

**Improvement of Leadership Competencies and Organizational Culture
through Whole Brain Based-Interventions:
A Case Study of Phoenix Thailand, Ltd.**

Panpilai Kokitsawat
Manager, Care Center
Zuellig Pharma, Ltd. Thailand

Ray Clapp, Ph.D.
Visiting Professor, University of Hertfordshire, UK
Research Fellow, Occupational Research Centre, UK

Abstract

This action research aim to improve Leadership Competencies and Organizational Culture of the study group at leader and supervisors levels of Phoenix Ltd. through Whole Brain Based-Interventions, namely: Whole Brain Appreciative Coaching (WBAC), Appreciative Inquiry (AI), and Appreciative Leadership (AL). The Action Research was conducted using two dependent variables: Leadership Competencies and Organizational Culture; while three Whole Brain-Based Interventions comprised the Independent Variables. Both qualitative and quantitative data were used for assessment of both control and study group. The Competing Value Framework was utilized as the research instrument for both Organization Culture and Leadership Competencies. The Organization Culture Assessment Indicator (OCAI) describes four organizational structures: Clan, Adhocracy, Market and Hierarchy. The Managing Skill Assessment Indicator (MSAI) was used for Leadership competencies assessment including both transformational and transactional competencies. Managing teams, Interpersonal Relation, Development of others, Innovation, Future and Continuous Improvement were assessed as Transformational dimensions. Whereas, Managing Acculturation, Control System, Coordination, Competitiveness, Emerging employees and Customer Focus were assessed as Transactional dimension. For the study group the results showed a statistically significant change in four out of the six competencies that support Transformational Leadership. However, there was no significant change in the culture of either the study group or the control group. These results show that the three interventions in total provided a useful enhancement to the leadership competencies of the study group.

Keywords: leadership competencies, organizational culture, Competing Values Framework, Whole Brain Appreciative Coaching, Appreciative Inquiry, Appreciative Leadership.

Introduction

This study focused on the leaders and supervisor levels in Phoenix Ltd, one of the leading in pharmaceutical and healthcare products distributors in Thailand. Phoenix is also recognized as productive and innovative logistics provider. Its vision is “Connect pharmaceutical professionals to support the well-being of the community”. The mission statement is “Be the partner that offer the healthcare multi-solutions”.

Phoenix Thailand’s key objective is to strengthen its market leader position and to offer the best support to the pharmaceutical industry by developing its sales and market penetration. This is a key component that drives the success of Phoenix. As services rely on people, the key is to get the best talents to provide the best services. People are the key investment area for Phoenix Thailand particularly the development of people within the organization as they are important assets of the company. This is clearly supported in the 2012 statement that states “Our people make Phoenix”.

SWOTAR Assessment

In the last few years, the performance of Phoenix Thailand has experienced strong competition in the Pharmaceutical Industry. To provide an initial evaluation of the organizational the Strengths, Weaknesses, Opportunities, and Threats of the organization a SWOT analysis was performed which identified the internal and external factors which are favorable and unfavorable. Furthermore, a Strengths, Opportunities, Aspirations, Results (SOAR) analysis which is a more positive analytical approach was also integrated into this initial evaluation.

The initial findings were as follows:

Strengths: Phoenix is strong in system process as it acquired International Organization for Standardization (ISO) and other International High standards, Financial Credibility, as well as Cash Flow.

Weakness: Human resource management issues are the major problems that Phoenix continuously faced for many years. The issues are lack of staff retention, succession planning, weak internal communication, as well as change averse culture.

Opportunities: There is an opportunity for employee turnover reduction, communication enhancement, and change adaptation.

Threats: Phoenix faced with less control on generic penetration, increasing government regulatory pressure, natural disasters, price cut trends, delayed payments as well as Thailand labour competitiveness.

Aspirations: Phoenix Thailand’s new shared values are passion for growth, innovative, pride, collaboration, and integrity.

Results: Phoenix aims for improvement on leadership competencies and organizational culture.

From the SWOT/SOAR, the key areas for challenges/opportunities are on turnover reduction, communication enhancement, and change adaptation. The aspiration is to address on Organization Shared Value.

The main situational issue concerns on the development of innovative solutions and intellectual capital of the organization to match the perceived current and future market/environmental needs.

Research Questions

1. What is the current and future nature of the management competencies to ensure organizational success in Phoenix?
2. What are the changes to the management competencies that will support the current culture of the organization?
3. What are the changes to the management competencies that will support the future culture of the organization?

Review of Literature

Competing Values Framework

According to Cameron & Quinn (1999), culture can be described as a set of opposing values based on two bipolar orthogonal dimensions such as Flexibility versus Stability and Internal versus External. The Competing Values Model uses six common variables through which the form of four different cultures can be expressed. The variables are:

- (1) Dominant Characteristics
 - (2) Organizational Leadership
 - (3) Management of Employees
 - (4) Organizational Values
 - (5) Strategic Emphasis
 - (6) Criteria for Success

The Competing Values Framework also contains a full range of leadership roles that align with specific organizational environments. The upper two quadrants are considered to align with transformational leadership while the lower two align with transactional leadership (Burns 1978, Quinn 1988 , Belasen & Frank 2012). This brings about innovative change where the innovator and broker roles need creativity and communication skills to manage the change process. Whereas, for continuous improvement the coordinator and producer roles are more relevant.

The concentration is on change, especially on corporate transformation processes which provides the revitalization and the creation of a new vision, and the institutionalization of change (Bhargava, 2003, p. 83). He also added that in the long-term perspective, leaders would focus not only on the current but also on their future needs and those of their followers. The leaders not only concern themselves with the short-term problems and opportunities (transactional issues) but also with the long-term (transformational) issues of the organization as well. Instead of viewing intra and extra-organizational factors separately, they should view them as a whole.

Furthermore, Rouse (2006, p. 71) suggested that transformational leaders inspire and communicate the company's mission throughout the organization and are able to integrate the organization into a single unit with a common purpose through their leadership. They are dedicated to the consistent practice of their values which are observed by other organizational members.

While the range of competencies to maintain effectiveness in different situations is large, the competencies defined by the Cameron and Quinn framework are concerned only with behaviors. The other components of 'competency' e.g. styles or attitudes, resist change and are more a subject for recruitment and 'fit' with the culture of the organization. Failure to obtain a 'fit' results in coping behavior by the individual which reduces the effectiveness of the individual (Clapp, 1993).

Competing Values Framework for organizational culture and leadership competencies

The Competing Values Framework with four different quadrants that represent the different kinds of organization culture and leadership competencies. (Figure 1)

Collaborate (or clan) represents the culture which is similar to a family-type organization, has less focus on structure and control, and has a greater concern for flexibility. The value-enhancing activities which lead to organizational effectiveness in the Collaborate quadrant deal with human competencies building, human development, human empowerment, human commitment, as well as high levels of participant engagement. Examples of activities in this competence include clarifying and reinforcing organizational values, norms, and expectations; developing employees and cross-functional work groups; implementing programs to enhance employee retention; and create team building and decentralized decision making.

There are two main leadership roles in this quadrant: The first is the Facilitator who is process and people oriented, manages conflict and seeks consensus. Influence is based on active involvement, participation and openness. The second is the Mentor who is caring and empathic, aware of and cares for the needs of others. Influence is based on mutual respect, trust morale, and commitment which are actively pursued. The associated competencies comprise three main groups each with the underlying competencies.

- Managing Teams: facilitating effective cohesive functioning and high performance teamwork.

- Managing Interpersonal Relationships: facilitating effective interpersonal relationships including supportive feedback, listening and resolution of interpersonal problems.
- Managing the Development of Others: helping individuals improve their performance, expand their competencies and take advantage of personal development opportunities.

Create (or adhocracy) represents Culture where organizations are externally oriented and has less focus on structure and control but a greater concern for flexibility and acceptance of risk. This regards the transition from the industrial to the information age and tends to be more flexible like the Collaborate Culture and externally focused like the Compete Culture. Cameron & Quinn referred that this type of Culture as an organizational form that is more responsive to hyper turbulent, ever-accelerating conditions that increasingly typify the organizational world of the 21st century.” Cameron stated that the Create Culture is the workplace where dynamic, entrepreneurial, creativity and high-risk orientation lead to innovation in the organization.

There are two main leadership roles. The first is the Innovator who is open minded, creative and change oriented. Influence is based on anticipation of a significantly different future that generates support and interest in others. The second is the Visionary whose thinking is focused on the future, both from the various scenarios that may apply as well as strategic direction and continuous improvement. The associated competencies comprise three main groups each with the underlying competencies:

- Managing Innovation: encouraging people to innovate, become more creative by expand alternatives and facilitate new idea generation.
- Managing the Future: communicating a clear vision of the future and facilitating its accomplishment.
- Managing Continuous Improvement: fostering incremental change to improve the efficiency of day to day activities.

Compete (Market) culture describes organizations which are externally oriented with more focus on structure and control and a less concern for flexibility and risk. Referring to Cameron & Quinn this style of organizing was well recognized as it was not only the answer to new competitive challenges, but also conducted the transactional operation related to network e.g., customers, suppliers, contractors, unions, etc. Furthermore, the main objectives of a Compete Culture organization are to generate profits, achieve bottom-line results, strengthen market niches, expand targets and keep the old customers. This quadrant emphasizes on value creation and performance for external and control focus.

The two main leadership roles are: first is the Competitor who is concerned with goal clarity and meeting targets. Winning is a dominant objective with a focus on external

competitors and market place positions. The second role is the Producer who is task oriented, work focused, and hard working. Their influence is based on rational argument, intensity of activity and accomplishment of tasks. Productivity is actively pursued. The associated competencies comprise three main groups each with five underlying competencies:

- Managing Competitiveness: fostering competitive capabilities and with an aggressive attitude towards exceeding competitors' performance.
- Energizing Employees: motivating and encouraging individuals to be proactive and bring energy into the workplace.
- Managing Customer Focus: fostering an active involvement in the needs of the customer, resolving their problems exceeding their expectations.

Control (Hierarchy) focuses more on internal process as it addressed structure formalization. This seems to be less concern for flexibility and risk. This culture type can create high changes in the organization. According to Quinn & Rohrbaugh (1981); Cameron & Quinn (1983); Cameron (1986) defined this as procedures for carrying out routine tasks. This quadrant focuses on internal control value creation and performance.

Two main leadership roles are involved. The first is the Monitor who is a technical expert, well informed and concerned with operational details. Influence is based on information flow. Documentation and information management are actively pursued. The second role is the Coordinator who is dependable, reliable and solves problems so as to maintain the flow of work Influence is based on problem-solving, managing schedules allocating assignments. Stability and control are actively pursued. The associated competencies comprise three main groups and each with underlying competencies:

- Managing Acculturation: fostering understanding and helping individuals clarify about what is expected of them and how they can best fit into the organizational/work setting.
- Managing the Control Systems: ensuring that procedures, measurement and monitor systems are effective in keeping processes and performance under control.
- Managing Coordination: fostering relations with different department and teams within the organization. Information across organization boundaries internal and external sharing.

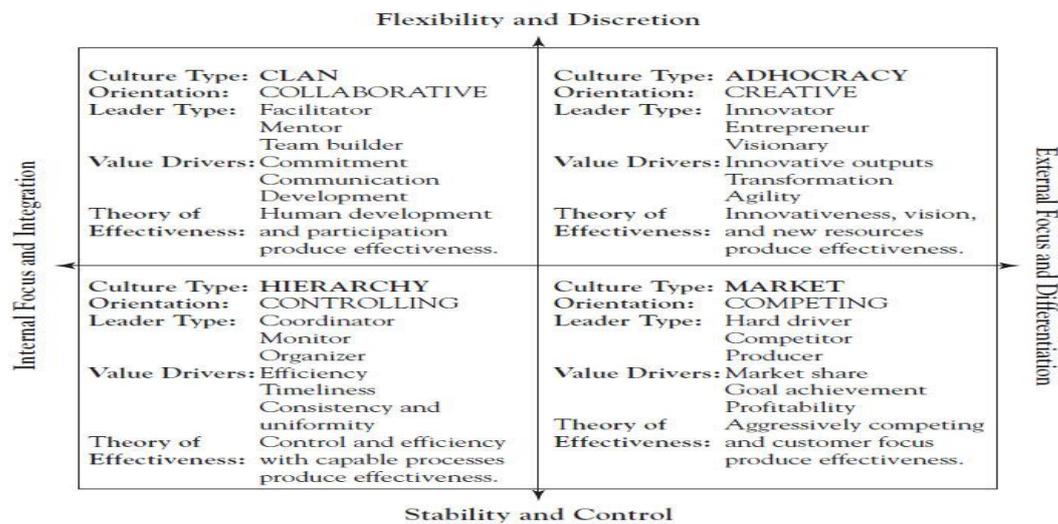


Figure 1. Competing Values Framework ‘

Conceptual Framework

The conceptual framework of this study is composed of three key constructs namely: 1) Leadership Competencies, 2) Organizational Culture as dependent variables, and 3) Whole Brain Based-Interventions (WBBI) comprised of Whole Brain Appreciative Coaching (WBAC), Appreciative Inquiry (AI), and Appreciative Leadership (AL) as Independent Variables. The dependent variables were chosen and drawn from the Competing Values Framework (CVF) by Cameron and Quinn (1983 and 1999) which were used as the basis of the SWOTAR assessment of the organizational culture and Leadership Competencies of the focal system of study.

The researcher applied the Competing Values Framework for organizational culture type as well as leadership competencies evaluation. The Brain Model of Lynch (1984) identifies and defines four distinctive functional intelligences based on the combination of functions of left, right, anterior and posterior parts of the brain. Tayko (2010 and 2012) extrapolated the use of these human information processing skills (HIPS) and called these Whole Brain Literacy (WBL) as “thinking-through processes” in planning, organizing, decision-making, communicating and related leadership and managerial skills set. The color used in the design of the framework is Tayko’s way of coding to differentiate distinctively how the brain performs in each quadrant. The following skills set include:

1. “I-Control” is positioned in the left and anterior brain quadrant and the color code is “Blue”. Its twin operating system is “I-Preserve”. I-Control is based on strategic thinking and when mapping this with Competing Value Framework on culture type is Market (Complete) and leadership competencies on managing competitiveness, employees, and customer focus.
2. “I-Explore” is positioned in the right and anterior brain quadrant and the color code is “Green”. Its twin operating system is “I-Pursue”. The “I-Explore” is based on

system thinking where culture type is Adhocracy (Create) mapping with leadership competencies on managing innovation, the future and continuous improvement.

3. "I-Pursue" is positioned in the left and posterior brain quadrant and the color code is "Yellow". Its twin operating system is "I-Explore". "I-Pursue" is based on project thinking where culture type is Clan (Collaborate) and leadership competencies on interpersonal relationships, development of others and team management.
4. "I-Preserve" is positioned in the right and posterior brain quadrant and the color coded is "Red". Its twin operating system is "I-Control". I-Preserve is based on process thinking where this culture type is Hierarchy (Control) and leadership competencies on managing acculturation, control system and coordination

As one of the OD Interventions, the Whole Brain Appreciative Coaching (WBAC) was selected to break the ice and unlock the comfort zone. It was also used as the brain mapping process for change preparation of the study group. Appreciative Inquiry (AI) was also a tool selected to help participants learn both listening and communicating effectively and efficiently. Lastly, Appreciative Leadership (AL) was used to help the study group explore the leadership perspectives and prepare them to become effective leaders.

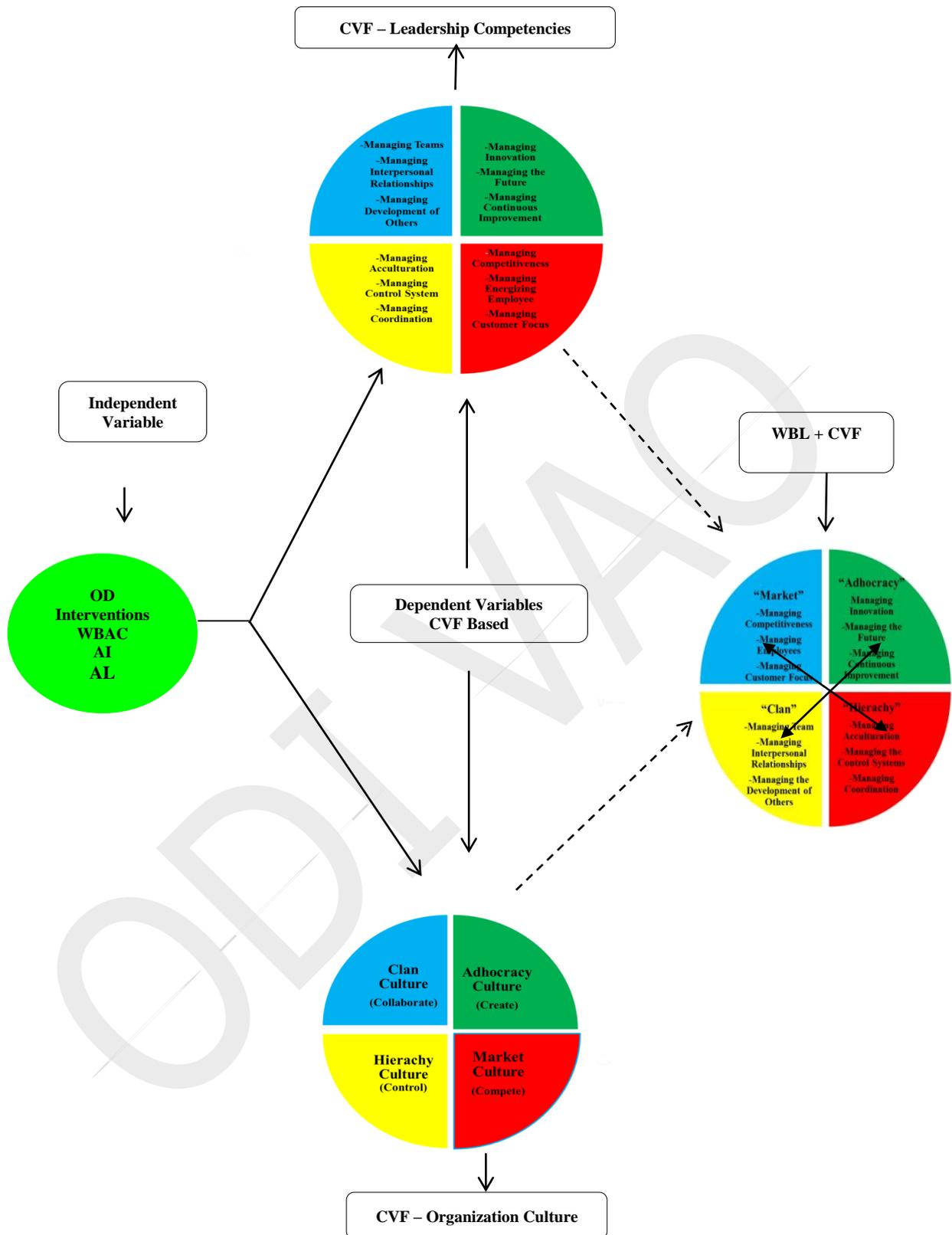


Figure 2. Conceptual Framework (CVF and WBI)

The Whole Brain based-ODI is an experiential learning process that was used for “transformative learning for change” (Tayko, 2013) which the study seeks to make a change in the leadership competencies and organizational culture.

Research Method

In this study, the study and control samples were drawn from 130 individuals of the IT& Customer Management Division. The members of the study group comprised of 35 staff from the Customer Service Team, Hospital Administration, Inventory, Business Excellence and Quality team. A further 31 individuals comprised the control group that was used as a contrast for the effects of the interventions on the study group.

A test-retest design was used to determine the effects of the interventions on individual competencies. To enable such a test, an extra data collection stage was added to the research process immediately before the intervention phase to define a base line for the effects of the interventions. Also to ensure that any changes to the competencies can be reasonably attributed to the intervention rather than other changes in the environment, the control group was not invited to take part in the interventions. However, both groups were the subject of the same measurement régime.

During the pre-intervention, questionnaires of Competing Value Framework namely Organization Culture and Leadership Competencies along with a description of the interview process were distributed to the study and control groups.

As part of the intervention, the study group attended three OD Interventions of Whole Brain Appreciative Coaching, Appreciative Inquiry and Appreciative Leadership Trainings. The same sets of questionnaires were then distributed to both the study and control group to evaluate the changes during the post ODI.

Organizational Culture Assessment Instrument (OCAI)

Cameron and Quinn developed the OCAI which is a questionnaire to capture the structure of psychological types presented in the core dimensions of an organization (Koh & Low, 2008; Cameron & Quinn, 1999). Six key dimensions underpin the four organizational types that are a fundamental part of the Competing Values Framework. To provide a quantitative assessment of organizational culture, the OCAI is scored by distributing 100 points to each of the organizational types that best describe the key dimensions of the organization of interest.

Management Skills Assessment Instrument (MSAI)

Referring to Cameron & Quinn (2006, p. 117), the Management Skills Assessment Instrument (MSAI) is a tool that provides strategies for development that change an organization towards a specific culture. The MSAI also helps identify the individual management skills and competencies that are vital for effective managerial performance and relates these skills to the Competing Values Framework. Without the alteration process becoming personalized, without individuals willing to employ new behaviors, and without

changes to managerial competencies, the organizational culture fundamentals will not change. Three categories of the most important skills represent each of the four organizational types within the competing value framework (Cameron & Quinn, 2006, p. 120). For the MSAI, each skill has five associated items that produce a reliable scale for the evaluation of the particular skill, giving, for the MSAI questionnaire a total of 60 items

OD Interventions

Whole Brain Appreciative Coaching (WBAC)

This Whole Brain Appreciative Coaching approach was developed by Udomsak Saponkij based on Whole Brain Literacy by Tayko (2010), and Appreciative Coaching by Sara L. Orem, Jacqueline Binkert and Ann L. Clancy (2007). Referring to Saponkij, coaching draws out the potentials from each person. People resists being changed by other people so the tipping point is to let them change from inside out by themselves. Therefore, the most significant aspect about coaching is not to coach others but to coach oneself. WBAC is composed of action based self-learning (ABSL) experiences. The participants are trained by doing internal group projects. The design is double loop learning.

Appreciative Coaching uses the four stages of Appreciative Inquiry to illuminate the process used in Appreciative Coaching which are:

1. Discovery: At this stage truly appreciating what gives life to the participant and helping them acknowledge an appreciative view of themselves.
2. Dream: At this stage the participants are coached to explore their aspirations and concrete desires for a successful future.
3. Design: The participants are coached to direct their attention and take action so that they can design the future they most desire.
4. Destiny: At the final stage, the participants are coached to learn to recognize and celebrate their dream and to live their lives fully and well.

Appreciative Inquiry (AI)

This approach was introduced by Suresh Srivastva & Cooperrider (1987), Whitney & Cooperrider & Laszlo (2008). Appreciative Inquiry is defined as powerful collaborative approach and to be used for both personal and organization development. It brings changes to shared learning and leadership as well as full engagement for everyone in the organization. Since AI focuses on the organizational strengths rather than on the problems, it evolves a true "Center of Excellence" which elicits solution. It is now a practical tool for positive change. The process involves the "4 D" Cycle.

Discovery: This is used to uncover meaning & purpose. Appreciative Inquiry generates from conversations. An appreciative interview is used for story telling by people about things within the organization such as value and things they want to expand and extend in the future. People identify the themes that connect with their most deeply held beliefs and values through the interviews.

Dream: This is a sharing of images of a preferred future which built on the themes that emerge through the conversations. People in the organization create both a written statement (possibility statement) and visual image which describe how the organization would look and feel at its best. These actions are a guide for creating the organization's preferred future.

Design: This is innovative way to create the preferred future. At this stage the specific action steps are determined to take individually or in groups. This action needs to be concrete, do-able and designed to drive the organization toward its preferred future.

Destiny: Once people in the organization have created a shared image of their preferred future, dialogued regarding the integration of the functions and people of the organization with that image, then they make the future happen. This stage builds hope and as well as creating learning process and adjustment.

Appreciative Leadership

The Appreciative Leadership approach by Auppakarakul, A. (2010) developed further the AI approach so the 4D Cycle of Appreciative approach is expanded to a 5 D Cycle of Appreciative Leadership, namely:

- **Delight:** to find pleasure and joy with the environment. Be and Think positively.
- **Discovery:** the ability to discover, gather and expand the strengths and successes of the members.
- **Dream:** to inspire the members for the success or the future.
- **Design:** the execution plan is designed to make the dream happen.
- **Development:** the implementation stage towards the success story.

Results

The respondents in this study were from a convenience group representing the departments within the IT and Customer Management Division of the organization. Data collection and analysis covered both the study group as well as the control group. However, only the study group was invited to participate in the interventions. The individuals within the Control Group (n=33) did not participate in any of the interventions while those from the Study Group (n=35) were all invited to attend the three interventions.

Table 1.
Demographic Profile

Demographic Variable	Study Group (n=35)		Control Group (n=31)		Overall Population	
	Quantity	%age	Quantity	%age	Quantity	%age
Gender						
Male	3	9	18	58	21	32
Female	32	91	13	42	45	68
Education						
Diploma	2	6	18	58	20	30
Bachelor	31	89	10	32	41	62
Master	2	6	3	10	5	8
Age (A) Years	32	100	36	100	34	100
Years with Company (A)	5	100	8	100	6	100

Control Group

In this study, the control group followed the scientific experimental framework (Myers & Hansen, 2012) to add precision to the process. The control group is formed from people who for the purpose of this study are seen as occupying the same organizational environment as the study group but isolated from the intervention. This enabled the control group to act as a lens through which the changes that resulted from the interventions to the study group can be viewed.

The results from the use of the OCAI measured the culture of the control group. It defined that there was no significant change in any of the scores of the four culture types pre and post the study intervention. The results supported the view of a stable study environment without significant change over the period of the study thus providing support for the view that any changes in the study group can be primarily attributed to the study interventions.

Table 2.
Control Group Organizational Culture. Paired Samples Test n=31

Culture Type	Intervention			Std Dev of Diff	't' test	Sig (2 tailed)
	Pre	Post	Difference (Mean)			
Clan	28.44	27.14	-1.29	9.48	-0.76	0.46
Adhocracy	20.18	18.44	-1.74	10.80	-0.90	0.38
Market	27.07	28.02	0.95	10.23	0.52	0.61
Hierarchy	24.61	26.40	1.79	12.45	0.80	0.43

The culture of the control group in order of priority was dominated by the Clan, Market and Hierarchy quadrants, less so by Adhocracy. Each of them occupied two of the six factors that characterized organizational culture within the competing values. This

suggested a more broadly characterized culture with some organization conflict as the two dominant quadrants have opposite values and styles of management. There is no difference pre and post the intervention in the dominant culture type for each of the common factors giving further evidence of a stable organizational environment under which the study was conducted. (Table 3)

Table 3.
Comparison of Common Factor Culture Types

Common Factors within each Culture Type	Pre Intervention		Post Intervention	
	Mean	Culture Type	Mean	Culture Type
Dominant Characteristics	29.84	Hierarchy	27.41	Hierarchy
Organizational Leadership	30.97	Market	31.45	Market
Management of Employees	45.97	Clan	39.67	Clan
Organizational Glue	32.26	Clan	32.90	Clan
Strategic Emphasis	30	Hierarchy	29.67	Hierarchy
Criteria of Success	33.39	Market	34.19	Market

Control Group Competencies

The results from the use of the MSAI to measure the control group competencies that were associated with the different cultural types are shown in Table 4. There were no significant (<0.05) changes in any of the competency scores in the pre and post interventions. The results supported the view of a stable study environment without significant change over the period of the study and provided additional support for the view that any changes in the study group can be primarily attributed to the study interventions.

Table 4.
Control Group Competency. Paired Samples Test n=31

Competency	Type	Intervention			Std Dev of Diff	't' test	Sig (2 tailed)
		Pre	Post	Difference (Mean)			
Teams		20.23	20.61	0.39	2.42	.891	.380
Interpersonal Relationships		20.16	20.32	0.16	1.90	.473	.640
Individual Development		20.33	20.71	0.39	1.84	1.173	.250
Innovation		19.23	19.77	0.55	2.76	1.108	.277
The Future		19.39	20.03	0.65	1.87	1.919	.065
Continuous Improvement		20.39	19.97	-0.42	1.79	-1.308	.201
Competitiveness		18.13	18.26	0.13	2.59	.277	.784
Motivation		19.58	20.03	0.45	1.84	1.366	.182
Customer Service		19.32	19.10	-0.23	3.02	-.416	.680
Coordination		20.10	20.55	0.45	2.38	1.057	.299
Information		19.45	19.61	0.16	2.60	.346	.732
Acculturation		18.42	18.36	-0.07	2.00	-.180	.859

All data was rounded to two decimal places except for the 'significance' of test results. The significance of the difference in the competency 'Managing the Future' was marginal at $p=0.65$.

The results show that most competencies while showing no significant changes predominantly score in the upper quartile of the scale indicated a high level of innate competence.

Study Group

The study group was comprised of 34 Supervisors and Leaders that worked within the same organizational environment as the control group. All of the Supervisors as well as Leaders took part in the three interventions that were designed to enhance the performance of the competencies that are associated with the transactional aspects of leadership.

Study Group Organizational Culture

Table 5.

Study Group OCAI (Post-Pre) Paired Samples Test (n=33)

Culture Type	Intervention			Std Dev of Diff	't' test	Sig (2 tailed)
	Pre	Post	Difference (Mean)			
Clan	36.15	36.86	.71212	14.92	.274	.786
Adhocracy	16.16	15.52	-.64545	9.51	-.390	.699
Market	24.22	23.92	-.29697	9.96	-.171	.865
Hierarchy	23.65	23.67	.02121	12.08	.010	.992

Note: Cases 17 and 24 were deleted due to incomplete data set resulting from the resignation of two people from the organization. Hence, the study sample was $n=33$.

The culture of the study group in order of priority was dominated by the Clan and then less so by Hierarchy and Market quadrants, and much less by Adhocracy. While broadly similar to the control group, the study group appeared more specialized with less organization conflict. Table 6 confirms this position and shows that the Clan cultural type was the more significant in five of the six common internal factors of the OCAI measure. The only exception is the factor 'organizational leadership' which is dominated by Hierarchy. While there was no significant change in the cultural quadrants scores that can be attributed to the interventions, the post intervention position of the factor for 'organizational leadership' moved from Hierarchy to Market orientation and the factor 'strategic emphasis' moved from Clan to a Market orientation.

Table 6.

Comparison of Common Factor Culture Types for Study Group

Common Factors within Culture Type	Pre Intervention		Post Intervention	
	Mean	Culture Type	Mean	Culture Type
Dominant Characteristics	35.71	Clan	44.00	Clan
Organizational Leadership	30.57	Hierarchy	32.57	Market
Management of Employees	54.57	Clan	51.57	Clan
Organizational Glue	37.14	Clan	44.00	Clan
Strategic Emphasis	30.14	Clan	26.42	Market
Criteria of Success	37.00	Clan	38.14	Clan

The lack of a more substantial change in culture may be explained by the short time interval between the interventions and the 'post' measurement of organizational culture. However, a more significant explanation concerned the lack of power of the relatively junior individuals that comprised the study group to make a change in the organizational culture. The rate of change is related to the individual power and the number of individuals involved. At the top of the organization, there is a large amount of influence (or organizational power) invested in a small group of people, while at the other end of the organizations there are many process workers who have little influence to make significant changes.

Table 7.

Comparison of Common Factor Culture Types for Study Group

Common Factors within Culture Type	Pre Intervention		Post Intervention	
	Mean	Culture Type	Mean	Culture Type
Dominant Characteristics	35.71	Clan	44.00	Clan
Organizational Leadership	30.57	Hierarchy	32.57	Market
Management of Employees	54.57	Clan	51.57	Clan
Organizational Glue	37.14	Clan	44.00	Clan
Strategic Emphasis	30.14	Clan	26.42	Market
Criteria of Success	37.00	Clan	38.14	Clan

Study Group Competencies

The results from the use of the MSAI to measure the study group competencies that were associated with the different cultural types are shown in Table 8. There are four competencies that show significant ($p < 0.05$) change and a further two that are marginal ($p < 0.08$) from the pre and post the study interventions. Four of the six competencies relate to the transformational aspects of culture indicating that interventions can be targeted to address specific organizational priorities.

Table 8.
Study Group Competencies

Q u a d	C o m p	Competency Type	Intervention			Stud Dev. of Diff	't' test	Sig (2 tailed)
			Pre (Mean)	Post (Mean)	Difference (Mean)			
A	1	Teams	19.74	20.79	1.06	3.41	1.81	0.079
	2	Interpersonal Relationships	19.77	20.82	1.06	2.49	2.48	0.018
	3	Individual Development	19.79	20.32	0.53	2.71	1.14	0.263
B	1	Innovation	18.09	19.27	1.18	2.70	2.54	0.016
	2	The Future	19.24	19.47	0.24	2.73	0.50	0.619
	3	Continuous Improvement	18.38	19.74	1.35	2.13	3.70	0.001
C	1	Competitiveness	16.03	16.53	0.50	3.26	0.90	0.377
	2	Motivation	18.24	19.71	1.47	3.06	2.80	0.008
	3	Customer Service	18.68	19.65	0.97	3.01	1.88	0.069
D	1	Coordination	18.29	18.53	0.24	3.20	0.429	0.671
	2	Information	17.90	18.24	0.35	2.84	0.73	0.473
	3	Acculturation	17.74	18.35	0.62	3.10	1.16	0.254

All data rounded to 2 decimal places except 'significance' test results.

Case 24 deleted due to incomplete data set hence n=34.

Quad A= Clan Culture, Quad B= Adhocracy Culture, Quad C=Market Culture

Quad D=Hierarchy Culture.

Highlighted show competencies with significant change, unmarked no significant change.

The competencies for Teams, Interpersonal Relationships, Innovation, Continuous Improvement, Motivation and Customer Service showed significant change. However, competencies for Individual Development, The Future, Competitiveness, Coordination, Information and Acculturation showed no significant change.

While all of the competencies score in the upper quartile of the scale indicated a high level of innate competence, only four competencies (highlight in Bold) showed significance.

Change at or less than $p=0.05$ (see Table 8. competencies A2 & B1 $p<0.05$ and C2 & B3 $p<0.01$. Two competencies A1 & C3 $p<0.08$, which were marginal probably due to the low numbers of individuals in the sample. All of these six competencies obtained a post intervention improvement in capability of better than 4% with a mean of 4.73% and considered a significant change. The remaining six competencies all showed a positive improvement in the range 0.9-3% with a mean of 1.65% however; no statistical significance had been found.

While these percentages may seem small, an improvement of some 5%, if viewed as an improvement to the workforce, an additional capability of 3 members of staff is created for the 30 people who participated in the interventions. All done without incurring any additional recruitment or salary costs to the organization.

A noticeable absence of significant change to the competencies in quadrant D is evident, this is probably due to the concentration of the interventions on transformational aspects of leadership rather than on the internal routine and process that concerned the day-to-day activities.

Transformational and Transactional Leadership Competencies

In Table 9, rows A and B represent the Transformational leadership competencies. Four out of the six competencies have been significantly improved by the OD interventions. Of the two remaining competencies A3 (Individual Development) and B2 (Managing the future) the lack of significance of the improvement could be due to lack of support from the particular interventions implemented as part of the study. Furthermore, the lack of priority given to the two competencies by the managers in the organization (Table 9) will have lowered the perceived learning priorities of the supervisors in the study group

While rows C and D in Table 9 represent the Transactional leadership competencies. This group of competencies has a focus towards the present rather than the future. As such, transactional competencies are concerned with the transactional performance of important day to day activities of the organization. While all six competencies show some improvements, only two of the six competencies which are Motivation and Customer Service show significant improvements. Both competencies are high priority items for the directors and managers but are considered as low priority by the supervisors. This shows a weakness in consistent problem identification or the lack of communication by the managers.

Competency Rankings

In this section the differences in priority ranking of the various competencies by the Directors, Managers and the Study Group are considered.

Table 9.
Ranking of the Top Six Competencies in Quadrant Order

		Priority Ranking		
		By Directors	By Managers	By Staff in Study Group
A1	Managing Teams		1	1
A2	Managing Interpersonal Relationships	2		3
A3	Managing Individual Development	5		5
B1	Managing Innovation	6		6
B2	Managing the Future	1		
B3	Managing Continuous Improvement		6	2
C1	Managing Competitiveness	4		
C2	Managing Motivation		3	
C3	Managing Customer Service	3	2	

D1	Managing Coordination	5	4
D2	Managing Information	4	
D3	Managing Acculturation		

*** The Study group and Managers ranking are from direct measurement using questionnaires

The Directors ranking are from an indirect measurements base on public publications.

All rankings are post intervention.

The members of the Staff in the Study Group are more concerned with change in terms of 'continuous improvement' than the Managers and Directors are. These changes are mainly associated with the current organisation and processes and are inconsistent with the SWOT/SOAR findings of the group being 'change resistant'. Furthermore, the competency 'continuous improvement' shows a significant ($p < 0.05$) positive improvement.

The Study Group staff appear less concerned with the external world (quadrants B and C) where only two competencies scored in the top six and excludes 'Customer Service'. On the other hand, for the Managers and the Directors, 'customer services' is seen as top important for both groups. The Study Group perceived 'customer service' as an external factor which is beyond their control

Furthermore, five out of the six more important competencies were aligned with the transformational competencies of quadrants A & B. Only four of the six competencies obtained a significant ($p < 0.08$) change associated with the transformational quadrants.

While Moderate priority was given by the Managers and the Study Group to the competencies in quadrant D, none of the improvements were significant. The competency 'Acculturation' is not seen as important by any of the respondents.

While the Directors and the study group staff show support, the Manager show little support for movement towards a more transformational style of leadership and for individual development.

Structured Interview Analysis

Table 10 shows the data gathered from personal interviews with the members of the Study Group using the structured interview design.

Table 10.
Structured Interview Results Summary

1	<p>In what way did the interventions change or benefit your performance in your work</p> <p>42% Thinking from different angles 25% Listening 9% Organizational fit 7% Better understanding of myself 7% Interpersonal understanding 5% Motivation 5% Change</p>																				
2	<p>Which of the three interventions was most useful to you What aspects were less relevant what aspects were not covered</p> <p>WBAC = 36%, AI=36% AL 28% Aspects not covered: no commentary</p>																				
3	<p>Pick six from the twelve competencies that are most important to you in your work and rank order them</p> <p>A1 B3 A2 D1 A3 B1</p>																				
4	<p>Do you think staff turn-over is a problem in maintaining organizational performance In what way does turn-over effect performance</p> <p>63% Reduces individual efficiency while training a new person as it is time consuming 27% Reduces performance of the team as it is required one to work harder 7% Loads other people with extra work 3% Reduces quality</p>																				
5	<p>Why do you think people leave the organization?</p> <p>32% Benefits (Pay, Holidays etc.) 30% Excessive Workload 20% Internal work pressures 14% Organizational Fit 2% Customer pressure 2% Risk due to out-sourcing</p>																				
6	<p>Does your manager talk to you about current problems and the future direction of the organization 100% yes</p>																				
7	<p>Are you encouraged to suggest improvements to the current ways of doing things 100% yes</p>																				
8	<p>In the last year approximately how many improvement ideas did you generate? How many of these ideas were accepted and how many implemented during the last year?</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;"></th> <th style="width: 20%;">individual Proposals</th> <th style="width: 20%;">Accepted</th> <th style="width: 20%;">Implemented</th> </tr> </thead> <tbody> <tr> <td>None</td> <td style="text-align: center;">44%</td> <td style="text-align: center;">None</td> <td style="text-align: center;">None</td> </tr> <tr> <td><5</td> <td style="text-align: center;">25%</td> <td style="text-align: center;">less than half</td> <td style="text-align: center;">23%</td> </tr> <tr> <td>5 to 10</td> <td style="text-align: center;">9%</td> <td style="text-align: center;">up to 80%</td> <td style="text-align: center;">35%</td> </tr> <tr> <td>>10</td> <td style="text-align: center;">22%</td> <td style="text-align: center;">over 80%</td> <td style="text-align: center;">41%</td> </tr> </tbody> </table> <p>(more than half of ideas proposed were accepted and over 30% implemented)</p>		individual Proposals	Accepted	Implemented	None	44%	None	None	<5	25%	less than half	23%	5 to 10	9%	up to 80%	35%	>10	22%	over 80%	41%
	individual Proposals	Accepted	Implemented																		
None	44%	None	None																		
<5	25%	less than half	23%																		
5 to 10	9%	up to 80%	35%																		
>10	22%	over 80%	41%																		
9	<p>Do you think a greater use of technology would improve the performance of the organization</p> <p>58% Said yes 18% Said- yes would improve work processes 12% Said- yes would minimize manual work 12% Said- yes would reduce errors</p>																				

Data show that the two main benefits were problem-solving (42%) and interpersonal listening (25%). Five other aspects all scored less than 10%. Problem-solving involved approaching the problem from different angles and encouraging transformational competencies when it provides new solutions to old problems.

The following were seen as useful: (1) Whole Brain Appreciative Coaching (36%), (2) Appreciative Inquiry (36%), and Appreciative Leadership (28%).

Five of the top six Competencies obtained a high degree of support for the development of the transformational leadership style.

Staff Turn-over was viewed as a significant problem by 82% of the Study Group, This reduces the efficiency of the individuals. Though training activity is viewed as a company investment for internal process improvement, there is less support on external training for individual development. Fifty percent (50%) of the staff in the study group considered workload and work pressures as contributing factors of high turnover. The high turnover further contributes to the problem of succession planning. Thus, there is always a need to recruit from outside of the organization and train.

Communication is good as 100% of the supervisors in the study group confirmed that their managers talked to them about current problems and the future of the organization. However, the significant focus of the study group towards a Clan culture may indicate weakness in cross-functional communication.

There is little evidence that the study group is resistant to change. They indicated that managers are encouraging improvements in the way things are being done in the workplace. Over half of the group proposed changes to the operational activities which correspond to the 'managing continuous improvement' competency.

All respondents agreed that additional use of technology would lead to improved efficiency in reducing errors and rework problem issues.

The study group can be considered as a guide for the entire organization as it reflects the current and future management competencies that could ensure Phoenix' organizational success. The Directors support the move towards a more Transformational Leadership. The current organization is by description process-oriented. If the future changes particularly in the area of technology would reduce the process needs then the move to the transformation will be sustained. If not, some of the transactional competences will need to be supported particularly in the Transactional quadrants C & D (Table 8).

Support on the Leadership competencies particularly where they have an impact on staff retention e.g. individual development required. The move towards better leadership competencies requires advance in technology particularly in reducing the manual entry and repetitive processing of data. This will provide time and opportunity to engage and develop the more creative competencies of the staff.

The current Organization Culture is consistent with the description of the organisation as being 'process-based, preoccupied with maintaining standards through the compliance with externally regulated systems and rules'. (None of the common factors relate to adhocracy in both the study group and the control group of priority for hierarchy while the competency score in the upper quartile).

The OD Interventions had an impact on particular competencies such as team, interpersonal relationship, innovation, continuous improvement, motivation and customer service. A group development intervention generated improvements in salient individual competencies to meet the needs of current and future success of the organization.

Improvement in the alignment of an individual's perception of organisational culture with the relevant competencies reduced the number of individuals that leave the

organisation. This has to be viewed over a longer term beyond the study time frame. However, only 16 % of the reasons for leaving the organisation had to do with the fit to the current cultural expectations.

Conclusions

Using the quantitative and qualitative research methods described earlier, the effects of the three interventions show that there was a statistically significant change in four out of the six competencies that support Transformational Leadership. However, there was no significant change in the culture of either the study group or the control group. This indicates that while it is possible to change the competencies of individuals within an organization to change the culture of the group or the organization requires additional support from management at all levels to demonstrate the new expectations and sense-making.

Leadership Competencies

- Based on the Individual and Group Levels findings, the results show that some of individuals in the study group who participated in the interventions enhanced their transformational leadership competencies rather than transactional leadership competencies. At the group level, the competencies of individual development, interpersonal relationships, and innovation have shown significant improvements.
- At the organizational level, the study has shown that the study group moved towards transformational leadership competencies due to the interventions. The Directors' are inclined towards transformation rather than transaction leadership which is not well-addressed at the organization level.
- Competency-Based Performance. The study has shown that the study group has improved towards six out of twelve transformational leadership competencies namely: managing team, interpersonal relationships, innovation, continuous improvement, motivation, and customer service.

Organization Culture

For both the study group and the control group there was no significant change in any of the Culture factor scores pre and post the study interventions. However, the study group shows slight changes in some factor scores such as: "Organizational Leadership" shifts from "Hierarchy to Market"; and "Strategic Emphasis" shifts from "Clan to Market". The results support the view that any changes can be primarily attributed to the interventions. There is also an interesting concern on change relating to organizational power (large influence) that can make significant changes in the organization comparing to individual power (less influence).

From a management view, the effects of improving competency without the necessary cultural support caused a misalignment with a corresponding need for the individuals to generate coping behavior which in turn diminished organizational performance. Thus, while it is possible for people learn new skills and be adaptable, there is less opportunity for the supervisors and leaders alone to lead to the new environment for

Phoenix Thailand and so drive the company direction. The process of change needs to be 'top down' rather than 'bottom up'.

The intervention tools of Whole Brain Appreciating Coach (WBAC), Appreciative Inquiry (AI) as well as Appreciative Leadership (AL) enhanced some of the Leadership Competencies and resulted to a slight change in some factors of culture. However to sustain and improve the organizational performance further support is required through cultural development at the organizational level.

References

- Auppakarakul, A. (2012). *The development Of Appreciative Leadership Concept: AI-Summit Thailand Book: Leveraging Positive Change for Organization Development and Transformation in Thailand*, 70-77.
- Belasen, A. T. F., N. M. (2012). Using the competing values framework to evaluate the interactive effects of gender and personality traits on leadership roles. *The International Journal of Leadership Studies*, 7(2), 192-215.
- Bhargava, S. (2003). *Transformational leadership: Value-based management for Indian organisations*. India: Sage Publications
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row
- Cameron, K. S. (1986). Effectiveness as paradox. *Management Science*, 32, 87-112.
- Cameron, K. S. Q., R. E. (1999). *Diagnosing and changing organizational culture. Based on the Competing Values Framework*. Reading Massachusetts: Addison-Wesley Publishing Company.
- Cameron K, S., & Quinn, R. (2006). *Diagnosing and changing organizational culture: Based on the competing values framework*. San Francisco: Jossey-Bass.
- Clapp R. G. (1993). Stability of cognitive style in adults and some implications. A longitudinal study of the Kirton Adaption-Innovation inventory. *Psychological Reports* 73. 1235-1245.
- Cooperrider, D. L., & Srivastva, S. (1987). Appreciative inquiry in organizational life. In: W. Pasmore & R. Woodman (Eds). *Research in Organization Change and Development*. 1, 129-169
- Cooperrider, D.L., Whitney, D. (2005). *A positive revolution in change: Appreciative Inquiry*. 87.
- Cooperrider, D. L., Whitney D, Stavros, J. & Fry, R. (2008). *Appreciative inquiry handbook*. San Francisco: Berrett-Koehler Publishers, Inc.

- Koh, T. Y. & Low, S. P. (2008). Organisational Culture and TQM implementation in construction firms in Singapore. *Journal of Construction Management and Economics*, 26, 237 – 248.
- Lynch, D. (1987). *The brain map workbook: A guide to how your brain creates your personal and professional worlds*. Fort Collins, Colorado: Brain Technologies Corporation.
- Myers, A. & Hansen, C. (2012). *Experimental psychology*, (7th ed.). UK: Wadsworth Learning
- Quinn, R. E., & Rohrbaugh, J. (1981). A competing values approach to organizational effectiveness. *Public Productivity Review*, 5, 122–140.
- Quinn, R. E., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. *Management Science*. 29, 363-377.
- Quinn, R. E. (1988). *Beyond rational management: Mastering the paradoxes and competing demands of high performance*. San Francisco: Jossey-Bass.
- Rouse, W. B. (2006). *Enterprise transformation: Understanding and enabling fundamental change*. New York: Wiley.
- Sara L., Orem, J. B., & Ann L. Clancy. (2007). *Appreciative coaching: A positive process for change*. San Francisco: Jossey-Bass/Wiley c2007.
- Soponkij, U. (2010). *The impact of ODI on leadership styles, shared values, and skills in Relation to employee satisfaction elements and employee engagement: a study of midsize company in Thailand*. Bangkok: Assumption University
- Stravos, J. M., Witney D., & Kelly, L.D. (2003). Strategic inquiry: Appreciative intent: Inspiration to SOAR: A new framework for Strategic Planning. *AI Practitioner*, November.
- Tayko, P. M., & Talmo M. L. (2010). *Whole brain literacy for whole brain learning*. Valenzuela City: Book choice Publishing.
- Tayko, P. M., (2013). The breakthrough: Quantum power springs for transformative learning and change (QPS4TLC). *ABAC ODI Vision. Action. Outcome. Journal*. Maiden Issue