceed at this time. Another discovery from SWOT/SOAR analysi was that, there was not a set of leadership competencies for leaders in an education QA field. With the reasons mentioned, this research aims to identify the important leadership competencies and how leadership competency development program could be suggested for this current time, utilizing feedback from management and employees through structured questionnaire and interviews.

Research Objectives

1. To identify the current perception toward leadership competencies for a culture of quality.
2. To compare the employees' perception between the current and expected experiences of leadership competencies for a culture of quality.
3. To compare the employee and management perceptions toward leadership competencies for a culture of quality.
4. To identify the most important leadership competency for a culture of quality.

Research Hypothesis

H1: There is a difference in the employees' perception between the current experience and an importance of leadership competencies for a culture of quality.

Current Perception of Leading Self Cluster

H2a: There is a difference in employee and management current perception toward take initiative competency.

H2b: There is a difference in employee and management current perception toward planning and organizing competency.

H2c: There is a difference in employee and management current perception toward agile learner/self-development competency.

H2d: There is a difference in employee and management current perception toward communication competency.

H2e: There is a difference in employee and management current perception toward adaptability competency.

H2f: There is a difference in employee and management current perception toward professional knowledge competency.

Current Perception of Leading Others Cluster

H3a: There is a difference in employee and management current perception toward decision making/problem solving competency.

H3b: There is a difference in employee and management current perception toward development of others competency.

H3c: There is a difference in employee and management current perception toward support work performance competency.

H3d: There is a difference in employee and management current perception toward building a team competency.

H3e: There is a difference in employee and management current perception toward value diversity competency.

H3f: There is a difference in employee and management current perception toward conflict management competency.

Current Perception of Leading the Organization Cluster

H4a: There is a difference in employee and management current perception toward creating a vision competency.

H4b: There is a difference in employee and management current perception toward act with integrity/accountability competency.

H4c: There is a difference in employee and management current perception toward strategic thinking competency.

H4d: There is a difference in employee and management current perception toward innovation competency.

H4e: There is a difference in employee and management current perception toward system thinking competency.

H4f: There is a difference in employee and management current perception toward driving result competency.

Expected Perception of Leading Self Cluster

H5a: There is a difference in employee and management expected perception toward take initiative competency.

H5b: There is a difference in employee and management expected perception toward planning and organizing competency.

H5c: There is a difference in employee and management expected perception toward agile learner/self-development competency

H5d: There is a difference in employee and management expected perception toward communication competency.

H5e: There is a difference in employee and management expected perception toward adaptability competency.

H5f: There is a difference in employee and management expected perception toward professional knowledge competency.

Expected Perception of Leading Others Cluster

H6a: There is a difference in employee and management expected perception toward decision making/problem solving competency.

H6b: There is a difference in employee and management expected perception toward development of others competency.

H6c: There is a difference in employee and management expected perception toward support work performance competency.

H6d: There is a difference in employee and management expected perception toward building a team competency.

H6e: There is a difference in employee and management expected perception toward value diversity competency.

H6f: There is a difference in employee and management expected perception toward conflict management competency.

Expected Perception of Leading the Organization Cluster

H7a: There is a difference in employee and management expected perception toward creating a vision competency.

H7b: There is a difference in employee and management expected perception toward act with integrity/accountability competency.

H7c: There is a difference in employee and management expected perception toward strategic thinking competency.

H7d: There is a difference in employee and management expected perception toward innovation competency.

H7e: There is a difference in employee and management expected perception toward system thinking competency.

H7f: There is a difference in employee and management expected perception toward driving results competency.

Definition of terms

1. Leadership competencies refer to the process and individual person to be able to employ knowledge, skill, and abilities to lead self, others, and an organization to achieve its goals. There are eighteen competencies in this study, six competencies per each leading level.
2. A culture of quality is a set of culture that delights customers' satisfaction and focuses on the quality improvement for organization excellence.

Scope of the Study

The study focused on core competencies of leadership of education QA agency. The total respondents in this study are $n=81$. Two research instruments have been utilized, consisting of the structured questionnaire and interview checklists. The research was undertaken eight months, ranging from literature review and an initial analysis, questionnaire construction process, validity and reliability test, questionnaire distribution, data analysis, data interpretation and formulation of recommendations.

Literature Review and Conceptual Framework

Transformational Leadership

The concept of transformational leadership is a process of leaders and followers help each other to enhance a higher level of motivation, moral, and performance based on mechanisms. Northouse (2016) added to Burn's concept that transformational leaders are able to influences followers to complete more than expectations and beyond mentality. Deming considered the transformational leadership is necessary for shaping a culture of quality (Dean and Bowen, 1994). This type of leader leads their followers by engagement, intrinsic need focus, and consciousness raising (Hay, 2012), which can foster a continual improvement and team working

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environment. The concept of transformational leader is comprised of 4 elements:

1. Idealized Influence: A leader provides a role model of high ethical behavior, foster pride and trust among followers. Together with trust, it is important to include integrity in order to ensure that followers are strongly convinced (Northouse, 2016).

2. Individualized Consideration: A leader as a coach or mentor provides followers with any supports for work accomplishment (Hall et al., 2005). More importantly, a leader needs to listen effectively in order to understand followers' needs and respect each individual contribution.

3. Inspirational Motivation: A leader inspires followers to commit to vision and work towards goals. Therefore, a sense of purpose should be fostered among followers. Purpose and meaning will be the key driver, which a leader uses, for team success.

4. Intellectual Stimulation: A leader has to innovatively unlock team's creativity and support a team to challenge status quo (Desbrow, 2016). To encourage followers to take risks and work on their assumption will develop them to think independently. Learning from such situations is valued as the opportunity for development.

Quality Perception

Frederick W. Taylor (as cited in PP&S, 2016) introduced the Principles of Scientific Management by using statistical theory to come up with a productivity improvement approach in manufacturing sector such as functional specialization, time and motion process analysis, and quality control by a final product inspection. Dr. W. Edwards Deming, an ASQ Honorary member in 1970, developed the PDSA (plan, do, study, and act) cycle from the basis of Shewhart Learning Improvement Cycle, which relates to quality for an entire process of an organization, until experimenting to implementation and for continual improvement with "Deming's Fourteen Points of Quality"- a management philosophy (The W. Edwards Deming Institute, 2016). Most of quality problems were under control of management, therefore, management should emphasize on cultural change and cooperation of employees as the keys for an organization to reach its expectation of quality. Other quality practices as Lean Manufacturing or Lean Thinking, Total Quality Management, were promoted by as a methodology of workflow improvement for performance betterment (ASQ, 2018).

At this day, quality becomes one of the aspects of organizational cultures that supports the constant fulfillment for customer satisfaction through an entire system of an organization such as tools, techniques, services, and trainings (Malhi, 2013). Thus, an organization has an effort to merge quality to its culture by actualizing the quality management tool to its working habit and system, including management philosophy, lifestyle, and mindset.

Management and a Culture of Quality

Srinivasan and Kurey (2014) explained in Harvard Business Review that the four essentials of quality are 1) leadership emphasis, 2) message credibility, 3) peer involvement, and 4) employee ownership. Safty (2012) stated that a culture of quality begins with leadership believing in the implications of the systems for serving customers' needs. The importance of leadership is the most necessary element to use for communicating about quality and creating employees' involvement and their sense of belonging to the organization. It is also the biggest concern that leaders should pay serious attentions because often time, gaps between their messages and their actions still exist. Executive participation becomes the most essential factor driving quality work culture through leaders showing enthusiasm and commitment.

Transformational Leadership Competency

All leadership theories mention common leader's behaviors, actions, and characters regarding the abilities to adapt, effective interpersonal communication and relationship, and good decision-making, although they are applied differently (Das , Kumar and Kumar, 2011). A leadership competency framework is an appropriate tool to understand behaviors, actions,and leadership characters systematically.

According to the Center for Creative Leadership (CCL, 2015), CCL's researchers believe that everyone can learn and develop their leadership behavior by beginning with understand self to lead self; understand others to lead others; and understand change to lead change. The three-leading model (figure 1) is interdependent and flexible (Center for Creative Leadership, 2015), so it can provide an individual with multiple starting points and opportunities to learn the connection of each component.

Figure 1: Youth Leadership Development Framework

The concept of competencies is dependent on challenges occurring by chance for each level in the organization. To begin with self, leading self's challenges are to prepare for management and leadership role and to improve personal effectiveness and performance. Leading other's challenges is to build relationship to accomplish goals, to deal with conflict, and more importantly to shift from a soloist to a team player who can support and lead a team. Leading the organization's challenges is to set directions for an organization, promote an alignment for a whole organization, and ensure commitment for excellent performance. The list of competencies adapted from McCauley in 2006 is as follows: (SHRM, 2008)

1. Leading the self: demonstrating ethics and integrity, displaying drive and purpose, exhibiting leadership stature, increasing your capacity to learn, managing yourself, increasing self-awareness, and developing adaptability

2. Leading others: communicating effectively, developing others, valuing diversity and difference, building and maintaining relationships, managing effective teams and work groups

3. Leading the organization: managing change and work, solving problems and making decisions, managing politics and influencing others, taking risks and innovating, setting vision and strategy, enhancing business and knowledge, and understanding and leading the organization

The synthesis using meta analysis on various leadership competency in terms of its meanings, factors, and frameworks was conducted to seek to understand commonalities, consistencies, similarities, and differences are presented in Table 1 as a summary of all interdependenting elements from various souces of academic journals and textbooks. The tick marks respresent the most frequent mentioned elements from the literature reviews of various sources.

Table 1:

Summary of Leadership Competencies

Cluster	Leadership Competencies	CCL	Schulich	OECD	Zenger	East	KIPP	Taxonomy	Journal[1]	Journal[2]	Journal[3]	Journal[4]
Leading Self	Take Initiative		/		/		/	/			/	
	Planning & Organizing	/	/	/			/		/	/		
	Agile Learner/ Self-Development	/	/			/	/	/			/	/
	Communication	/	/	/	/		/	/		/	/	/
	Adaptability	/	/	/			/	/		/	/	
	Professional Knowledge	/		/	/		/					/
Leading Others	Decision Making/ Problem Solving	/	/	/	/	/	/			/	/	/
	Development of Others	/	/	/	/		/	/		/		/
	Support Work Performance	/	/	/	/		/			/		
	Build a Team	/	/	/	/	/	/	/	/	/	/	/
	Value Diversity	/					/	/		/	/	/
	Conflict Management		/	/	/		/	/	/		/	
Leading the Organization	Creating a Vision	/	/	/	/	/	/	/	/	/	/	/
	Act with Integrity/Accountability	/			/	/	/	/		/		/
	Strategic Thinking	/	/	/	/	/	/	/	/	/	/	/
	Innovation				/	/	/	/	/	/	/	
	System Thinking	/	/	/			/	/	/	/		/
	Driving Results	/	/	/	/	/	/			/		

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[1] Maddock, S. (2012) "Public leadership: motivated by values not bonuses", *International Journal of Leadership in Public Services*, Vol. 8 Issue: 3, pp.112-120, doi: 10.1108/17479881211279986
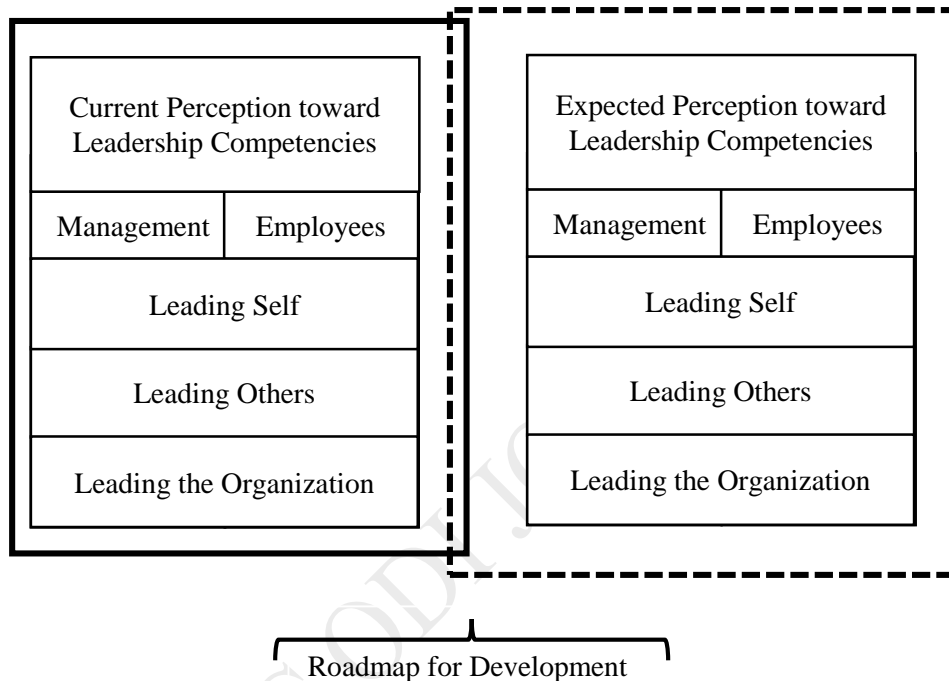
[2] Anupam Das, Vinod Kumar, Uma Kumar, (2011) "The role of leadership competencies for implementing TQM: An empirical study in Thai manufacturing industry", *International Journal of Quality & Reliability Management*, Vol. 28 Issue: 2, pp.195-219, doi: 10.1108/02656711111101755

[3] Pagon, M., Banutai, E., & Bizjak, U. (2008). Leadership competencies for successful change management. *University of Maribor, Slovenia, EUPAN*, 1-2.

[4] Malhi, R. S. (2013). Creating and sustaining: a quality culture. *Journal of Defense Management S, 3,* 2167-0374.

Conceptual Framework

Figure 2 illustrates the conceptual framework based on the concept of gap analysis. There is the comparison of current and expected perception toward leadship competencies for a culture of quality. In the perspectives of managmen and employees, the comparion demonstrates regarding three clusters: leading self, leading others, and leading the organization. Between the gaps, a roadmap for development will be created.

Figure 2: Conceptual Framework

Research Methodology

Research Design

The research and development is the research design of this study that uses applied research to find out the intervention for the improvement of working process by focusing on leading behaviors (Investopedia, 2018). As a result, the study will lead to the leadership competency development roadmap as the organization development (OD) intervention.

The mixed method is used as the data collection. The quantitative method is for the measurement of perception mean and the comparison of those perceptions. The qualitative method is for in-depth information from the interview about leadership competencies.

Research Sampling

Non random sampling method is used for this study. Due to the research focus, the scope is the education QA agency, therefore; the population of this study includes all employees. There were two parts of research procedure, three employees selected to complete an SWOT and SOAR initial analysis weighted score, eighty-one employees as the population completed the questionnaire and ten of them were interviewed.

Research Instruments

The initial analysis contents are based on organizational contexts aligned with the McKinsey 7S framework. The primary data are from a researcher analysis and executive interview. The researcher grouped the analyzed topics based on the McKinsey 7S framework for strengthes and weaknesses (SWOT and SOAR analysis) and the PESTEL model for opportunities and threats. There are two scales to rate all of fifty-three topics, which are the level of importance and the level of impact to the organization. The full score of importance is 1.00, while the range of impact is from 1-5 (low to high level of impact). All three raters' score then is averaged and come up with the final score.

For the questionnaire, languages applied were English and Thai. There are two parts: general question and perception toward leading in the organization. There are two criteria for each item: current experience of leadership competencies and a level of importance of leadership competencies for a culture of quality, which can be referred to expected perception. Perception rating is used in order to understand how respondants perceive based on each question.

According to the aims of the research, an interpretation of employees᾽ experience and attitude toward leadership competencies is the key answering the research questions. Therefore, the focus of the questionnaire is an employee᾽s perception instead of attitude. To construct the questionnaire, many standardized leadership competency tests are studied in order to adopt relevant parts to the context of this study. Schulich Leadership Framework (Western University, 2018) is adopted as the main part of questionnaire, along with the leadership competencies questionnaire of Massachusetts Institute of Technology (Burrell, n.d). Core competencies self-assessment tool (Human Resource University of Victoria, 2006) is used as the pattern of data type for collection, which is separated into frequency of competency demonstration and a level of importance of competency. For the 2nd part, The criteria use the Likert scale (0-4) in table 2.

Table 2:

The scale of perception toward leadership competencies

Current Experience of Leadership Competencies	Importance of Leadership Competencies for Culture of Quality
0 = Never	0 = Not important at all
1 = Rarely	1 = Slightly Important
2 = Sometimes	2 = Moderately Important
3 = Often	3 = Very Important
4 = Always	4 = Absolutely Essential

Additionally, there is an open-ended section for any comments toward leadership for a culture of quality.

Validity and Reliablility Test

For content validity, the index of item-objective congruence (IOC) is used to verify the validity of the questionnaire. IOC developed by Rovinelli and Hambleton is a procedure used in test development for content validity evaluation of a developed item. The questionnaire was then sent to three experts to identify the questions whether or not they are congruent with research objectives and definitions of terms. The criteria for item-objective congruence (IOC) score are +1 = Congruent, 0 = Questionable, and -1 = Incongruent. The acceptable item has to be rated more than

0.66 (IOC ▢ 0.66). As the result, all items in the part of general information are selected, while forty-five out of sixty-five items were selected for the 2nd part.

Pilot test/Cronbach's Alphas

      The questionnaire was tried out with thirty employees of the Education Testing Agency. The questionnaire was distributed manually. The Cronbach's Alphas results are separated by the current perception and the level of importance, shown in Table 3 and 4.

Table 3:

Reliability Statistics for Current Perception

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.968	.969	45

Table 4:

Reliability Statistics for a Level of Importance

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.979	.979	45

Research Data Analysis

      For the initial analysis, the average of weighted score was used for ranking to find the priority of each component. For the questionnaire and the interview step, demographic information is shown by descriptive statistics (frequencies and percentages), including the current and expected perception. Pair Samples Test is used for comparing the difference of current perception and a level of importance of the leadership competencies for a culture of quality. Independent Samples Test is used for comparing two groups of respondents (employee and management) perception. The statistical significance was set at 0.05. For the comments section and the interview, the contents were analyzed by grouping keywords and ranking by frequency.

Data Analysis and Research Findings

From the study, the demographic data, the current perception toward leadership competencies, the comparison of current and expected perception, the comparison of employee and management perception, and the most important leadership competency are as follows:

There were 81 employees responded the questionnaire. The demographic data consists of six categories of information: gender, age, working period in the organization, department, and position. It was found that 58% of respondents are female, while 42% of respondents are male. 45.7 % have their age between 31-40 years old. 27.2 % is between 41-50 years old. 19.8 % are between 20-30 years old. 7.4 % are more than 51 years old.

Half of all respondents (45%) have been working in the organization for 2-5 years. 29% have been working with the organization more than 10 years. 19% have been working for the organization 6-9 years. 7% have worked here less than 2 years.

30% of respondents work in the department of assessment and certification, which is the core function of the organization. 28% is from the operation supports comprised of legal, finances, IT, human resource, purchasing, general administration. 20% are in the department of policy and strategy. 13% is from the development and promotion department, which is for assessor development. 9% of respondents did not mention their department. For position, 67% of respondents hold non-management position. 33% are the management level.

Current Perception toward Leadership Competencies

Considering three clusters of leadership competencies, the highest average cluster is a leading self at 2.35, of which professional knowledge, the highest average of leadership competencies consisted. Following with leading other and leading the organization, their averages are 2.33 and 2.18, respectively. The results are all in the sometimes frequency range. The results are illustrated in the table 5:

Table 5:

The Current Experience by Cluster

Cluster of Leadership Competencies	The Highest Average	The Lowest Average	Average of Cluster
Leading Self	Professional Knowledge (2.59)	Agile Learner/Self-Development (2.13)	2.35 (Sometimes)
Leading Others	- Decision-making/Problem Solving (2.44) - Development of Others (2.44)	Support Work Performance (2.15)	2.33 (Sometimes)
Leading the Organization	Strategic Thinking (2.43)	- Creating a Vision (2.07) - Drive Results (2.07)	2.18 (Sometimes)

The Comparison between current and expected perceptions

Considering a cluster of leadership competencies, the highest gap cluster is leading the organization with 1.19, additionally driving results as one of leading the organization competencies holds the largest gap at 1.41, following with innovation (1.32) and creating a vision (1.21). Leading self and leading others, their gap between current and expected perception are 1.00 and 0.98, respectively. The results are illustrated in the Table 6.

Table 6:

The comparison of current and expected perception by cluster

Cluster of Leadership Competencies	The Highest Gap	The Lowest Gap	Average Gap of Cluster
Leading Self	Take Initiative (1.08)	- Professional Knowledge (0.96) - Adaptability (0.96)	1.00

| Leading Others | Support Work Performance (1.15) | Value Diversity (0.79) | 0.98 |
| Leading the Organization | Drive Results (1.41) | Strategic Thinking (1.01) | 1.19 |

Statistically, the perception of all leadership competencies for a culture of quality between current and expected experience is significantly different (table 7). The result also prove and accept.

Table7:

The comparison of current perception and a level of importance of leadership competencies

Paired Samples Test		Current Experience (mean)	Importance or Expected (mean)	Sig. (2-tailed)
Leadership Competencies				
Leading self				
Pair 1	Take initiative	2.27	3.35	.000
Pair 2	Planning and Organizing	2.30	3.32	.000
Pair 3	Agile learner	2.13	3.16	.000
Pair 4	Communication	2.42	3.39	.000
Pair 5	Adaptability	2.40	3.35	.000
Pair 6	Professional knowledge	2.59	3.56	.000
Leading Others				
Pair 7	Decision Making/ Problem Solving	2.44	3.34	.000
Pair 8	Development of others	2.44	3.42	.000
Pair 9	Support work performance	2.15	3.30	.000
Pair 10	Building a Team	2.33	3.28	.000
Pair 11	Value Diversity	2.38	3.17	.000

Paired Samples Test				
Leadership Competencies		**Current Experience (mean)**	**Importance or Expected (mean)**	**Sig. (2-tailed)**
Pair 12	Conflict Management	2.20	3.31	.000
Leading the Organization				
Pair 13	Creating a vision	2.07	3.28	.000
Pair 14	Act with integrity/accountability	2.20	3.28	.000
Pair 15	Strategic thinking	2.43	3.44	.000
Pair 16	Innovation	2.06	3.38	.000
Pair 17	System Thinking	2.27	3.39	.000
Pair 18	Driving Results	2.07	3.48	.000

*Statistically significant at $p < 0.05$.

**Statistically significant at $p < 0.01$.

The Comparison between Employee and Management Current Perceptions

Considering a cluster of leadership competencies, the highest gap cluster is leading the organization with 0.38. Following with leading self and leading others, their gap between current and expected perception are 0.37 and 0.35, respectively. Narrowing to each competency, the largest gap is agile learner/self-development (0.65). Creating a vision has the second largest gap with 0.54. Communication and conflict management have the third largest gap with 0.50. On the other hand, system thinking has the smallest gap at 0.19. To take initiative and to plan and organize have the small gap at 0.22 and 0.26, respectively. The results are illustrated in the table below (Table 8):

Table 8:

The comparison of current perception between employees and management

Cluster of Leadership Competencies	The Highest Gap	The Lowest Gap	Average Gap of Cluster
Leading Self	Agile Learner/Self-Development (0.65)	Take Initiative (0.22)	0.37
Leading Others	Conflict Management (0.50)	Build a Team (0.29)	0.35
Leading the Organization	Creating a Vision (0.54)	System Thinking (0.19)	0.38

Statistically, the current perception of the employee and management toward agile leaner/self-development, communication, conflict management, creating a vision, strategic thinking and driving result is significantly different (Table 9).

Table 9:

The comparison of employee and management current perception by t-test

Leadership Competencies	t-test for Equality of Means			
	Perception of		Gap (Mgt-Emp)	Sig. (2-tailed)
	Management (mgt)	Employee (emp)		
Leading Self				
Take initiative	2.44	2.22	0.22	.283
Planning and Organizing	2.45	2.18	0.27	.126
Agile learner/Self-Development	2.57	1.91	0.66	.002**
Communication	2.74	2.24	0.50	.009**
Adaptability	2.59	2.30	0.29	.103
Professional knowledge	2.78	2.50	0.28	.279
Leading Others				
Decision Making/ Problem Solving	2.65	2.34	0.31	.125
Development of others	2.65	2.34	0.31	.148

Leadership Competencies	t-test for Equality of Means			
	Perception of		Gap (Mgt-Emp)	Sig. (2-tailed)
	Management (mgt)	Employee (emp)		
Support work performance	2.37	2.05	0.32	.085
Building a Team	2.52	2.23	0.29	.154
Value Diversity	2.61	2.27	0.34	.092
Conflict Management	2.54	2.04	0.50	.025*
Leading the Organization				
Creating a vision	2.43	1.89	0.54	.004**
Act with integrity/accountability	2.42	2.09	0.33	.084
Strategic thinking	2.74	2.28	0.46	.006**
Innovation	2.26	1.96	0.30	.217
System Thinking	2.39	2.21	0.18	.318
Driving Results	2.37	1.92	0.45	.017*

*Statistically significant at p<0.05.

**Statistically significant at p<0.01.

The Comparison between Employee and Management Expected Perceptions

Considering a cluster of leadership competencies, the highest gap cluster is leading self with 0.25. One of the leading self largest gap competencies is professional knowledge with 0.34. Following with leading the organization and leading others, their gap between current and expected perception are 0.23 and 0.19, respectively. Interestingly, leaders rate higher score than employees almost every competency, only support work performance with the lowest gap among all competencies is the result that employees perceive its importance more than management, but a statistical calculation is based on the formula that management perception is higher than employees. The results are illustrated in the table below (Table 10):

Table 10:

The comparison of Expected Perception between Employees and Management

Cluster of Leadership Competencies	The Highest Gap	The Lowest Gap	Average Gap of Cluster
Leading Self	Professional Knowledge (0.34)	Take Initiative (0.19)	0.25
Leading Others	Value Diversity (0.30)	Support Work Performance (0.06)	0.19
Leading the Organization	- Creating a Vision (0.30) - System Thinking (0.30)	Act with Integrity/ Accountability (0.14)	0.23

Statistically, in Table 11 the perception of the employee and management toward the importance of adaptability, professional knowledge, value diversity, and system thinking is significantly different.

Table 11:

The comparison of employees and management expected perception

Leadership Competencies	t-test for Equality of Means			
	Perception of		Gap (Mgt-Emp)	Sig. (2-tailed)
	Management (mgt)	Employee (emp)		
Leading Self				
Take initiative	3.48	3.29	0.19	.181
Planning and Organizing	3.48	3.24	0.24	.106
Agile learner/Self-Development	3.32	3.08	0.24	.161
Communication	3.52	3.32	0.19	.153
Adaptability	3.54	3.26	0.28	.033*

Leadership Competencies	t-test for Equality of Means			
	Perception of		Gap	Sig.
	Management (mgt)	Employee (emp)	(Mgt-Emp)	(2-tailed)
Professional knowledge	3.78	3.44	0.33	.018*
Leading Others				
Decision Making/ Problem Solving	3.43	3.30	0.13	.420
Development of others	3.54	3.36	0.18	.184
Support work performance	3.34	3.28	0.06	.650
Building a Team	3.46	3.20	0.26	.058
Value Diversity	3.37	3.07	0.30	.042*
Conflict Management	3.44	3.25	0.19	.191
Leading the Organization				
Creating a vision	3.48	3.18	0.30	.051
Act with integrity/accountability	3.37	3.23	0.13	.327
Strategic thinking	3.56	3.38	0.18	.159
Innovation	3.54	3.30	0.24	.091
System Thinking	3.59	3.29	0.30	.022*
Driving Results	3.63	3.41	0.22	.117

*Statistically significant at p<0.05.

**Statistically significant at p<0.01.

The Most Important Leadership Competency

Professional knowledge is the most important leadership competency for a culture of quality (3.44). Driving results is perceived as the second most important competency perceived by respondents (3.48). Strategic think is the third most important leadership competency. Development of others is the next important competency. Following with system thinking and communication, both competencies get 3.39. For the highest average cluster, a leading the organizaiton was responded at 3.37. Following with leading self and leading others, their averages were 3.36 and 3.31, respectively. The results are all in the very important to essential range. The results are illustrated in the table 12. Based on the interviews, development of others, building a team and support working performance are the three most important leadership competencies.

Table 12:

The Most Important Leadership Competency

Cluster of Leadership Competencies	The Highest Average	The Lowest Average	Average of Cluster
Leading Self	Professional Knowledge (3.56)	Agile Learner/Self-Development (3.16)	3.36 (Very Important)
Leading Others	Development of Others (3.42)	Value Diversity (3.17)	3.31 (Very Important)
Leading the Organization	Drive Results (3.48)	Creating a Vision (3.28) Act with Integrity/ Accountability(3.28)	3.37 (Very Important)

Discussion of Results

Current Experience towards Leadership Competencies: employees' experiences with management

Among three clusters, leading self is rated as the most frequently perceived leading

behavior. Due to the nature of QA work, employees have to do the routine task as the majority of their works. Therefore, they rarely put their concentration to other bigger aspects of the organization such as the organization goal and mission. Additionally, most of the work is a kind of individual work, so a leader then does not play the main role in leading, but only focus on monitoring a working output.

For each competency, professional knowledge becomes the most frequently perceived leadership competency, which is relevant to the nature of educational quality assessment tasks that requires specific knowledge. Decision-making/problem-solving is perceived as the second one owing to its centralized process. Although employees are freely to propose a new project or idea, they cannot make a decision. Next, strategic thinking is the third most frequently perceived competency by respondents because the organization are recently working on the strategic planning and get employees involved in the technical hearing activity, even though it is not always done. Communication is another frequent perceived competency because it is for connecting with others and daily working. Next, adaptability is significant for the reformation of an educational quality assessment system, many respondents then perceive the ability to adapt and adjust of leaders more often, such as a change of educational quality assessment process, and an integration of technology to the working process.

On the other hand, five leadership competencies- creating a vision, innovation, driving results, agile learner, and supporting work performance- are less perceived by the respondents. All the competencies less perceived are interrelated to one another because of the organizational mission and the hierarchal organization structure. The same task has to be done as the annual cycle with passive working style. Leaders then rarely touch the organizational vision and translate to employees, along with the innovation competency. Therefore, they are less innovative to create new ideas or new technique aiming for effectiveness and efficiency.

The comparison between current and expected perception: both employees and management perception

Statistically, there is the significant difference of perception toward current experiences and a level of importance or expected situations of leadership competencies for all sixteen competencies. Current perception is rated lower than the important level or the expected situation for every leadership competency. This perception gap relates to how leaders perform and how they are expected.

The top three leadership competencies with a large gap are driving results, innovation and creating a vision. The huge gap stems from current situations that the education quality assessment process has been reforming for 2 - 4 years, that leaders need to improve working and educational quality assessment processes. However, its accomplishment has not been as expected yet because of an existence of traditional leading and clichéd working style. By this, all respondents then perceived that innovation, driving results, and creating a vision are the appropriate leadership competencies, which should be applied for this situation.

The bottom three leadership competencies with the smallest gap but still significant are adaptability, value diversity and decision-making/problem-solving. Adaptability and decision-making/problem-solving are the top five most perceived leadership competencies. It is obvious that the higher score rated for current perception, the fewer gaps between current and expected perception. Because of the traditional organizational culture, it is difficult to adapt or adjust working style flexibly. Together with the organizational decision-making nature is still centralized. Even though the situation changes, the leaders still do not be able to adapt as much as expected, also do not share the role of decision-maker or problem-solver to employees. For a competency of value diversity, since there is a rule and regulation for working, employees are prone to admit same approaches and perspectives. Another reason is that the autonomy of the organization is for the leaders, therefore, the organization tend to be homogenous as the directions of the leaders. A few of diverse approaches and perspectives is widely accepted.

The comparison between employee and management perception toward leadership competencies (for current and expected situations)

The gaps between employee and management are illustrated in the way that a management's current perception is higher than employees' perception for every leadership competency. Though they have demonstrated a lot of leading behaviors, employees may not get the interaction as equal as leaders' performance. Employees perceived that the leaders occasionally perform the characteristic of agile learner or self-development, while leaders perceived themselves sometimes demonstrated such character. Without competency-based job description, leaders set their preference-based development plan, which may not serve current and future needs. It connectedly causes the gap of driving results and communication that leaders deliver much more than employee receive by an one-way communication. Real-time responses are then not provided to employees. Creating a vision and strategic thinking are perceived differently between employees and management. Leaders do not communicate a clear vision, mission as guidelines for decision-making and implementation as employees' expectation. More importantly, employees tends may not be able to understand an organizational strategy as it should be.

For expected perception, management rates higher than employees in every leadership competency. Clearly, leaders do recognize the importance of leadership competencies more than employees. Especially strategic thinking and adaptability, leaders believe in adapting strategy, process, and technology to changing conditions, and thinking systematically for the system reformation. They are convinced to be resilient enough in dealing with unstable political situation and develop the newly appropriate educational quality assessment system.

While employees think supporting work performance is more important than leaders. Deeply scrutinizing to each leading behavior, employees give a higher importance to 'feedback given by management' than management assessing themselves because employees are not receiving enough working feedback as they expect from their leader, but leaders think that they have already provided feedback. The gap of providing feedback is based on its quantity and quality. Based on the interview, almost all of interviewers with employee status stated the importance of providing feedback, which help them to understand what it takes for a successful work, including a self-development plan. An effectiveness of providing feedback needs leaders to be able to communicate and to have professional knowledge. Leaders' knowledge and experiences serve as messages, while communication is the mean to deliver those messages to employees.

The important leadership competencies for a culture of quality
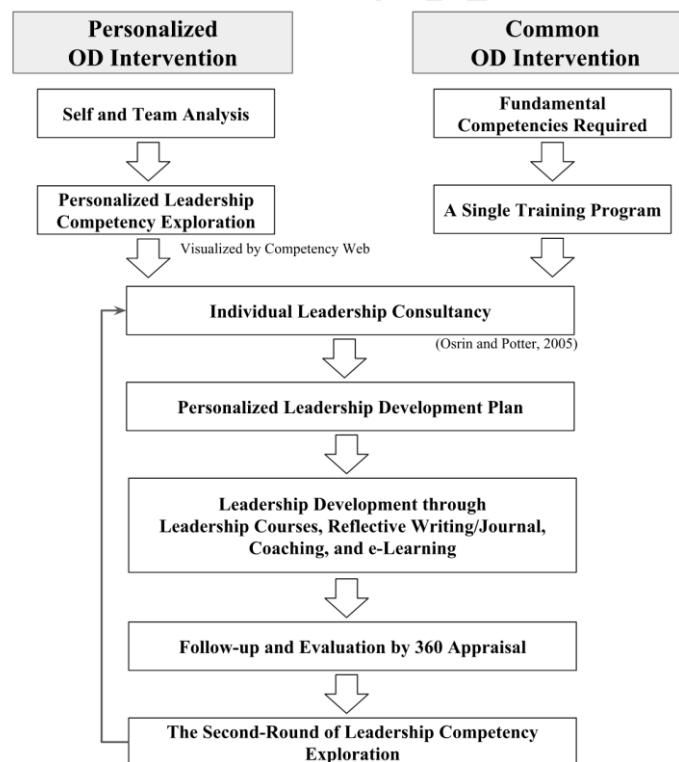
Professional knowledge is the most important leadership competency covering technical, functional, and job-specific knowledge. English proficiency and IT literacy are other important skills for leaders to use for effectively supporting the development of working process. Together with, the organization is specialized in an academic field. The need of knowledge competence is necessary for a reformation of quality assessment system and the organization's image. Driving results is the second most important one that leaders have to give an importance to a clear, measurable, and direct impact on organization's performance and properly balance qualitative and qualitative goals. Additionally, leaders also have to reconsider a working process that is able to better the quality assessment system, such as the integration of technology with the quality assessment system. Therefore, strategic and system thinking become other very important competencies because leaders use for broadening their understanding toward situations affecting organization's performance. The objectives, priorities and strategic plans for quality-based performance are required as the information to formulate employee performance goal. Therefore, leaders have to ensure the quality assessment system and the development of assessor are integrated and aligned with strategic directions and the national goal.

Professional knowledge, driving results, and system and strategic thinking then become the most important leadership competencies, which serve as the solid foundation of a competent leader who are ready for four areas of the new strategy.

Recommendations

The result of this study shows the need of leadership competency development, due to the perception gap of current experience and expected one and the perception of employee and management. Leadership development should be concerned with long-term consequences; therefore, it is broader than a single training technique program. On the contrary, it is the way in which attitude is instilled, action empowered, and organization-wide affected (Bush and Glover, 2004).

According to the overall gap, many leadership areas have to highly consider and strategically develop. In order to reach the sufficient level or the expected perception of leadership competencies, competency-based leadership development program and guidelines for leadership development should be addressed. The leadership development process is adapted from Georgia State Government's Competency-Based Development Guide (2012). Together with, the combined implementation of self and team analysis, exploration of leadership competency, experiential learning as learning by doing, and coaching is used as the OD intervention. Such integrated techniques will allow each leader to assess oneself and understand one's area of improvement. The roadmap of leadership development is proposed (Figure 3) .

Figure 3: Proposed Leadership Competency Development Roadmap

The roadmap contains two types of interventions. The leaders have to begin the first step concurrently, which are personalized and common OD interventions. At first, they have to

analyze their current performance with competency-based. Along with, others relating to them assess their leadership performance. The result from two different angles will lead to leadership competency exploration, by which is visualized a competency web. Meanwhile, leaders have to attend a single training program as the common OD interventions, to fulfill their leadership competencies of professional knowledge and support work performance, regarding the research result. They also have to inform their learning outcomes in the next step of consultancy. Secondly, a summarized competency web and details will be used for individual leadership consultancy (Osrin and Potter, 2005). The primary focus of consultancy is to assess and make meaningful benefits to plan for a personalized leadership development plan.

Thirdly, leaders have to embed in customized practices of leadership competency development, which can be leadership courses (Gosling, 2005), reflective writing/journal (Pedler, Burgoyne & Boydell, 2001), coaching, and e-learning (Bolden and Gosling, 2005), depending on the recommendation from consultancy.

Fourth, the leaders have to attend the follow-up and evaluation activity, which allow them to revisit the pre-assessment result and their developmental progress. By this, there will be others relating to them participate the activity. The 360 appraisal feedback system will be used at this activity. The results from this activity will be divided into two parts, which are the lessons learned and the current leadership competency performance. The lessons learned will be shared to the right situation for other human resource developments, while the current leadership competency performance will be used as the source for a continuous leadership development.

Further Research

The development and implementation of competency-based leadership development program are supposed to continuously focus in the future and aligned with a competency-based job description with leadership program. Continuously, the study of assessor competency based on the set of leadership competencies should be explored in the future. While considering the social factor of the more globalized society, the further study can expand the scope of study to QA agencies in other ASEAN countries. A competency-based leadership development program can be harmonized with countries' uniqueness.

References

Adam, B. (2013). Closing the Leadership Gap in Asia. Retrieved from:
https://www.smu.edu.sg/perspectives/2013/09/25/closing-leadership-gap-asia

ASQ. (2018). Lean Kaizen: A Simplified Approach To Process Improvement. Retrieved from
https://asq.org/training/lean-kaizen-a-simplified-approach-to-process-improvement-kaizen

Burrell, (n.d). Leadership Competencies Questionnaire. Retrieved from
http://web.mit.edu/10.26/www/Team-Building/Forms/leadership_competencies.html

Bush, T. and Glover, D. (2004) Leadership Development: Evidence and beliefs. National College
for School Leadership. Available online at: [www.ncsl.org.uk/media/F7A/88/ bush-school-
leadership-full.pdf]

Case, P. and Bolden, R. and Gosling, J. (2005). What is Leadership Development? Purpose and
Practice. Retrieved from http://www.authentic-change.com/wp-
content/uploads/2017/03/leadership-development-purpose-and-practice.pdf

Center for Creative Leadership (Greensboro, NC). (2015). *The center for creative leadership
handbook of coaching in organizations*: 1. ed. San Francisco, Calif: Jossey-Bass.

Clemmer, J. (2012). Leadership Competency Models: Why Many Are Failing and How To Make
Them Flourish. Retrieved from https://www.clemmergroup.com/wp-
content/uploads/2014/08/LeadershipCompetencyModels.pdf

Chan, T.C. & Quazi, H.A. (2002), "Overview of quality management practices in selected Asian
countries", *Quality Management Journal*, Vol. 9 No. 1, pp. 23-49.

Das, A., Kumar, V., Kumar, U. (2011) "The role of leadership competencies for implementing
TQM: An empirical study in Thai manufacturing industry", International Journal of
Quality & Reliability Management, Vol. 28 Issue: 2, pp.195-219, doi:
10.1108/02656711111101755

Dean, J., D. Bowen. (1994). Management theory and total quality: Improving research and practice
through theory development. *Academy of Management Review* 19, no. 3:392-418.

Desbrow, P.C. (2016). Transformational Leadership through Power and Influence. Retrieved from
http://sites.psu.edu/leadership/2016/03/12/transformational-leadership-through-power-and-
influence/

East Hampshire District Council. (2017). Leadership Competency Framework. Retrieved from https://www.easthants.gov.uk/sites/default/files/documents/Leadership%20Competency%20Framework.pdf

Georgia State Government. (2012). Georgia State Government's Competency-Based Development Guide, Retrieved from https://doas.ga.gov/assets/Human%20Resources%20Administration/Performance%20Management%20Training%20Documents/CompetencyBasedDevelopmentGuide.pdf

Gosling, J. (2005). Leadership Courses. *What is Leadership Development? Purpose and Practice, 2,* 16.

Hall, J., Johnson, S., Wysocki, A., Kepner, K., Farnsworth, D., and Clark, J. L. (2005). Transformational Leadership: The Transformation of Managers and Associates. Retrieved from https://edis.ifas.ufl.edu/pdffiles/HR/HR02000.pdf

Hay, I (2012) Transformational Leadership Characteristics and Criticisms. Retrieved from http://www.leadingtoday.org/weleadinlearning/transformationalleadership.htm

Human Resource University of Victoria, (2006). Core Competencies Self-Assessment Tool. Retrieved from https://www.uvic.ca/hr/assets/docs/od/core_self%20assesment.pdf

Investopedia (2018). Research and Development - R&D. Retrieved from https://www.investopedia.com/terms/r/randd.asp

KIPP. (2016). KIPP: Leadership Framework and Competency Model. Retrieved from http://www.kipp.org/wp-content/uploads/2016/11/KIPP_Leadership_Competency_Model.pdf

Laohavichien, T., Fredendall, L.D. and Cantrell, R.S. (2011), "Leadership and quality management practices in Thailand", *International Journal of Operations & Production Management*, Vol. 31 No. 10, pp. 1048-1070.

Maddock, S. (2012) "Public leadership: motivated by values not bonuses", International Journal of Leadership in Public Services, Vol. 8 Issue: 3, pp.112-120, doi: 10.1108/17479881211279986

Maesincee, S. (2016). Thai Economy 4.0 Transforming towards Value-Based Economy. Retrieved from: http://knit.or.th/th/sites/default/files/upload/13/1.ศ.ดร.สันสนีย์%20ไชย โรจน์_KNIT%20Thailand%204.0.pdf (in Thai)

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Malhi, R. S. (2013). Creating and sustaining: a Quality Culture. J Def Manag S3: 002. Doi:10.4172/2167-0374.S3-002

McCauley, C. (2006). *Developmental assignments: Creating learning experiences without changing jobs*. Greensboro, N.C.: Center for Creative Leadership Press. Permission granted from the Center for Creative Leadership to republish CCL's Model of Leader Competencies.

National Reform Steering Assembly. (2016). แผนการปฏิรูประบบการประกันคุณภาพการศึกษา [Reformation Plan for Educational Quality Assurance System]. Retrieved from http://library2.parliament.go.th/giventake/content_nrsa2558/d062159-03.pdf

Noronha, C. (2002) "Chinese cultural values and total quality climate", *Managing Service Quality: An International Journal*, Vol. 12 Issue: 4, pp.210-223, https://doi.org/10.1108/09604520210434820

Northouse, P. G. (2016). Leadership: Theory and Practice (7th ed.). Thousand Oaks, CA: Sage Publications, Inc.

OECD. (2014). OECD Competency Framework. Retrieved from https://www.oecd.org/careers/competency_framework_en.pdf

Office for National Education Standards and Quality Assessment. (2015). Quality Assurance in Thailand. Bangkok: Offset Plus Co., Ltd.

ONESQA. (2018). Strategy Plan 20 years. Retrieved from: http://eoffice.onesqa.or.th/e-office.ceo?chkmain=2 (in Thai)

Osrin, N. and Potter, J. (2005). What is Leadership Development? Purpose and Practice. Retrieved from http://www.authentic-change.com/wp-content/uploads/2017/03/leadership-development-purpose-and-practice.pdf

Pagon, M., Banutai, E., & Bizjak, U. (2008). Leadership competencies for successful change management. University of Maribor, Slovenia, EUPAN, 1-2.

Pedler, M, Burgoyne, J and Boydell, T (2001) A Manager Guide to Self Development, 4th edition, London: McGraw-Hill

Pimpa, N. (2012). Amazing Thailand: Organizational culture in the Thai public sector. *International Business Research*, 5(11), 35.

Pornrungroj, C. (2014). วัฒนธรรมคุณภาพ [Quality Culture]. Retrieved from www.onesqa.or.th (in Thai)

Porter, J. (2017). How to Give Feedback People Can Actually Use. Retrieved from https://hbr.org/2017/10/how-to-give-feedback-people-can-actually-use

PP&S. (2016). Quality Management: Then, Now and Toward the Future. Retrieved from https://www.pp-s.com/Files/PPSWP_QMSbeyondprod.pdf

Promtan, T., Asawarungsaengkul K., Rungreunganun, V., & Intarakumthornchai, T. (2016). The Leadership Competency Model for Middle Management in Hard Disk Drive Industry. *The Journal of KMUTNB.,* vol. 26, no. 3, pp.517-524, (in Thai).

Rosenbaum, A. (2003). New challenges for senior leadership enhancement for improved public management. *United Nations Leadership and Social Transformation in the Public Sector: Moving from Challenges to Solutions. New York: United Nations*, 103-113.

Safty, S. E. (2012). Five essential ingredients for a quality culture. Retrieved from https://www.processexcellencenetwork.com/lean-six-sigma-business-transformation/articles/key-ingredients-for-quality-culture-development

Santiago, P., K. Tremblay, E. Basri and E. Arnal (2008), Tertiary Education for the Knowledge Society, *OECD Publishing*, Paris. Retrieved from http://www.oecd.org/education/skills-beyond-school/41266759.pdf

Schulich School of Medicine & Dentistry, Western University. (2016). *Emerging Leaders PMA Pilot Program October 2016.* Retrieved from https://www.schulich.uwo.ca/humanresources/staff/learning_development_opportunities/Emerging%20Leaders%20Program%20Guidebook%20-%20October%201,%202016.pdf

SHRM. (2008). Leadership Competencies. Retrieved from https://www.shrm.org/resourcesandtools/hr-topics/behavioral-competencies/leadership-and-navigation/pages/leadershipcompetencies.aspx

Srinivasan, A. & Kurey, B. (2014) Creating a Culture of Quality. *Harvard Business Review: Organizational Culture.* Retrieved from https://hbr.org/2014/04/creating-a-culture-of-quality

The W. Edwards Deming Institute. (2016). Dr. Deming's 14 Points for Management. Retrieved from https://deming.org/management-system/fourteenpoints

Western University, (2016). Leadership Competency Self-Assessment Questionnaire. Retrieved from https://www.schulich.uwo.ca/humanresources/staff/learning_development_opportunities/schulich_leadership_book_club_read_to_lead.html