The Impact of Organization Development Intervention (ODI) on Employee
Engagement through the Improvement of Job Resources:
A Case Study in a Private Floor Tile Manufacturing Company in Thailand

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By	:	Pirata Phakdeesattayaphong
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....

Dean of Graduate School of Business, Kitti Phothikitti, Ph.D.

DISSERTATION EXAMINATION COMMITTEE

....Chairman

Program Director of OD, Perla Rizalina M. Tayko, Ph.D.

.... Dissertation Advisor

Sming Chungviwatanant, Ph.D.

.... External Member

Somchai Tantasanee, Ph.D.

.... Member

Vorapot Ruckthum, Ph.D.

.... Member

Maria Socorro Cristina L. Fernando, Ph.D.

Abstract

Each organization is different, what makes one better than the others? Products, Technologies or even strategies can be copied over time, one aspect that is very hard to copy and also a key to success is the people; it is up to the company to see how they can bring the best out of their people so, employee engagement is the answer; many studies have shown that companies, which have an engaged workforce are outperforming those that do not have one.

The purpose of this research was to study the impact of Organization Development Interventions (ODI) on employee engagement through the improvement of job resources (supervisor support, job autonomy, performance feedback and co-worker support). The relationship between the job resources and employee engagement was the basis for conceptual framework of this study. The interventions focused on developing job resources (supervisor support, job autonomy, performance feedback and co-worker support) which will lead to employee engagement. Action research was used as the research methodology with a non-randomized control and experimental groups; the research used quantitative and qualitative data analysis to measure the pre and post OD interventions.

The researcher conducted six interventions over six months (May-November 2013) at a focal company, company X, which is a medium-sized floor tile manufacturing company. The interventions were conducted with 27 participants from various departments (Experimental group). The researcher also set up a control group of 26 participants in order to compare the impact of interventions. The ODI process was designed based on Cummings & Worley's "Effective Change Management" and "Whole Brain Literacy" models.

The research findings indicated that ODI had a significant impact on job resources and employee engagement. There was supportive evidence from both quantitative and

qualitative data analysis: after the ODI, all the mean for job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement significantly increased in the experimental group; while in the control group only the mean for job autonomy significantly increased and the others had similar scores or less than in the pre-ODI stage.

In summary, there were statistically significant improvements between pre-ODI and post-ODI for job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement in the experimental group. In addition, the statistical findings supported that all variables of job resources (supervisor support, job autonomy, performance feedback and co-worker support) had a statistically significant relationship with employee engagement.

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Chapter 1

Potential Challenges for Change

1.1   Introduction

Nowadays, change is everywhere. We are now living in an exponential era, change happens very fast and at an accelerated rate, which we never expected. Everything we once knew and depended on is changing; new changes, new challenges, more complex situations will definitely occur sooner or later.

For businesses to survive in this fast moving competitive world, it needs to be able to respond to the changes in the economy, customers' behaviour and a globalized world. The quicker the company can adjust to a changing economic environment, the more competitive it can stay. To gain a competitive advantage, it not only needs to focus on new technology or good strategies but the company must also focus on human assets; without their support and commitment, business functions will not be ready.

Employees are the keys for success in an organizational, they are the driving engine of the organization; thus the use of effective employee engagement strategies can lead to higher employee involvement and commitment. Jack Welch, a former General Electric CEO, ranks employee engagement as the first indicator of the organization's well-being (cited in Vance, 2006). Employee engagement is basically "employees' ability and willingness to give their best work performance to help the company improve its overall business performance" (Cook, 2008, p. 3). In other words, engaged employees possess"3H"; which is:

1) Hand – engaged employees insert their full effort and energies into their work

2) Head – engaged employees focus on their work and have the intention to complete their work

3) Heart – engaged employees are attached to their organizations and want to help the organizations succeed.

The review from Kular et al (2008) indicated that there are more "disengaged employees" than "engaged employees". Gallup's study from 120 countries around the world also indicated that only 11% of employees are found to be "engaged employees" while 62% were not "engaged employees" and 27% were "actively disengaged" (Gallup, 2010). Blessing White 2011 employee engagement Global Survey showed 31% of employees are engaged (BlessingWhite Research, 2011). Disengaged employees can cost companies' reputation and the bottom line. From Gallup's study in 2007, disengaged workers have cost the US economy around 334-431 Billion USD due to low productivity (Gallup, 2007). In 2005, Gallup conducted a survey on work life in 1600 Thai citizens representatives; as the result showed that only 12% of Thai employee population were "engaged" while 82% were not engaged. Similarly in China, Japan, Australia and Singapore, the studies showed that less than 18% were engaged (Gallup, 2005).

Engaged employees are joyful, emotionally positive and have better health. Also, they can create personal resources and job resources by themselves and transfer individual engagement to others to create team engagement (Bakker & Demerouti, 2008). Low engagement can come from high job demands and lack of job resources which hinder employees to perform effectively, provided job resources can help them achieve their personal and organizational goal (Chung & Angeline, 2010).

There are many studies which support engagement impact on customer satisfaction, employee intention, productivity, creativity leading to the bottom line (Bates, 2004; Corporate Leadership Council, 2004; Gibbons, 2006; Harter, Schmidt & Hayes, 2002; Schaufeli, Salanova, González-Romá & Bakker, 2002). As a result, employee engagement can be one of the strategic initiatives for a company to sustain organizational success.

1.1.1 Global, Regional and Thailand Economic Context

Economies in the last few years have been volatile because of a global recession from natural disasters and also the Euro crisis. Many economists believe that the European debt crisis can be resolved only with a strong political response from the European Union. Emerging Economies will be driving global economic growth while facing inflation issues; another big risk is the bubble crisis of emerging countries as their capital markets have increased significantly; the IMF had forecast that growth would remain weak, especially in Europe. In 2012, global growth projects dropped to 3.5% from 4% in 2011 and reached 4% in 2013 (IMF, 2012).

The global recession during 2008-2009 also impacted South East Asian economies, as South East Asia has been a manufacturing base for global companies i.e. for electronics, hard drives and automotive parts due to its low-cost labour. The association of Southeast Asian Nations (Asean) was established in 1967, the purpose was to increase economic growth, increase social progress, develop culture, promote collaboration, peace and mutual assistance (ASEAN, 2012). Today, there are 10 members which are Indonesia, Thailand, Philippines, Malaysia, Singapore, Vietnam, Brunei, Laos PDR, Cambodia and Myanmar. The combined economies of ASEAN countries would sum up to around the tenth largest economies in the world. The outlook for ASEAN between 2013-2017 is that economic growth rate will return to the level of the pre-crisis with an average of 5.5% (OECD, 2012a). Even though China and India's average growth is predicted to decrease from the pre-crisis period, ASEAN will show strong economic growth as it shifts to focus on domestic demand rather than export (OECD, 2012a). From Figure 1, there is still a huge gap between the six top countries (Singapore, Brunei, Malaysia, Thailand, Indonesia and Philippines) and Cambodia, Laos, Myanmar and Vietnam (CLMV). The gap does not mean only income level; it also covers infrastructure, trade, tourism, communication and human resources (OECD, 2012b).
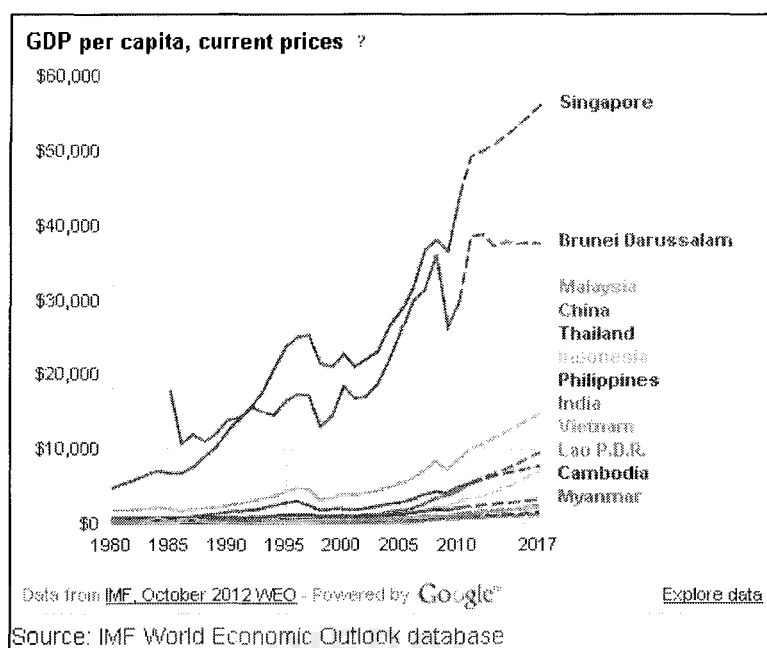
Figure 1. World Economic Outlook. Source: http://www.guardian.co.uk/global-development/datablog/2012/nov/18/oecd-south-east-asia-economic-outlook

The ASEAN Economic Community (AEC) is the next big challenge, yet to arrive for ASEAN, the purpose of AEC is to transform ASEAN into a production base and a single market by 2015 which will increase the competitiveness and scale of economy as a whole while enabling free flow of services, goods, investment, skilled labour and capital (Asean Economic Community, 2012). This concept will change the way we do business. Many companies have been studied and they have prepared for this change.

For Thailand, the Flood disaster in 2011 has cost around 3% of GDP, from the huge losses it heavily impacted the manufacturing sector, the country's GDP growth dropped from 7.8% in 2010 to barely 0.1% in 2011(IMF, 2012a). However, a positive sign started in Q4 2012; so, Thailand's Ministry of Finance forecast an economic growth of 5.5% in 2012 and 5.2% in 2013 while export rate was expected to double in 2013 (10.5% compared to 4.5% in 2012) (MarketWatch, 2012).

The global demand for flooring and carpets has a prosperous future, it expects to grow 5% annually through 2014 where North America has the highest demand (ReportLinker,

2011). This is considered good news to the focal company, company X, as it matches its vision to expand overseas. AEC has pros and cons for Thailand; the positive point is that Thailand is in the middle for logistics across the region, so this could have a positive impact on the transportation sector. In addition, the readiness of infrastructure and financial system in Thailand can immediately support the free flow of investment. But for the negative side, today Thailand is selected to be a production base for many global companies, AEC might make the investors to look for the lower costs and move the production base to low-cost countries such as CLMV. The domestic market could also be impacted by lower cost of goods from other countries in ASEAN. Another key issue will be skills shortage as talented resources could move to better paid countries such as Singapore or Brunei. At the same time, foreign labour could also move out from Thailand to go back to their home country to better paid countries as well. There are opportunities and threats from AEC, both the government and private sectors must understand and prepare for all the above impacts to be able to stay in business. Human resources is one of the key success factors to survive this change. A company must build a workforce that dedicates itself to work hard and commit to the company's success or in other words, has "Engaged Employees".

1.2 Organizational Context of the study

This section describes the focal company of the study including the company's profile, organization structure, company's vision and mission and the organization's analysis.

1.2.1 Company Profile

The focal company for this study is a local manufacturing company; due to the confidentiality agreement, the researcher names it as "Company X". Company X is a local floor tile manufacturing company in Thailand, which is a privately owned company and has been established in Thailand for more than 40 years. It produces, distributes and provides services of PVC vinyl flooring. Company X is the first manufacturer of vinyl floor tiles in

Thailand. From the market share point of view, Company X is always the leader in this sector. Its products include various designs of vinyl floor tiles, floor sheets, glue and installation accessories. It also provides installation and repair services. Today, Company X operates in two factories with a production capacity of five million square meters per year.

With more than 40 years in the industry, Company X is widely trusted and accepted among distributors, architects, interior, designers, contractors and customers for their high quality. Company X operates in B2B and B2C. B2B is for office buildings, malls, hospitals, schools and government projects while B2C focuses on end-consumers such as home building or home decoration; the customer segment is divided into three groups which are:

1) Dealers – contribute to 82% of sales, which is the majority sales revenue; dealers must be formally appointed by the company; at present, there are around 100 dealers across Thailand.

2) Direct sales – contribute to 13% of sales, this is from end-consumers or projects; end-consumer can walk-in to buy products and services from shopping malls, the company also bids for projects such as shopping malls, hospitals and government projects too.

3) Overseas customers – contribute to 5% of sales, company X exports overseas to countries such as Malaysia, Hong Kong, Singapore, New Zealand, Bangladesh; it mainly focuses on the ASEAN region.

1.2.2   Vision and Mission

Vision

"To be a world class quality floor tile manufacturing company"

Mission

- Manufacture and Develop Vinyl Floor Tiles with High quality continuously

- Respond to customers' needs by providing high quality products and services with on time delivery

- Build the brand image by increasing long-term returns to employees, management and shareholders

- Become an expert in the vinyl floor tile industry. Provide advice and share knowledge to enhance employees' skills to be able to response to fast changing situations

- Be a market leader with high quality products and dealer networks in Thailand and in overseas markets.

1.2.3 Organization Structure

Company X has around 300 employees and operates in two locations; the headquarters consists of an office and factory while another location has only the factory; there are 110 employees working in the office, 90 employees in the factory and 100 employees in another factory location. The organization structure is a hierarchical type which is functional-oriented; the hierarchy level consists of the managing director -> manager -> assistant manager or supervisor -> assistant supervisor -> staff. The top management team consists of six people (managing director and manager Level). The organization structure of the company is shown in Figure 2.

The managing director is responsible for the day to day operations, while the board of directors provide directions, investment decisions and approval of employee welfare and benefits
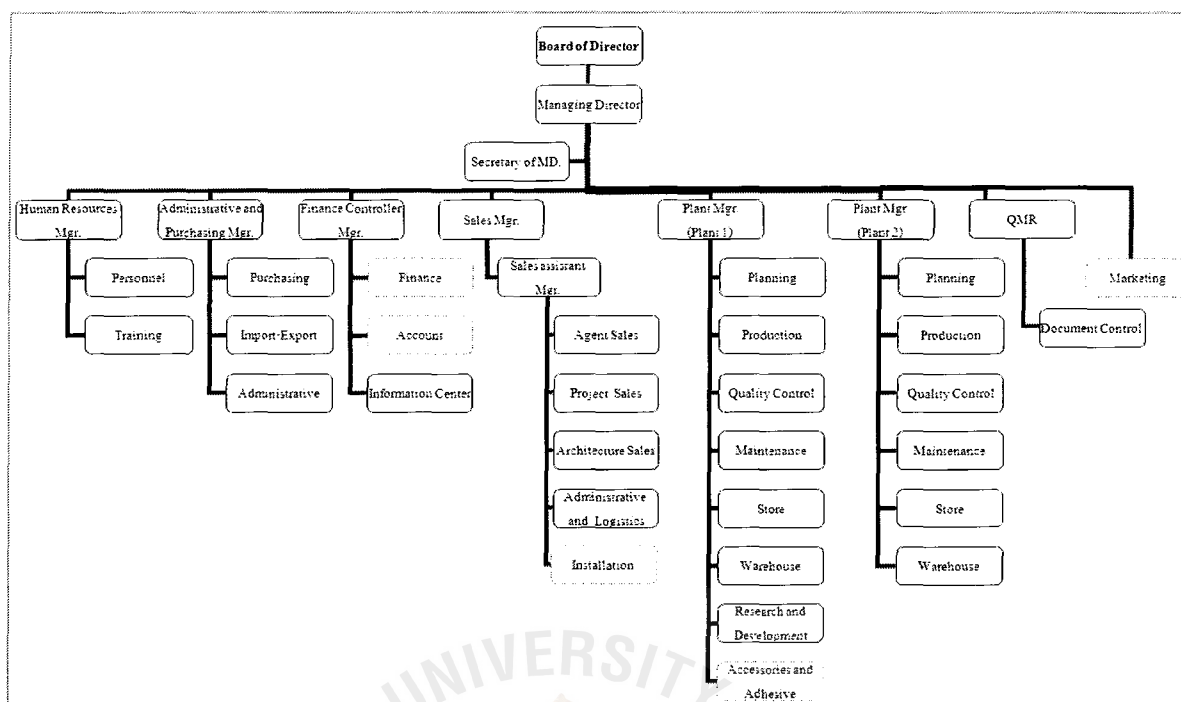
Figure 2. Company X Organization Structure

1.3 Company Situation Analysis

1.3.1 SWOT Analysis

The researcher verified and updated the existing SWOT analysis from the year 2011 with the top management of the company consisting of managers from the finance, HR and operation departments. The process is to ensure that the existing SWOT analysis is still valid; there are some revisions to align with current situations and change in economies; below is the revised SWOT analysis of the company:

Strengths:

1) A well-established company, the first manufacturer of Vinyl Floor tiles in Thailand

2) A well-known product and brand globally

3) High Quality products with international standards

4) Excellent customer services

5) Strong dealer and customer base

6) Always the leader in the market since establishment

7) The owner of the company is a respectful person from a family in Thailand

Weakness:

1) Big Skill gaps between the managers and supervisors' levels

2) Most employees lack both soft skills and soft skill training such as analytical thinking and communication

3) Lack of leadership skills among managers and supervisors as most of them were promoted from years with the company at both the office and plants

4) Staff become complacent and too relaxed

5) Slow innovation for both products and processes, low staff participation in the innovation process

Opportunities:

1) More demands from AEC countries (no tax)

2) New technology i.e. Wood-like surface to infiltrate into laminated segment

3) New government (new election), new investment

4) Change in customer preference to "One stop" shop; expand business through joint-venture or trading business in order to respond to customer demands and market trends.

Threat:

1) Penetration from low priced China products

2) Unstable economic situation

3) Cut-down in government spending budget

4) Talented workforce are expected to move out after AEC commissioned.

1.3.2   Financial Analysis

Revenues come from product and service, products contribute to around 80-85%. The services come from installation and repair fees. Figure three shows a big drop in revenue from 2009. In 2009, the overall construction industry has been slow, new projects and

spending in construction have been limited due to global financial crisis "Subprime". Not just company X, it impacts the whole construction industry, the construction industry of Thailand had decreased by 2.8% measured by construction area (Bharat Book Bureau, 2010). Company X's revenue is mainly based on the growth of the construction sector in Thailand; a robust economy means more construction and therefore higher revenues for the company.

The production planning is based on sales orders; at the moment, the company operates at 60% of its production capacity; which means that there is capacity to generate more revenues.
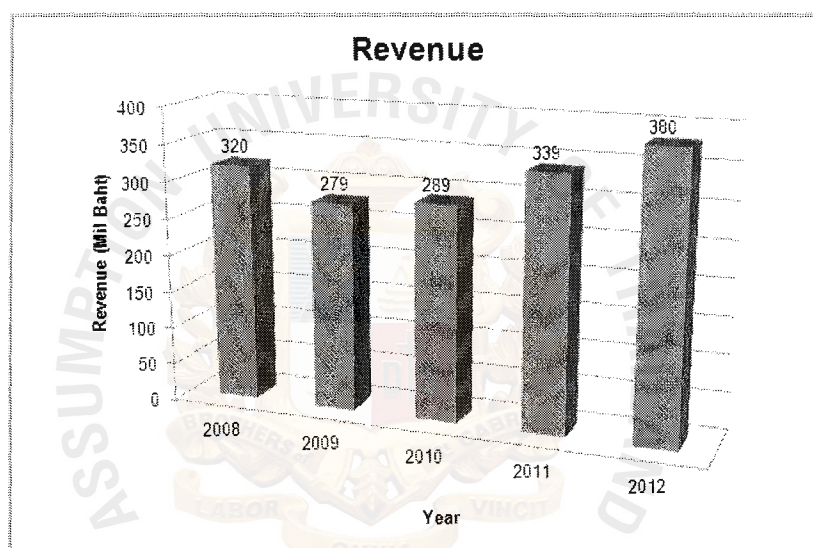
Figure 3. Company X Revenue History

1.3.3 Organizational Assessment

The researcher used the 7-S framework developed by McKinsey to assess the organization situation. 7-S focuses on seven key components that effect organization effectiveness (Waterman, Peters & Phillips, 1980). The researcher conducted a one-to-one interview with four managers (Operation, Sales, HR and Finance); the purpose was to understand the alignment both the hard and soft aspects of the company. The model claims that an organization is not only a structure, but it has seven elements as shown in Figure 4. Effective organizations have an alignment of these seven components. Missing or changing

one component, can impact the others; according to Waterman, Peters, & Phillips (1980), a framework suggests the ideas that there are multiple factors that influence an organization's ability to change and the framework has no starting point; each of the seven factors can be the driving force in changing a particular organization at a particular time.
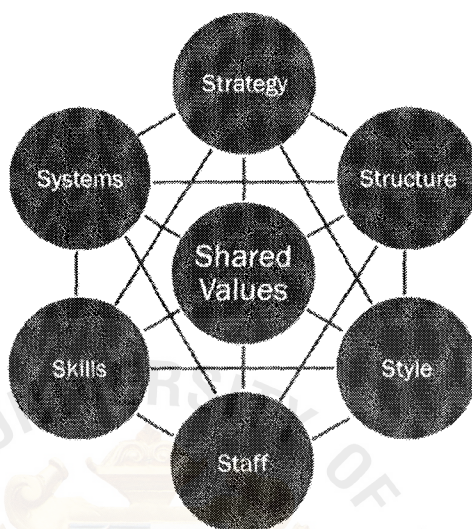
Figure 4. McKinsey 7-S model; reprinted from "McKinsey's 7-S Model: A strategic assessment and alignment model" from http://whittblog.wordpress.com/2011/04/24/mckinsey-7s-model-a-strategic-assessment-andalignment-model/

Strategy

- Corporate Strategy is not well communicated (only the top management knows)
- Penetrate new channels (Projects and Architects)
- Strategies for customers focus only on good service and quality, there is no focus on new products
- Expand to overseas markets and be competitive in AEC by offering good quality
- There is no deployment of strategies, only discussions at the corporate strategy level

Structure

- Roles and responsibilities are clear for each department

- Teamwork is good due to long seniority in the company

- Decision making is divided among each department head

- Some unclear responsibilities in inter-departments

Systems

- Use Time attendance system to control employees

- KPI was set in each department and reviewed annually

- Set up an Internal Audit committee to randomly check for compliance

Shared Values

- Family culture (most people stay with companies for more than 20 years)

- Respect each other, seniority and loyalty to the company

- Working environment and policies are very flexible

- Difficult to change, get used to easy working atmosphere, no punishment

Style

- Each department takes accountability of its own, management will not interfere

- Management style is flexible, participative style

- Management helps to solve problems by brainstorming with related people

- Direction comes from the management

Staff

- Staff have technical skills, mostly from on the job training and orientation training

- Lack of soft skill training especially management/leadership skill at the supervisory level as they are promoted from the seniority of the company

- HR is responsible for training plans with minimal recommendations from other departments

- Not enough training and low response rate due to work schedule pressure

- Staff are not very active or give extra effort, it is a day to day routine job

- Accountability is the key problem, staff just do day to day routine jobs without planning or caring

Skills

- Lack of management skills (most people get promotion due to years of working with a company so they have only technical skills and experience)

- Skills gap – English language, computer, management, soft skill

From the assessment, there are key findings as below:

1. The hard elements (Strategy, System, and Structure) are well constructed but the soft elements (Shared Values, Skills, Style, and Staff) are not aligned and supported as hard elements.

2. Shared values are not aligned with Strategy, current shared values are not aggressive enough to penetrate new markets or innovate for new products

3. Structure and System are well defined across organizations but strategy is not communicated widely in the organization

4. Staff and skills are big gaps especially between supervisors and managers as most supervisors are promoted from experience (years with the company) so they have good technical skills but lack management and leadership skills which are coaching, managing and motivating people, delegating and conflict management leading to low engagement from the staff level

Overall employees are satisfied with the company, they are working like one big family but that leads to being too relaxed. Structure and systems are in place and are well implemented in the organization. The soft elements need to be improved to be able to execute the strategy. Management really want employees to be more accountable, more active and give extra effort to help boost the company's performance. Job Resources in terms of

supervisor support and job autonomy can help improve both skills and styles while employee engagement can help improve in staff development; which can increase in the alignment of hard and soft aspects.

1.3.4   Lifecycle of the Organization

The researcher used Adizes's Organization Lifecycle to understand the stage of development in the corporate lifecycle. According to the Adizes, corporate lifecycle assessment survey (Adizes, 2011), company X has undergone various stages in the lifecycle; the results found that the company is now in the "Stable/ Aristocracy stage", see Figure 5.
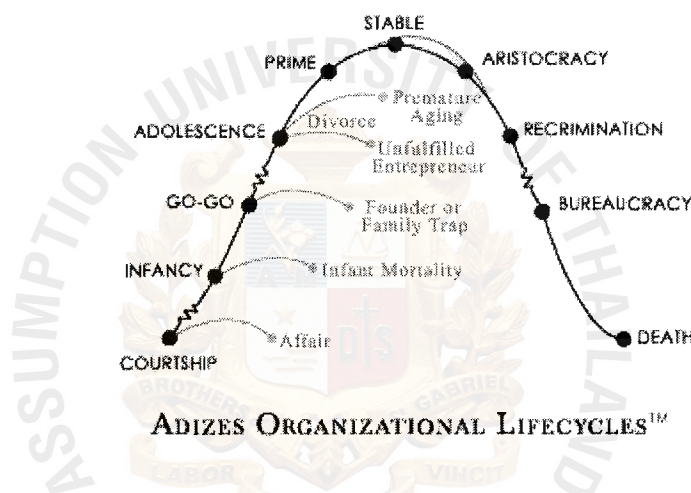
Figure 5. Adizes Life Cycle of Company X

A stable stage is considered at the top of the lifecycle but it does not mean it is good. Companies that are in a Stable stage start losing energy or we start getting old. It is very difficult to detect that the company is at this stage as the symptom will not show in a financial report, so many companies do not realize what they are getting at. If the company continues to lose vitality, it will easily move to an Aristocracy stage because it has neglected their long-term opportunities and focuses more on short-term views which is most of the time conservative, emphasizing on financial numbers and low risks. With a lack of long-term view, the company can get stuck in this stage as they have no eagerness to explore, no innovation, just continue whatever they had been doing (Adizes, 2011).

For a 40-year-old company, it is not a surprise to see the company in a stable stage; it has gone through nice times in the prime stage when it was the only manufacturer of Vinyl Floor tiles in Thailand. Customers begged them to sell to them; the sales team did not have to do anything. The findings align with 7-S assessment, the style and shared values of the company, which reflected the "stable" stage; the staff and their working styles are too flexible, sometimes too relaxed. The staff become complacent and resist to change; now the market situation has changed, new comers have started, products from China have penetrated Thai market at a much lower price. It is a big challenge for the company to ensure that they have to build capability for change in order to not fall into the aristocracy stage.

The results of this analysis reflect an opportunity for change; it is time to do something. The researcher explained results of the analysis to the management team of the focal company and they totally agreed with the results and decided to give full support to this study to develop interventions to help them be ready to change.

1.4   The need for Research

The current situation analysis of the focal company which included a SWOT analysis, financial analysis, 7-S model analysis and Adizes life cycle analysis, there are four main factors that alerts company X to transform to a highly engaged organization. Figure 6 illustrates the needs for this research.
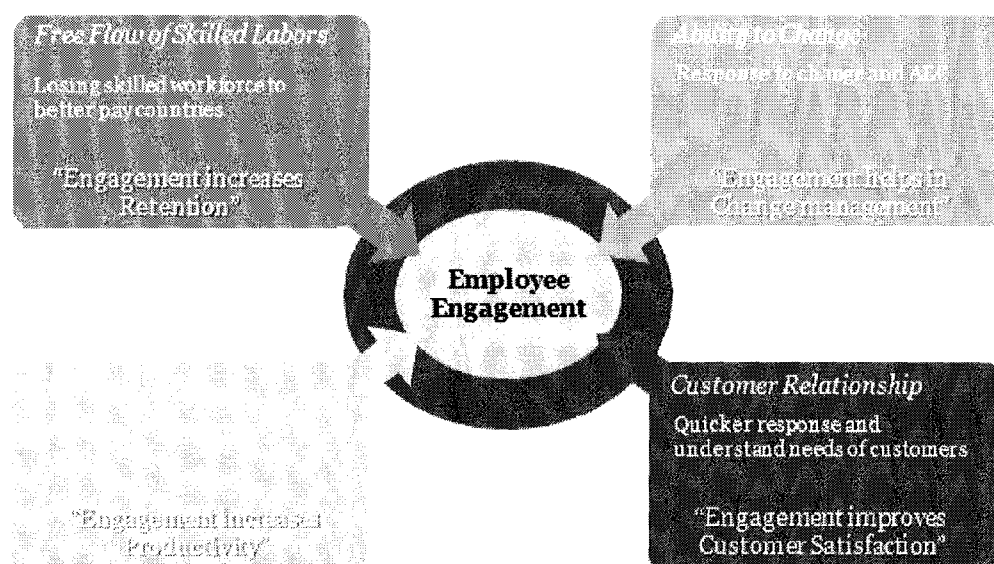
Figure 6. Needs for Research

1) Free flow of Skilled labour (AEC impact)

In 2015, AEC's free flow of skilled labour could impact the company when they may lose talented employees to more developed countries such as Singapore and Malaysia for higher compensation; it is a big threat for many companies in Thailand: to avoid that, companies must provide an environment to make employees feel that they belong to; they are part of a big family. One key character of engaged employees is emotional attachment to the organization; they dedicate and feel attached to the company and want the company to be successful.

2) Ability to change

The most important factor for company X to survive with AEC and adapt itself against China's low cost products is by changing quickly. The company needs to address its foundation in order to overcome change. The foundation in this case refers to human assets; the company needs to focus on developing human assets to ensure productivity, innovation and customer satisfaction which are the core of business. The challenges ahead such as AEC and penetration from China's products can lead to a transformational change of the company. In order to be successful with change, the company needs to ensure alignment and

engagement of its employees (Guy & Beauman, 2005). For a company in a stable stage, change is the key and also the most important factor to ensure that the company will not fall down into the aristocracy stage. One of the key strategies of Company X is to start a new business model which is trading. Trading requires totally different skills than manufacturing. Company X must ensure that their workforce is ready in terms of skills and mindsets to transform themselves into a new business.

3) Customer Relationship

The main customers of Company X are dealers which the company must retain and at the same time explore new segments. One of the strategies of the company will be to expand customer base. It plans to penetrate into the architecture segment which has a key influencer for big construction projects. In order to do that, the sales team must start building relationships, be more responsive and understand their needs. In the digital world, customers' behaviour and expectations are changing, they want companies to listen, respond and engage with them more (Phakdeesattayaphong, 2012). From Bates (2004) and Pont (2004) studies, employee engagement has proved to increase customer engagement.

4) Competitive cost

Nowadays, China's products are able to penetrate into many product sectors. Vinyl floor tile is no exception. Due to lower labour and material cost, its price is much cheaper than Company X. In order to stay competitive, company X has to maintain in excellent quality while it is still cost competitive which can be done via operational excellence. Improve in productivity is a key factor to have operational excellence. Employee engagement has been proved in improving productivity, engaged employees are more focussed and put their full effort to the work tasks (Harter et al, 2002).

From the literature review, there is a lack of research about what drives or predicts engagement especially in the Asian context (Kular et al, 2008). In addition, not many

academics focus on the interventions to increase the level of engagement. It would be a benefit to identify interventions that can improve the level of engagement that are applicable to Thailand's context. Company X needs to have an engaged workforce to put their full energy, focus on their work and dedicate themselves to the success of the organization. Thus, improving the level of engagement can help overcome those challenges and improve the overall performance of the company.

1.5 Potential Challenges for Change and Next Step

From the organization assessment, it seems that there is a big skill gap between the manager and supervisory staff level. Because of this gap, most decision making come from the top management. Even though the management encourages feedback, suggestions or comments from employees are encouraged as they are the ones who understand their job best, but employees are afraid to share as they feel that their knowledge is not good enough. The morale also decreases as employees become complacent, not giving their full energy or showing accountability in their jobs. They do what they were told to do but they do not care about the work outcomes, which is behaviour of low engagement. Enhancing job resources (increasing leadership, enhancing team work, providing feedback and giving autonomy) can help in increasing the level of engagement. Employees become leaders, make decisions and take ownership while managers could become coaches, provide feedback and bring out their full potential. Therefore, there is a need for this research to increase the level of engagement to get the full potential of their employees and help them to overcome change.

1.6 Research Problem Statement

The purpose of this study is to improve employee engagement through job resources in a private floor tile company in Thailand using OD interventions. The interventions focused on developing supervisor support, job autonomy, performance feedback and co-worker

support which in turn would improve employee engagement. The aim was to determine whether this approach can improve employee engagement in the focal company.

1.7   Research Objectives

There are four research objectives in this study:

1) To assess the current level of job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement in the focal company.

2) To investigate whether age, years of employment with the company and position held within the company relate to employee engagement.

3) To identify, design and implement appropriate ODI to improve/develop job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement.

4) To investigate the relationships between job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement.

1.8   Research Questions

1) What is the current level of job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement in the focal company?

2) Is there a different level of employee engagement with reference to age, years of employment with the company and position held in the company?

3) Can ODI contribute to the improvement and development of job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement?

4) Are there any relationships between job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement?

1.9   Research Hypotheses

Based on the research questions, hypotheses are formulated as shown below:

Hypothesis 1

Hypothesis 1.1:   There is a different level of employee engagement with reference to age.

Hypothesis 1.2:   There is a different level of employee engagement with reference to years of employment with the company.

Hypothesis 1.3:   There is a different level of employee engagement with reference to the position held in the company.

Hypothesis 2

Hypothesis 2.1:   There is a significant improvement between pre-ODI and post-ODI on supervisor support

Hypothesis 2.2:   There is a significant improvement between pre-ODI and post-ODI on job autonomy

Hypothesis 2.3:   There is a significant improvement between pre-ODI and post-ODI on performance feedback

Hypothesis 2.4:   There is a significant improvement between pre-ODI and post-ODI on co-worker support

Hypothesis 2.5:   There is a significant improvement between pre-ODI and post-ODI on employee engagement

Hypothesis 3

        Hypothesis 3.1:   Supervisor support has a significant relationship with employee engagement

        Hypothesis 3.2:   Job autonomy has a significant relationship with employee engagement

        Hypothesis 3.3:   Performance feedback has a significant relationship with employee engagement

        Hypothesis 3.4:   Co-worker support has a significant relationship with employee engagement

1.10   Definitions of Terms

For the purposes of this study, the following words and phrases are defined as follows:

Employee Engagement: "A positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, González-Romá & Bakker, 2002, p. 74).

- "Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work and persistence even in the face of difficulties".

- "Dedication refers to being strongly involved in one's work, and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge".

- "Absorption is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work".

Job Resources: refer to "those physical, psychological, social, or organizational aspects of the job that are either/or: Functional in achieving work goals, Reduce job demands and the

associated physiological and psychological costs, stimulates personal growth, learning and development" (Bakker & Demerouti, 2007, p.312).

Appreciative Inquiry: AI is a process of leading positive change in an organization, it searches for what works and build on that (White, 2006).

Appreciative Coaching: A Coaching method based on an Appreciative Inquiry model (Orem, Binkert & Clancy, 2007).

Job Autonomy: "The degree to which the job gives the worker freedom and independence in scheduling work and determining how the work will be carried out" (Hackman & Oldham, 1974, p.5).

Supervisor Support: the extent to which leaders create a positive work environment, concern for employee's needs and well-being, pay attention and appreciate employees' contribution, encourage teamwork and help solve work-related problems.

Co-worker Support: Interpersonal relationship among employees, trust and help for each other, concern for well-being and value individual input.

Performance Feedback: "The degree to which the worker gets information about the effectiveness of his or her efforts, either directly from the work itself or from others" (Hackman & Oldham, 1974, p.5).

1.11   Significance of the Study

Employee engagement has been studied to have several benefits for organizations thus it is an important consideration in any organization. Some of the benefits include; employees being more committed to their work, a better utilization of job resources, supervisors realize the role and position they occupy in an organization, better governance and smooth running as employees feel they are appreciated (Richman, 2006). This study has three main benefits.

The first benefit is for company X, the study is designed to improve the level of engagement in the company X, the higher employee engagement, the better organizational performance. It is not only improving the bottom line of business but also the work climate. Engaged employees will lead to an engaged team and then an engaged organization. Employees can benefit from better job resources such as supervisor relationship, co-worker relationship. The current issue the management faces is a low level of engagement; employees are too relaxed, not taking full accountability and not sharing ideas during work. The ODIs could improve or create job resources leading to a higher level of engagement.

The second benefit is for other researchers and practitioners. The study will provide useful information and guidelines to practitioners, HR and researchers about engagement at work. There is a lack of research that predicts or drives engagement especially in the Asian context as most researches have been done in USA and Europe (Kular et al, 2008). In addition, not many academics focus on the interventions to increase a level of engagement, this part is mostly done by consulting firms like Gallup, Hayes Group, Hewitt and Accenture as a private engagement. It would be beneficial to identify and share interventions that can improve the level of engagement in Thailand so that other companies can leverage the practice and implement it on by their own.

The third benefit is for the researcher, herself; as a full-time consultant, employee engagement is quite a popular topic for large companies in Thailand. The researcher can use theories and results from this study to apply with the firm's existing methodology to create a concrete approach to help clients solve their problems efficiently. In addition, it can be applied to her workplace to help reduce turnover rate which is one of the biggest issues in consulting firms as many studies show a significant relationship of engagement and employee turnover rate (Baumruk, 2006, BlessingWhite Research, 2008). This study will not just help

understand theories but also give practical recommendations and interventions that can be used in any company.

1.12   Scope and Limitations

The scope of this research is mainly focusing on the Impact of ODI on employee engagement through the improvement of job resources (supervisor support, job autonomy, performance feedback and co-worker support). The research is an OD action research on the focal company, company X. The findings and ODI might not be applied or represented to other companies or other industries or outside of Thailand. However, this research provides an in-depth analysis of the focal company that would represent an analysis of the relationship among variables (supervisor support, job autonomy, performance feedback, co-worker support and employee engagement). The assumptions of this research are described below:

1) It is assumed that participants will provide honest and correct information on interview and self-report questionnaires.

2) It is assumed that employee engagement questionnaire, UWES-17 accurately measures the engagement level of the company X.

Chapter 2

Literature Review, Related Studies, and Conceptual Framework

This chapter presents the reviews of existing studies related to the topic which are organization development, change management, employee engagement and job resources. In addition, the variables of job resources are discussed along with how they link to improve the level of engagement.

2.1 Organization Development and Change

2.1.1 Organization Development (OD)

Organization Development is "a process that applies a broad range of behavioural science knowledge and practices to help the organization build their capacity to change and to achieve greater effectiveness" (Cummings & Worley, 2008, p.1). The essences of OD are

- OD uses a long range approach to ensure sustainability and change in the organization.

- OD focuses on the whole system, organization-wide.

- OD always seeks support from the top management to ensure sponsorship, ownership and buy-in.

- Outcome of OD is not only the financial figure; it also involves satisfaction of stakeholders and efficiency of the organization.

- OD uses interventions which are activities to make organizations transform to the desired stage.

- OD combines researches, theories and experience to understand and identify problems and the organizational system.

OD has become a preferred strategy for change management in organizations; it focuses on people and organizations on how to make them function better to increase individual and organizational effectiveness (French, Bell, & Zawacki, 1994). OD focuses on

the most important assets of the organization which are human assets by improving individual performance creating higher morale and increasing satisfaction; with the today accelerated rate of change, OD approach can help organizations handle change by looking at the whole system, planning for systematic changes and improving organizational knowledge to develop the competence for self-renewal in order to be able to handle future change. OD helps organizations go beyond surface change or just fix the problem; it transforms the underlying assumption and values governing their behaviour and culture, helping the organization to change themselves (Cummings & Worley, 2008).

2.1.2 Change

There are many researches about the nature of change and change methods. Until now, there are many change management models. The researcher aims to select a model that fits with the organization situation and requirements. Each model has some similarities and differences from each other. Knowledge of the process of each change model step is crucial to ensure a successful change program. Many research studies conclude that engagement is a primary antecedent to a successful organizational change implementation (Dicke, Holwerda, & Kontakos, 2007). For example, Guy and Beaman (2005) stated that engagement and alignment are two of the main categories for successful change management; the others are organizational competency and competitive pressure. In addition, the key success factors of change management also relate to engagement such as communication, leadership support ((Dicke, Holwerda, & Kontakos, 2007). As such, during change management initiative, engaged employees will help increased buy-in and be advocates of the change program.

Our understanding of organizational change has evolved since the 1940's when the first change model was developed. Kotter's 8- step model is one of the best known and the most applied change model (see Figure 7). The framework identifies the activities in each

step and it can be applied to all top-down change (Kotter, 1996); each step described below in detail.

1. Create a Sense of Urgency
2. Form a Guiding Coalition
3. Create a Vision
4. Communicate the Vision
5. Empower others to Act on the Vision
6. Create Quick Wins
7. Build on the Change
8. Institutionalize the Change
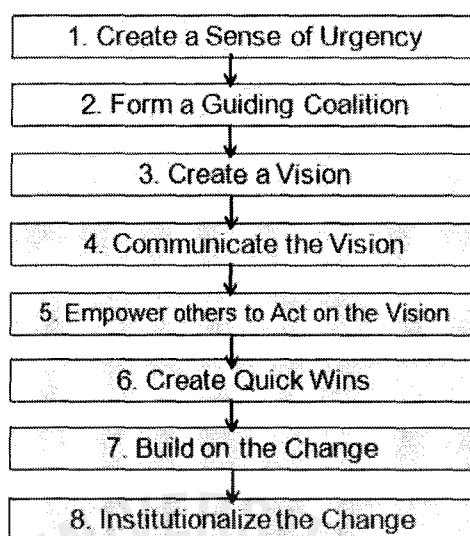
Figure 7. Kotter's Change Model

Step 1: Create a sense of urgency - Develop a sense of urgency around the change. Use facts by examining the market and environment, identifying crisis or potential opportunities to support your ideas that the change is necessary.

Step 2: Forming a guiding coalition - Assemble a powerful group of people to lead the change effort; we need to form a powerful coalition with key people in the organization.

Step 3: Create a vision - Vision will help lead the effort and show a clear focus to the team. A clear vision will help the team see the future stage and its benefits so that people understand it and can also explain to others on why they should assist this change.

Step 4: Communicate the vision - Use every channel to communicate, the communication must be clear and strong to ensure alignment of this initiative.

Step 5: Empower others to act on the vision - Remove any barrier, prepare structures and reward system to motivate the change.

Step 6: Create Short quick wins - Build momentum to reduce resistance or give up. Need to find a short term target to show the success and a taste of victory.

Step 7: Build on the change - We have to keep looking for improvement, maintain momentum and motivate people by recognizing and rewarding those who help in the improvement.

Step 8: Institutionalizing the change - Make change stick, make sure that it integrates with the way the organization works and embed it into the normal behaviour and organizational culture.

For Company X, Kotter's model can be applied very well. The very first thing they need is creating a sense of urgency. The company has been the number one for 40 years; it cannot see the need for change, most employees are with the company for more than ten years and change is very difficult for them, once they see the need for change, the vision and communication should take place to ensure understanding and alignment. Empowering people to act is another important key; since most employees lack skills and readiness for change, empowering them and showing them a quick win result can motivate them to make the change successful. At the end, the company must ensure that the new change sticks by institutionalizing the change into the organizational culture.

2.2 Review of studies on related topics of interest

2.2.1 Job Resources, its definition and its importance

In operational terms, job resources mean resources provided by the company including monetary and non-monetary to help employees get a job done and be satisfied with their jobs. Employees are an important asset to the company and their needs should be catered for in order for a company to maximize their output and commitment to the company. This is usually done through job resources that are the amount of work and resources that are utilized by an organization to engage the employees and ensure that there is job satisfaction and commitment in an organization. Job Resources are therefore a cost incurred by the organization either monetary or otherwise to ensure employee satisfaction and commitment.

There are different researchers who have conducted a research into the relationship between job resources and the success and profitability of an organization. According to Zaleznik (1996), the form of job resources that a company uses to satisfy its employees, the higher is the profits and success of the company. The author reiterates that an organizational success either could directly or indirectly be attributed to the job resources of the organization. A survey conducted in different manufacturing companies in the US revealed that companies with a higher number of job resources enjoyed more success than the others (Lasher, 1971). This was later attributed to the employment satisfaction and commitment to the company. The results showed that the companies with better job resources benefited from getting higher revenues and profits as opposed to the companies with poor job resources. The employees were also more satisfied and this was cited as the main cause of the difference in profits and revenues.

According to Kruse (1993) companies which perform intensive level of job resources allocation and analysis are invariably those that experience the greatest level of growth and profitability no matter the industry. This was after he had conducted a research in the state of Pennsylvania whereby he sampled some of the biggest companies across all the industries and discovered that the profit margin compared to the revenue and size of the firm also was interrelated to Job Resource allocation. A research conducted by Carrig & Wright (2006) revealed that it is not only an allocation that matters in order to satisfy the employees but the employees should have a say on what they need and what should be improved in order for the companies to realize its results. Carrig and Wright found that the companies that were involved with the employees and did a survey of the employee needs before allocating the job resources had higher returns than companies that simply allocated the resources on their own without consulting all the employees or their representatives.

The Job Resource allocation does not directly influence the level of profits or returns but it is meant to motivate and encourage the employees and is therefore meant for the employees. It is therefore important for the company to totally involve the employees as their satisfaction directly influences the production and as a result the growth and profitability of the company. According to Sirota, Mischkind, & Meltzer (2005), if two companies hire the same kind of employees the only difference that will improve performance is the Job Resource allocation which differs among different companies and the better the resource allocation the higher the profits and growth of an organization.

2.2.2 Employee Engagement Definition

Employee engagement has become known as an organizational psychology concept, many studies support the relationship of engagement and business outcomes (Harter et al, 2002; Schaufeli & Bakker, 2004b; Salanova, Agut, & Peiro, 2005; Robertson-Smith & Markwick, 2009). The concept of Work Engagement or employee engagement has started since 1990 from the study of Kahn 1990. While it have been more than twenty years, not many researches in this area has been completed, there is still no consistency in definition and measurement (Dicke et al., 2007; Kular et al., 2008; Simpson, 2009).

Engagement is considered as the harnessing of the members of an organization to the work performance role and this is witnessed in the way they commit and express themselves cognitively, positively and emotionally in their role performance (Lee, 2002). This implies that employees who are engaged tend to be physically involved in their performances, emotionally connected and cognitively alert to the organization while performing their work role (Kress, 2005). Contrary to this, employees who are disengaged tend to be disconnected from the performances and hide their real thoughts, identity and feelings in their work role (Thatcher, 2005). Engagement can be looked at as an energetic state where employees are fully dedicated to their work performance and they remain confident of their effectiveness

(Cohen, 2002). There are quite a number of engagement definitions, both from academic and consulting firms. Despite no distinct definition and measurement, most studies agree on two core dimensions of engagement – Energy and Involvement (Bakker 2011). A sample of definitions from both academic and practitioners is shown in Table 1.

Table 1
Employee engagement Definition

Source	Definition
Schaufeli, Salanova, González-Romá & Bakker, (2002)	"Engagement as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (p. 74).
Corporate Leadership Council	"The extent to which employees commit to something or someone in their organization, how hard they work and how long they stay as a result of that commitment" (Vance, 2006, p.3).
The Gallup Organization	"Employee engagement is the involvement with and enthusiasm for work" (Vance, 2006, p.3).
Seijts & Crim (2006)	An engaged employee are someone who is fully involved and enthusiastic about his or her work.
Develop Dimension Internationals (2005)	"Engagement is the extent to which people enjoy and believe in what they do, and feel valued for doing it" (Vance, 2006, p.3).
Towers Perrin	"the extent to which employees put discretionary effort into their work, beyond the required minimum to get the job done, in the form of extra time, brainpower or energy" (Vance, 2006, p.3).
Robinson, Perryman & Hayday (2004)	"A positive attitude held by the employee towards the organization and its values. An engaged employee is aware of business context, and works with colleagues to improve performance within the job for the benefit of organization" (p. 2).
Hewitt Associates	"the state of emotional and intellectual commitment to the organization or group producing behaviour that will help fulfil an organization's promise to customers-and in so doing, improve business results" (Vance, 2006, p.3).
Macey & Schneider (2008)	Macey & Schneider splits engagement into three areas: 1) Trait Engagement refers to positive view of work, positive affectivity, enthusiasm. 2) State Engagement refers to feeling of energy and absorption. 3) Behaviour Engagement refers to discretionary effort.
Kahn (1990)	"The harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances" (p. 694).
Saks (2006)	Engagement consists of Job and Organization Engagement: - Job Engagement refers to psychologically present in one's work role. - Organization Engagement refers to psychologically present in one's role as a member of organization (Griffith 2009, p. 24)
Maslach, Schaufelli, & Leiter (2001)	"engagement is characterized by energy, involvement, and efficacy, the direct opposite of the three burnout dimensions of exhaustion, cynicism, and inefficacy" (Saks, 2006, p. 601)

There are various definitions and discussions among practitioners and academics in terms of engagement and its definition. Until now, there is no consistency or agreement in any definition (Simpson, 2009). There are overlaps in definitions above, some researchers emphasize on attitude perspective, some emphasize on behavior. Nevertheless, mainly engagement is more a combination of involvement, commitment, passion, enthusiasm and dedication to work role and considered as a positive angle of burnout. The researcher summarizes the concept of "employee engagement" into three levels. Figure eight shows the three levels of engagement.

- Level 1: employees feel positive and think positively about the company. They also speak positively about the company to others; they feel valued to be in the company, their hearts and minds are with the company

- Level 2: Not just a feeling, employees also perform their job; they have energy to do their jobs; they take full accountability of their jobs.

- Level 3: This is the highest level of engagement. Employees do not only feel good and perform their tasks, but also focus on their job and always find the best solution for the company as if it is their own company, they put their hearts, hands and heads to the success of the organization.
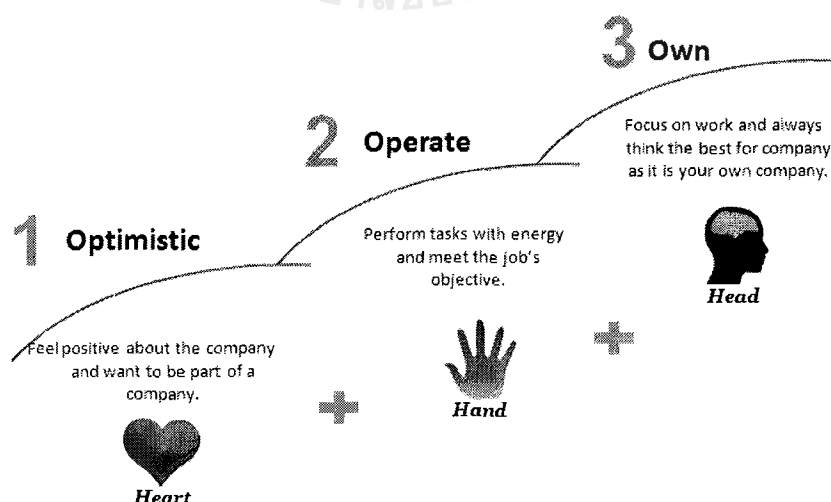
Figure 8. Level of employee engagement (Source: the researcher)

2.2.3 Employee Engagement Models

Simpsons (2009) identified four lines of engagement research (Personal Engagement, Burnout/Engagement, Work Engagement and employee engagement). All of them refer to the engagement at work and they have similar meanings but use different measurements; all the definitions consist of commitment, involvement and passion about work.

2.2.3.1 Personal Engagement Model (Kahn's model)

William A. Kahn is considered to be the founder of engagement; his qualitative study on personal engagement explained how psychological work experiences determine the level of people presenting themselves during role performances which stated three psychological conditions that will determine the level of engagement – psychological meaningfulness, psychological safety and psychological availability (Kahn, 1990). He defined Engagement as "The harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances" (Kahn, 1990, p. 694), whereas disengaged employees withdraw and defend him/herself physically, emotionally or cognitively while working on their tasks (Kahn, 1990).

- Physically means energy to work, willing to go the extra mile

- Cognitively means deeply focus in work, time flies quickly when working

- Emotionally means to form a meaningful connection with others and concern for other's feelings

Kahn's model stated that a level the engagement culminates from a psychological present state where the true and authentic facets of the employee can be expressed fully. In such a state, employees do not require to curb their values, beliefs, thoughts, feelings, relationships and inclinations (Strumfer, 2000). All the named facets are normally manifested in the employee behavior at work. The model outlines three factors that promote engagement levels;

a. In situations where employees have a sense of meaning in their performance role, this engagement is most likely to succeed. This means employees develop the feeling that their work is related to some enduring, broader, desirable and important values or objectives. They get the notion that their performance aligns with the value aspirations. This feeling makes the employees more inclined to devote their efforts to the work and not withhold their efforts, which manifest an engagement (Johnson, 2004).

b. When employees are made to feel that the dedication to their performance roles will not result in undesirable consequences, high engagement levels are more likely. This implies that engagement surfaces when employees have the feeling that adversities are manageable or unlikely (Bates, 2004).

c. Employees may maintain their devotion to their performance if they are in a position to access the resources that are necessary. This means that employees need to be put in a position to have the necessary exertion (Hackman, 2000)

Psychological meaningfulness means a feeling that one feels his/her work is meaningful to a company and receives fair return of self given his/her efforts in his/her role. Meaningfulness can come from feeling importance of work done and task characteristics. Psychological safety is a feeling that one can show oneself without fear of consequences, through career status or a negative self-image, which can come lack of from co-workers and supervisors; psychological availability is a feeling of having resources (physical, emotional, psychological) to perform the tasks (Kahn, 1992).

Building on Kahn's study, May (2004)'s study showed that all three psychological conditions were significantly related to engagement. May's Model conceptualizes the levels of engagement through emphasizing on the importance of employees committing their emotional, cognitive and physical resources to bear on the task related roles when engaging

themselves to work (Gubman, 2004). The model argues that different jobs entail different physical exertion level and challenges, and cognitive and emotional demands and this will vary with individuals. The study concluded that work role fit and job enrichment lead to psychological meaningfulness; supervisor support and co-worker relations lead to psychological safety; and physical and emotional resources lead to psychological availability (May, Gilson, & Harter, 2004).

2.2.3.2 Burnout/Engagement Model (Maslach's model)

Maslach has defined burnout as a psychological syndrome characterized by long-term exhaustion, cynicism and inefficacy (Maslach & Leiter, 1997; Leiter & Maslach, 2004). Engagement was identified as the positive antithesis to burnout, opposite on a continuum and uses the reverse score of Maslach Burnout Inventory (MBI-GS; Maslach & Leiter, 1997). Maslach & Leiter (1997) stated that engagement is characterized by involvement, energy and efficacy that are opposite to the three dimensions of burnout which are cynicism, exhaustion and a lack of efficacy.

- Cynicism means distancing oneself from work's objective and environment

- Exhaustion means feeling fatigued physically, emotionally and cognitively, which is the consequence from long work and tiredness of work.

- Lack of Efficacy means reduce feeling of accomplishment, does not feel work is worthwhile.

In their view, burnout is opposite the work engagement where energy turns to exhaustion, efficacy turns into lack of efficacy and emotion/involvement feeling turns into cynicism. From this definition, it means that someone who is not burnout must be engaged.

Schaufeli et al. (2002) argued this whoever was not burnt out did not have to be engaged, rather they suggested that engagement should use different constructs.

2.2.3.3 Employee Engagement Gallup Model

Employee engagement was defined by Harter as an ''individual's involvement and satisfaction as well as enthusiasm for work'' (Harter et al., 2002, p. 269). The concept is based on connect, involvement and enthusiasm to work which is similar to Kahn's concept (Simpson, 2009). The key antecedents in this model are four elements 1) basic equipments being provided, similar to Kahn's Availability condition 2) contributing to the organization, similar to Kahn's meaningfulness condition 3) sense of belonging, similar to Kahn's safety condition 4) opportunity to grow, similar to Kahn's meaningfulness condition. It is measured by Gallup Workplace Audit (GWA) consisting of twelve statements about those four antecedents, which are workplace perception such as relationship with co-worker, supervisor support, feedback, opportunity to grow (Harter et al, 2002). The rating uses 1 to 5 Likert scale (1 means strongly disagree while 5 means strongly agree). GWA has been developed more than 30 years and been tested in many countries such as USA, UK, Hong Kong, Australia. Over one hundred studies in more than 80 independent companies are in Gallup's database, the questionnaire has been used worldwide in various occupations (Harter, Schmidt, & Killham, 2003). Harter (2002)'s study also showed the relationship of employee engagement and business outcomes such as turnover, customer satisfaction, productivity and safety. Gallup has identified employee engagement as a significant predictor for positive business outcome (Luthans, & Peterson 2002).

2.2.3.4 Work Engagement Model (Job Demand-Resource Model, "JDR Model")

Work engagement refers to "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli et al., 2002, p. 74).

"Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties. Dedication refers to being strongly involved in one's work, experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge. Finally, absorption is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work" (p.74).

The Utrecht Work Engagement Scale (UWES), a self-report questionnaire developed by Schaufeli & Bakker (2003) has been used in many researches to measure work engagement. It measured three dimensions of engagement, which are vigor, dedication and absorption. UWES is one of the most often used instruments to measure work engagement; it has been translated into many languages and has been validated in North America, Europe, Asia and Africa (Schaufeli, 2012). It has been tested more than 10,000 participants in over 10 countries (Schaufeli, 2006).

Previous studies have shown that job resources (performance feedback, support from colleague, support from supervisor, learning opportunities are positively associated with work engagement (Bakker & Demerouti, 2008; Schaufeli & Bakker, 2004b; Rothmann & Jordaan, 2006; Halbesleben, 2010; Mauno, Kinnunen, Mäkikangas, & Feldt, 2010).

- **Job Demand** refers to "those physical, social or organizational aspects of the job that require sustained physical and/or psychological (i.e. cognitive or emotional) effort on the part of employee and that are therefore associated with certain physiological and/or psychological costs (e.g. exhaustion)" (Bakker & Demerouti, 2007, p.312).

- **Job Resources** refers to "those physical, psychological. Social or organizational aspects of the job that: (1) reduce job demands and the

associated physiological and psychological costs, (2) are functional in achieving work goals, and/or (3) stimulate personal growth, learning, and development" (Bakker & Demerouti, 2007, p.312).

- **Personal Resource** refers to "positive self-evaluations that are linked to resiliency and refer to the individuals' sense of their ability to successfully control and have an impact on their environment" (Bakker, 2011, p.266).
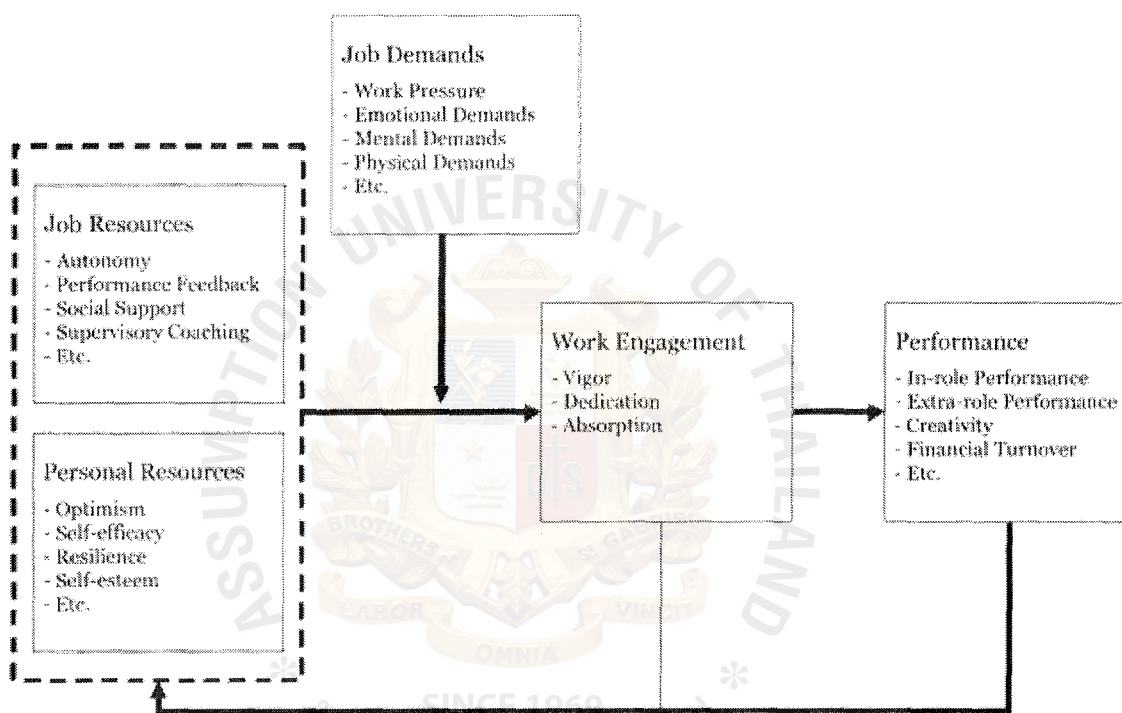
Figure 9. Job Demand-Resource Model: JD-R Model (Bakker & Demerouti, 2007)

From Figure 9 JD-R Model, there are two psychological processes, first is an energetic process whereby job demands are linked to health problems through burnout; the other one is a motivational process, which links job resources to organizational outcomes through engagement. This JD-R model renders the perspective of socio-economic exchange as to fail to allocate the support forms which fosters the obligation among employees to demonstrate and exchange engagement (Shaw, 2005). One of the assumptions of this model is that job demands like undue expectations, pressure levels and conflicting requirements,

tend to lead to burn out (Cropsnzano, 2005). In such a case, job demands are a representation of facets of the role sustained by demand in an effort to withstand difficulties. These efforts are normally applied so as to accommodate depleted levels of energy and demands (Hackman, 2000). Job Resources like support, feedback and autonomy are all responsible for fostering engagement and alleviate the adverse effects of job demands that are undue (Cropsnzano, 2005) This model considers resources as to curb job demands, stimulate growth and facilitate work goals. The resources have been considered as to elevate effort as well as facilitate learning which in the long run can interfere with the exhaustion caused by demand. This model demonstrates that job resources are responsible for promoting engagement. Social support, constructive feedback, and supervisors coaching are some of the job resources exemplars that are positively associated with engagement (Saks, 2006). Other potential resources that have also been strongly associated with engagement include appreciation, information, climate, job control, and innovation (Johnson, 2004). Example of job resources in previous studies that related to Engagement:

- Performance feedback (Albrecht, 2010; Bakker & Demerouti, 2008)

- supervisor support (Bakker & Demerouti, 2007; Ram & Prabhakar, 2011)

- Support from colleagues (Bakker & Demerouti, 2008)

- Social Support (Bakker, 2008; Rhenen, 2008)

- Learning opportunities (Albrecht, 2010; Bakker & Demerouti, 2008)

- Autonomy (Bakker, 2008; Rhenen, 2008)

- Job Variety (Bakker & Demerouti, 2008)

- Appreciation from colleagues and Supervisor (Bakker & Demerouti, 2007)

- Growth Opportunities (Rothmann & Jordaan, 2006)

- Advancement (Rothmann & Jordaan, 2006)

- Organization Support (Rothmann & Jordaan, 2006)

Based on JD-R model, job resources and personal resources can together or independently predict the level of engagement (Bakker & Demerouti, 2008). The scope of this study focused on job resources only as personal resources which are about people' characteristics and individual sense, which are difficult to change in such a short period. Engaged employees can generate their own resources as feedback loop fostering engagement continuously and can create on-going positive spiral (Bakker, 2011). The researcher selects three levels of job resources to test in this study:

- Organization Level - Supervisory Support and Autonomy

- Interpersonal Level - co-worker support

- Task Level – performance feedback

2.2.4 An analysis of Job Demand Resources Model Selection and Applicability of this study

There are different approaches that can be used to measure employee engagement. However, this study applies JD-R model which is one of the most effective approach and was proposed by Evangelia Demerouti and Arnold Baker (Bakker et al, 2004). There are two underlying psychological factors that play a crucial role in the development of job strain and motivation under the JD-R model. First, there is the health impairment process whereby poorly designed jobs lead to employee exhaustion both mentally and physically which may lead to complications and serious health problems for employees (Chernisss, 1980). Second, there is a motivation process whereby job resources exert the motivating potential which in turn leads to a high work engagement and excellent performance (Farber, 1983).

One of the main strengths of the JD-R model is that it satisfies the need for specifications and variability between occupations and thereby extending the two models and as a result it is more flexible and rigorous. Comparing the JD-R model to the other models

one finds that it is the only model that compares the positive as well as the negative aspects of work in the job or working environment.

The Kahn model describes the employee engagement as the coming together of the organization members to perform their roles in engagement as people employ and express themselves physically, cognitively and emotionally during performances (Mathews, 2001). The Kahn model is a mere definition of the employee engagement in an organization and not the job demand and the job resources. It is therefore weak as compared to the JD-R model as it does not focus on the job resources but only on employee engagement. This means that Kahn's model is weaker when compared to the JD-R model as it assesses all the aspects of the employees both the positive and negative aspects. The burnout Maslach model is a model that focuses only on the burnout and the fatigue that employees face at the work place. The burnout model mainly focuses on the working conditions and the job demand but fails to pay any attention to the Job Resource. This is its weakness when compared with the JD-R model which essentially views both perspectives and clearly examines them to get a conclusive report on their effects on the employees. The JD-R model is therefore the best model that should be used while assessing both the job demand and job description as it critically examines the two aspects clearly and conclusively.

As this study focuses on engagement as a result of job resources, researcher uses Work Engagement (JD-R model) from Schaufeli et al. (2002) as the definition with UWES as the measurement. UWES measures attitude and feeling of an employee towards work, rather than measures basic needs at work as Gallup Q12 (Freeney & Tiernan, 2006). The drawback of Gallup Q12 is about context it used. Q12 was developed based on American culture; it cannot prove that if organizations provide all needs at work, employees in other cultures will feel engaged as culture and perspectives of needs are different (Freeney & Tiernan, 2006). UWES has been widely used in academic research worldwide and has been psychometrically

tested. It measures attitude, energy and enthusiasm about work as oppose to Gallup Measurement that focused on job resources or aspects that support one to do work better (Griffith, 2009). This study will measure the level of engagement by using UWES test after applying interventions in job resources.

2.2.5 Engagement vs. other constructs

Since Engagement cannot determine the distinct meaning, some refer to it as "old wine in new bottles" (Little & Little, 2006). Engagement has been compared to existing constructs such as Organization Commitment, Job Involvement, Organization Citizenship Behaviour and Job Satisfaction (Saks, 2006). The concept of employee engagement is totally different from other HR theories related to employees' work satisfaction and motivation. Although effective employee engagement can somehow increase employees' work satisfaction and motivation, HR managers should know that employee engagement is all about employees' desire and ethusiasm in delivering outstanding work performance (Markos & Sridevi, 2010). Therefore, employee engagement is normally measured based on employees' emotional attachment or commitment to the company, their job performance, respect for their co-workers, or the customers' satisfaction (Markos & Sridevi, 2010; Demovsek, 2008; Ellis & Sorensen, 2007). In this section, the researcher will explain the similarity and distinction between engagement and those constructs.

2.2.5.1 Job Involvement

Job Involvement defined by Lodahl and Kejner (1965) as "the degree to which a person's work performance affects his self-esteem" (p. 25). It is similar to Kahn's definition of meaningfulness as the job is part of their life. One part of engagement is about dedication, feeling emotionally involved with the organization. Job involvement refers to the job or work as central to a person; engagement emphasizes more on how employees employ him/herself during work performance, not only just emotional attachment.

2.2.5.2 Organizational Commitment

From Meyer and Allen (1991) model, commitment is defined into 3 types

- Affective Commitment – employees feel positive emotional attachment, identify themselves with goals of an organization and want to remain a part of the organization

- Continuance Commitment – the needs to stay in an organization or loss in leaving an organization

- Normative Commitment – a feeling of obligation to stay in the organization

Organizational Commitment is also positively associated with performance (Tamkin, 2005). The closest relationship of Organization Commitment is affective commitment which refers to a desire to be part of an organization, a person's attitude and attachment, identifies with the goal and emotional connect which equals to Kahn's definition of being emotionally engaged in a role. Saks (2006) states that engagement is not a feeling or an attitude, it is the level of how one performs attentively and absorb in work role performance.

2.2.5.3 Organizational citizenship behavior (OCB)

Saks (2006) stated the difference between OCB and employee engagement that OCB focuses on discretionary effort or an informal role which means behavior that is extra or not stated in his/her job description while Engagement is focused on in-role or formal role behavior. Organ (1988) defined OCB as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system and that in the aggregate promotes effective functioning of the organization" (p. 4).

2.2.5.4 Job Satisfaction

Gubman (2004) stated that Engagement goes beyond job satisfaction, it is not just emotional connection or feeling happy, it actually commits to do the work that benefits the

organization. Employees who are happy and satisfied with their jobs, do not mean that they insert energy and emotion into their work; job satisfaction is defined as a positive emotion towards work; it can also be looked at as a way of having employees freed from dissatisfaction and hassles implying that it in no way encompasses the relationship of a person with the work itself.

2.2.6 Summary of comparing employee engagement with other constructs

It is hard to distinguish between employee engagement, job satisfaction and organization commitment as employee engagement tends to blend over into these areas of job satisfaction and commitment. According to Schaufeli's model, the engagement is distinct from constructs like organizational commitment, job satisfaction, or job involvement. As organizational commitment is centered on the association of employees with the organization, the focus remains on the organization yet engagement is focused on the work itself (Tapscott, 2000). Employee Engagement is the measurement of the level of emotional commitment that an employee has to an organization as it takes into account the amount of discretionary effort that employees expend on behalf of an organization (Bullock, 1999). Job satisfaction on the other hand is the measurement of an employee's happiness with a given job and the conditions that he/she is working on and does not take into account the amount of commitment that an employee gives towards a an organization. Job commitment is the amount of work that an employee gives to a given job. From the definitions above one can see that the three definitions are intrinsically related and it is for this reason that it has been difficult to properly define and distinguish employee engagement from the rest.

Employee engagement is one of the most important aspects of employee activities in an organization as it is the emotional commitment to an organization. Employee engagement is the emotional attachment to the company which means that the employees feel as if they form a part the company and also own it. The employees are engaged to the company in such

a way, that they feel obligated to do what is best for the company. The employees are so committed to the company and all they are interested in is the profitability and success of the company. This commitment and dedication to a company is the most important aspect and it ensures maximization of profits as the employees give the company everything they can, to ensure the company that they feel being a part of the success. Employee engagement therefore incorporates both job satisfaction and job commitment.

In summary, engagement terms often overlaps with other constructs but is also has a unique point or distinctive perspective of those described above as Robinson et al (2004) states that

"...engagement contains many of the elements of both commitment and OCB but is by no means a perfect match with either. In addition, neither commitment nor OCB reflect sufficiently two aspects of engagement – its twoway nature, and the extent to which engaged employees are expected to havean element of business awareness" (p. 8).

2.2.7 Benefits of employee engagement

It would be nice if an organization can tell which is the most critical employee attitude for performance. Job Satisfaction used to be a popular tool to predict the performance of an organization. As job satisfaction measures the sense of happiness in a company, however it does not ensure that "Satisfied" or "Happy" employees will perform their best or give energy for their job. Employee engagement consists of vigor, dedication and absorption meaning that employee puts their effort or extra mile to work, focus on the work and feeling emotionally involved and take pride in their work. In other words, they use their hand, head and heart to perform the work role. Nowadays, Engagement has become a buzzword and a popular HR offering from consulting firms as many organizations believe that engagement is the direct measurement to create performance. Gallup (Harter et al., 2003) has published

many researches that support engagement related to customer satisfaction, employee intention, creativity leading to a bottom line. Schaufeli et al. (2002) founded that engagement related to positive attitude towards work, job satisfaction, low turnover intention and organizational commitment. In addition, the longitudinal study from Sonnentag (2003) reveals that an engagement links to motivation and OCB. There is a lot of evidence to show that engagement is strongly related to performance outcome such as retention, turnover, productivity, customer satisfaction, profit and revenue growth (Harter et al., 2002; Gibbons, 2006).

Corporate Leadership Council (2004) and Bates (2004) revealed that highly engaged employees outperformed the disengaged employees by 20-30%. Towers Perrin (2005) calculated that a 5% increase in total employee engagement can increase 0.7% of the operating margin. Hewitt Associates (2004) also confirmed that when the level of employee engagement increased, the financial performance would follow. The company that has a high level of employee engagement score had a corresponding customer loyalty at twice the level of the average level of employee engagement (Pont, 2004). Similar to Bates (2004)'s study in a department store chain, he finds that employee engagement influences customer engagement (customer discretionary purchase). Even though customers never meet employees, high employee engagement has an impact on better quality of product development which leads to customer engagement (Oakley, 2005).

Bakker (in press, cited in Bakker, Schaufeli, , Leiter, & Taris (2008), p. 193) identified four reasons why engaged workers perform better 1) they experience positive emotion, enthusiasm, happiness 2) they have better health; both physical and psychological 3) they can generate their own personal and job resources 4) they create an engaged team by transferring their engagement to other people. In summary, from many researches, we can conclude that an engagement supports business performance. Employees who are enthusiastic

about work, feel strong and give energy to work and show better work performance both in an extra role resulting in better financial results and satisfied customers and workplace (Bakker 2008). Figure 10 summarizes the benefits of employee engagement.

Figure 10. Benefits of employee engagement

2.2.8 Drivers of Engagement

Many companies try to find a secret recipe to increase the level of employee engagement. Since "one size does not fit all", it depends on the context and culture of an organization. Many researches study the antecedents or drivers that predict engagement. One of the key drivers is the ability of the business managers to make employees united at work (Markos & Sridevi, 2010). By creating a work environment that is free from work discrimination, the company can benefit from a long-term employee engagement. Possible key drivers include: offering training and learning opportunities, offering job promotion, work recognition, empowering employees, promoting work collaboration and teamwork and

the use of effective leadership style (Blessing White Research, 2011; Markos & Sridevi, 2010; DDI, 2005).

Both Kahn and Maslach's model cannot fully explain the degree or level of engagement the employee will contribute; another theoretical model explains the degree of engagement is Social Exchange Theory (SET) (Saks, 2006). One of the few ways in which individuals are able to pay back to their organization is through their engagement levels. Employees often choose whether to engage themselves to different levels and this is normally in response to the resources that they received from their respective organizations (Maslach et al., 2001). Employees committing themselves fully into their work roles and dedicating greater physical, emotional and cognitive amounts of resources have been identified as a profound means of employees to respond to the actions of their organization. When individuals get these resources, they tend to be obliged to pay back to organizations with engagement levels which are greater (Maslach & Leiter, 2000). Kahn's definition of employee's engagement level states that employees tend to be obliged to commit themselves to their performance roles as a means of repaying for the resources they receive from the same organization (Maslach & Leiter, 2000). In case, the organization fails to offer these resources, the employees are most likely to disengage and withdraw themselves from their respective roles (Rothbard, 2001).

According to Kahn, job characteristics have a psychological meaningfulness that entails a level of return on investments based on the self and role performances. There exist five main job characteristics and they include; task, skill variety, autonomy, task significance and feedback (Snyder & Lopez, 2005). Psychological meaningfulness can be easily reached through job characteristics that offer a variety and challenging work, variety permitting the utilization of different personnel skills as well as the opportunity to contribute positively (Rothbard, 2001). High job characteristics have been observed to offer employees with the

incentive and room to commit more of themselves into their respective work or increase their engagement levels. According to May's model on levels of engagement, job enrichment is positively associated with the meaningfulness and it mediates the existing relationship between engagement and job enrichment (Lee, 2002).

Considering recognition and rewards within an organization, Kahn Model has it that employees vary in their levels of engagement as this remains a function of their benefits perception, they receive from their work role (Lee, 2002).In addition, a return sense in relation to investments can result from external recognition and rewards together with meaningful work. Consequently, organizations might expect their employees to be more engaged in their work to the level that the employees will expect their performance to be rewarded and recognized more by the organization. Corporate Leadership Council (2004) reveals that emotional drivers such as the relationship with managers, pride in work have four times impact on extra effort than pay and benefit. This aligns with Herzberg's (1996) study, which stated that Hygiene factors (pay, benefit) do not serve to motivate people but lack of it can cause dissatisfaction. While motivator (sense of achievement, growth opportunity) leads to greater satisfaction and job experience (Gibbons, 2006). Figure 11 summarizes the drivers of employee engagement.
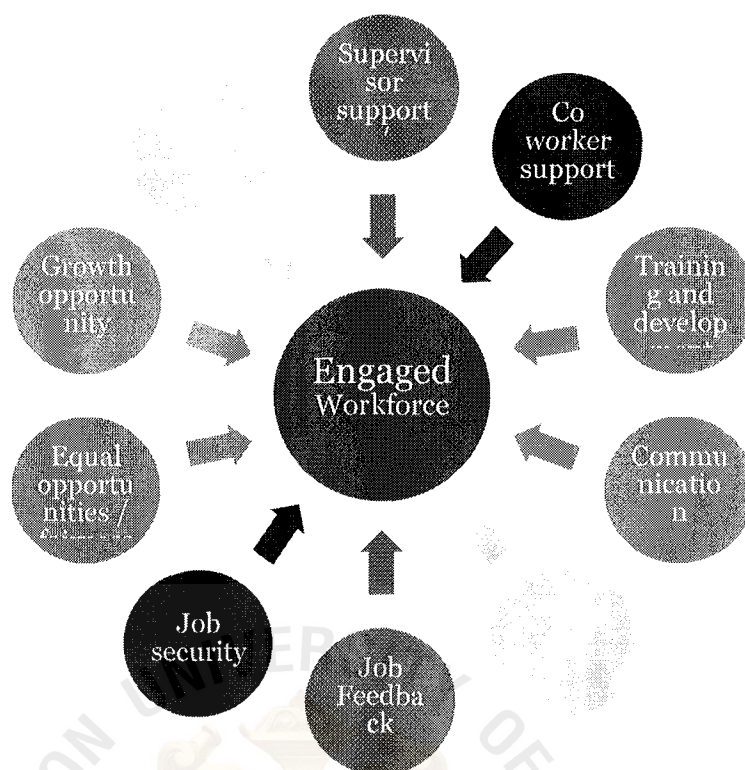
Figure 11. Drivers of employee engagement

2.3 Discourse on Concepts that make up the Conceptual Framework

2.3.1 Job Characteristics Model

Hackman and Oldham (1974) identified five dimensions of a job, to create motivational potential. These five core dimensions turned out to generate three critical psychological states a) experienced meaningfulness, b) experienced responsibility and c) experienced knowledge of his or her performance. Similar to Kahn (1990), experienced meaningfulness comes from challenging work, contribution to the organization or making an important contribution. Ram & Prabhakar (2011) show the strong positive relationship between employee engagement and job characteristics.
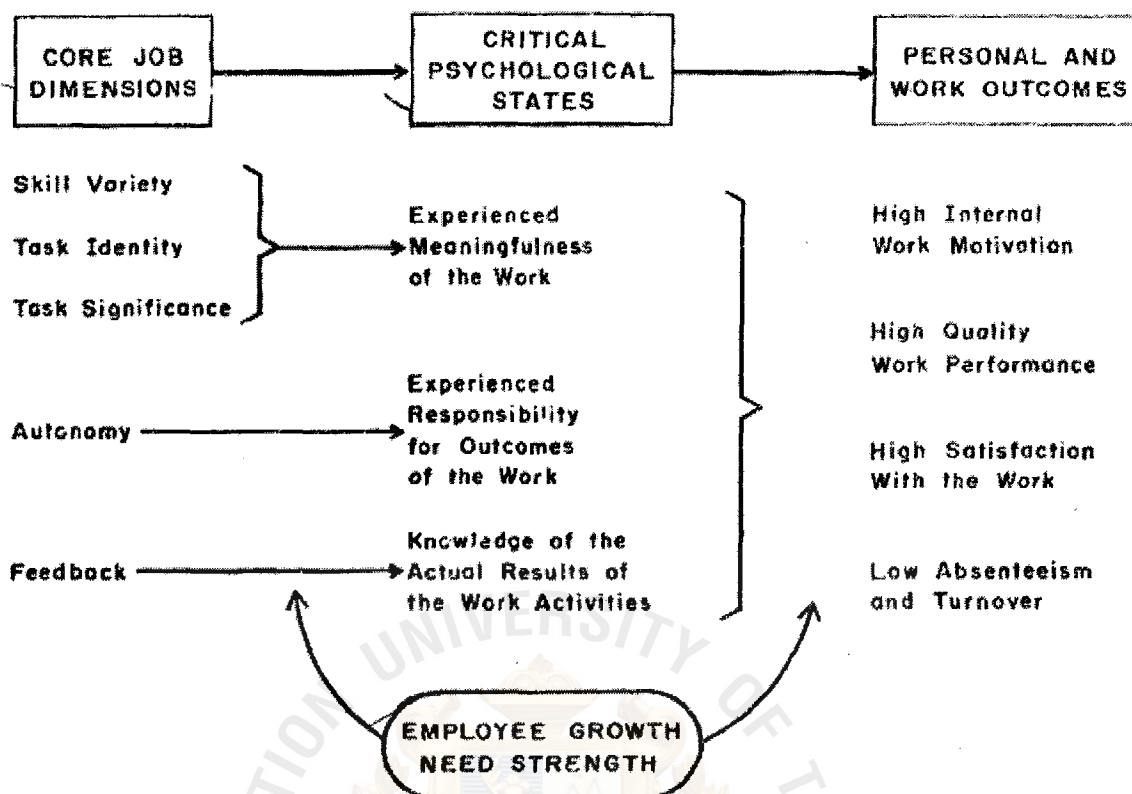
Figure 12. Job characteristics Model (Hackman and Oldham, 1974, p. 3)

The Job Characteristics model is illustrated in figure 12. The five dimensions include: (Hackman & Oldham, 1974)

- **Skill Variety:** the degree to which a job requires different skills, abilities or doing different things

- **Task Identity:** the degree to which a job requires doing from start to finish, completing a job or a piece of work.

- **Task Significant:** the degree of importance of the task, its impact on the organization, people or external environment. The importance of a job or impact of a job on others.

- **Autonomy:** The degree to which the job gives the employees freedom to make decisions, decide work schedules and allow them to design how to get a job done.

- **Feedback:** The degree to which the employees receive information about the work efforts, or effectiveness of their work from self, supervisor or others.

Any job can use these five core dimensions to determine the motivating potential. Jobs that have high levels of skill variety, task identity, task significant, feedback and autonomy will have more motivating potential and hence create better performance (Johari, Ambia Che Mit & Kirana Yahya, 2009).

2.3.2 Appreciative Inquiry

AI is a process of leading positive change in an organization, it searches for what works and builds on that (White 2006). Appreciative Inquiry uses positive ways of asking questions to create a positive relationship and builds on the present positive core of a given person, organization or situation. The research process will be based on a 4-D cycle and five core principles. AI process comprises of four stages, called 4-D Cycle as shown in figure 13 (Cooperrider, Whitney & Stavros, 2003).

Discovery
What gives life?"
(the best of what is)
Appreciating

Destiny
What will be?"
(how to empower, learn
And adjust improvise)
Sustaining

**Affirmative
Topic Choice**

Dream
What might be?"
(imagine what the world is
Calling for)
Envisioning

Design
How can it be?"
(determining the ideal)
Co-constructing
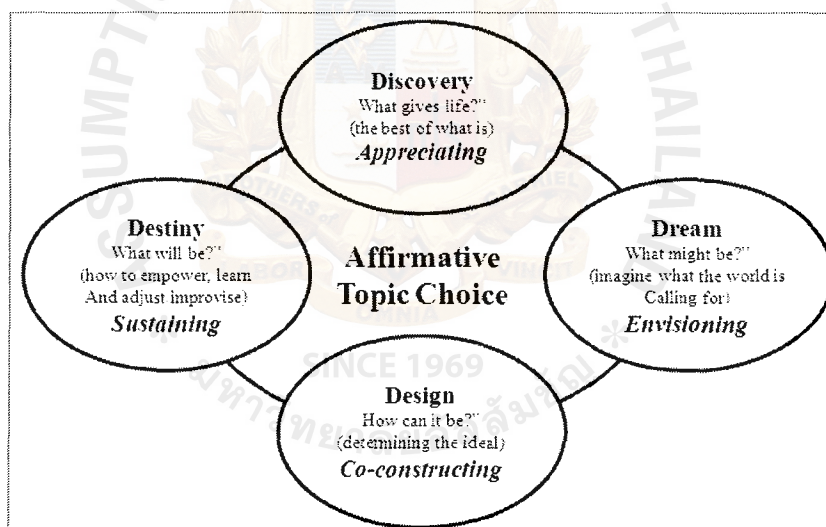
Figure13. AI 4-D Framework. Source: Cooperrider, Whitney & Stavros (2003).

- Discovery

AI begins with the search for the best example of an organization/division/ department. This phase focuses on bringing the strengths from an individual, team, organization. The questions are asked in a positive way to search for the strengths around the work environment. Management, managers and employees at all levels question one and another to learn about the strengths of the new entity; sample questions are:

- Tell me the story about the best time that you have had within a company. What made it an exciting experience? What factors contribute to that time?

- What are things that you value about yourself, your work and your organization?

- What are the three things you aspire for a company in order to prosper in the future?

- **Dream**

It focuses on the new vision for the company. In this step, participants imagine an idealized future state for a company. Participants are encouraged to be bold and realistic. Employees at all levels will sit together and imagine in which areas the company can be better. Sample questions are:

- Imagine three years from now, what do you expect to see which will be different, changed and better in the company. What are you proud of?

- **Design**

The design phases define how to let the dream become a reality. The participants will be asked to create statements and phrases to be taken from now to the future, to connect "what is" with "what might be". The statement involves the character and architecture of an organization including business process, culture, customer relations, leadership, management, communication system, structure, policies, strategy, shared value, training, evaluation, etc (Cooperrider et al., 2003).

- **Destiny**

Destiny is the final phase in the AI process. It translates intent to action. Participants choose topics to develop a plan and implement it. This phase also encourages participants to the accomplishment and builds up on what has worked. The final goal is to put the

organization into a self-sustaining environment which is built upon the new behaviour of an organization and positive change.

Along with the 4-D process, the five core principles serve as a foundation of AI (Cooperrider, Whitney & Stavros, 2008)

- The constructionist Principle: the organization as a living human construction; it evolves in the direction of the image created from the questions we ask.

- The principle of Simultaneity: change begins the moment we ask questions.

- The anticipatory Principle: our behavior is influenced by the future we anticipate.

- The Poetic Principle: we have no boundary on what we can learn and inquire.

- The Positive Principle: the organization will be perceived as positive when the change is led by positive questions and thinking.

Based on the concept of Appreciative Inquiry, Appreciative Coaching reflects on open, dynamic and possibilities, it boosts people to imagine about the strength, dream and to discuss about positive things about them (Soponkij, 2010). It will help motivate employees and build on what they do well resulting in better performance.

2.3.3 Whole Brain Literacy

As the speed of change continues to increase, we all have to find a way to handle that in order to survive in this world. The world is complex, dynamic and evolving. The best way to learn about changes is learning how to learn to learn. Whole Brain Literacy (WBL) can be described as a thinking system by tapping into the whole brain functioning, using human brain/mind through four brain quadrants based on Lynch (1984); a four-brain model on human information processing skills (HIPS) (Tayko & Reyes-Talmo, 2010); the four quadrants are illustrated in Figure 14.
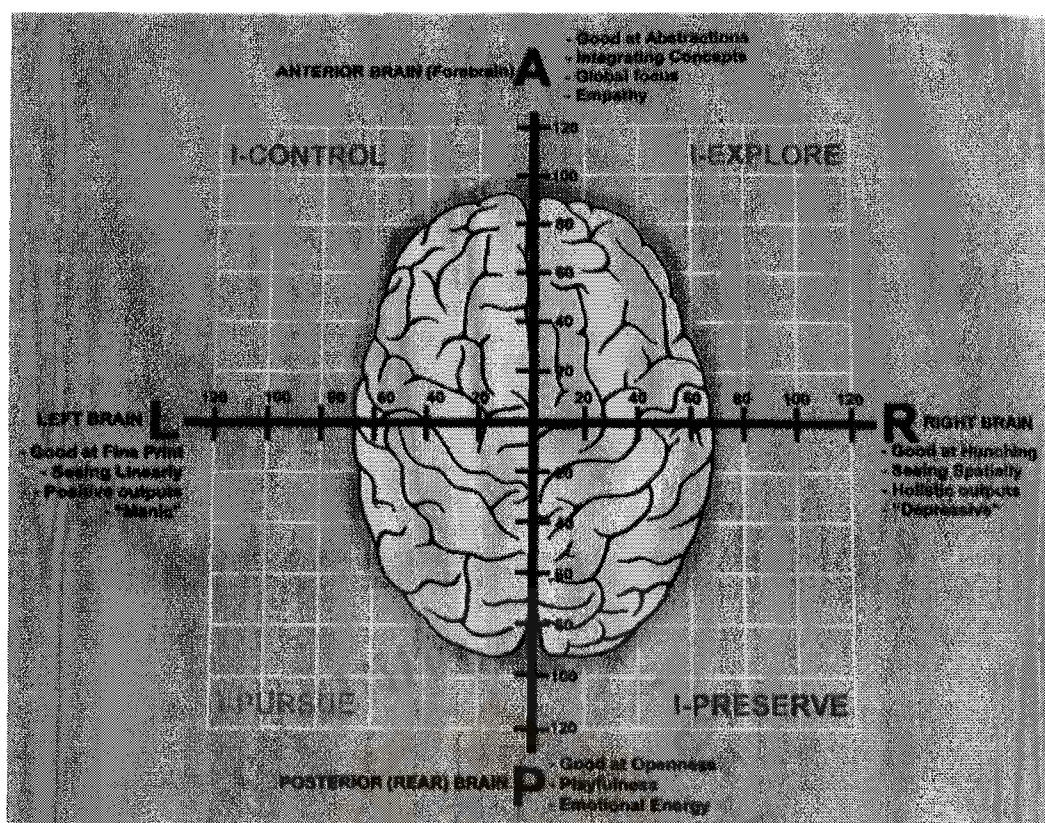
Figure 14. The Four-Brain Model of Lynch (Source: Tayko and Reyes-Talmo (2010)

Everyone can benefit from WBL especially the leader and management. We need WBL as a thinking tool to manage our thoughts, tasks, times and feelings. Process thinking and whole brain thinking will help improve logic; humans are designed to be whole, thus we have the ability to think in a whole brain way. If an individual or organization can use the whole brain, it will create a competitive advantage without limits (Herrmann-Nehdi, 2010). Missing or lacking one of the four quadrants will prevent us from changing which is a very important key to survive in the exponential times. Sen (2010) stated "Whole-brained persons are balanced and effective, in touch with reality, yet optimistic and motivated and in charge of their emotions, expressing them appropriately and minimizing the time spent under the influence of negative moods, thus safeguarding their health and well-being" (p. 6).

Herrmann-Nehdi (2010) stated that key initiatives/ideas must be whole brained to meet the client's needs. Whole brain thinking can improve the completeness, thinking logic

and increase the buy-in from stakeholders. An organization that incorporates the four perspectives of thinking (I-Control, I-Pursue, I-Explore and I-Preserve) will sustain its competitiveness and create effective management of changes. Using the whole brain enables to see the larger picture of the company rather than each view; the connectivity of each part has made the whole more than the sum of each part (Tayko & Reyes-Talmo, 2010).

2.4 Conceptual Framework

From the initial analysis of the focal company and the review of related literature, the increment of job resources such as supervisor support, job autonomy, performance feedback and co-worker support, may lead to increase the level of employee engagement; a more engaged workforce may lead to better organizational performance. The main theoretical framework applied to this study is job resources and employee engagement. This research aims to study the impact of ODI on employee engagement through the improvement of job resources (supervisor support, job autonomy, performance feedback and co-worker support) in a private floor tile manufacturing company in Thailand. Key success factors of this research are that it requires interaction and collaboration between the researcher and participants which are the heart of action research; the conceptual framework is illustrated in Figure 15.

4 Independent Variables
Job Resources

1 Dependent Variable

Employee Engagement

Demographic
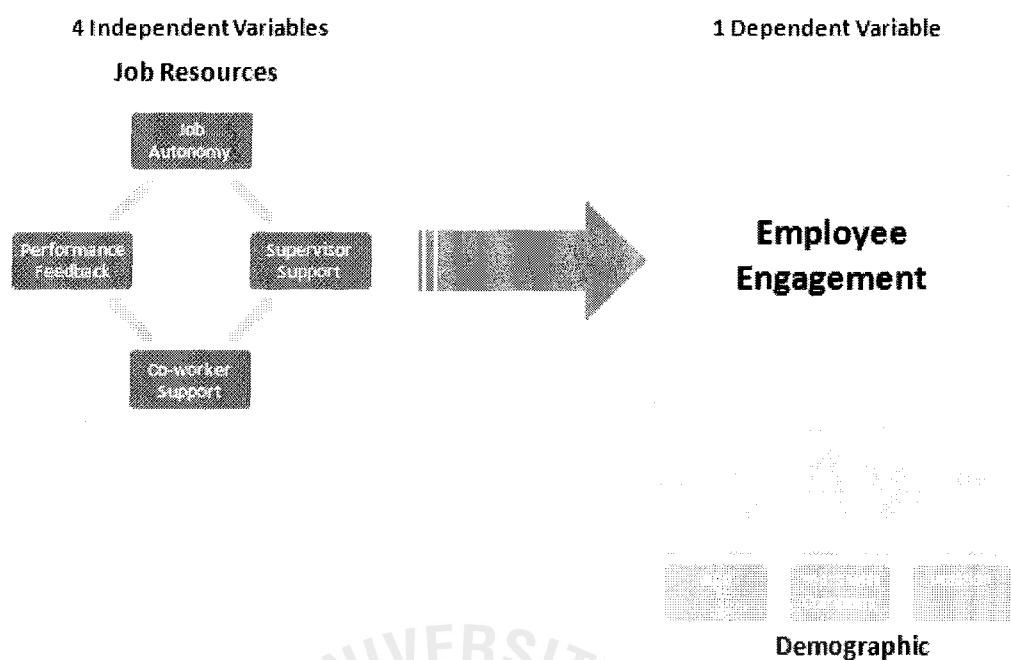
Figure 15. Conceptual Framework

Job Resources (supervisor support, job autonomy, performance feedback and co-worker support) are represented as a set of independent variables to test the positive relationship with employee engagement which is a dependent variable. Demographic (Age, Years with company, and Position) are tested with employee engagement to investigate whether demographics has an effect on the level of employee engagement.

From the company assessment, the researcher proposed OD Action research that conducts interventions to increase job resources in a company, so that the level of employee engagement can increase. There are many variables of job resources that can help improve employee engagement. In this study, the researcher selected four variables of job resources as follows:

1) Supervisor Support – supervisor support means how supervisors or leaders build a positive work environment by paying attention to their employees, creating teamwork environment and helping solve work related problems. They are also able to get people to work together in order to get the job done. From the company analysis, it was found that

supervisors in the focal company lacked leadership skills; most of them were promoted to be supervisors due to their long service and good technical skills. They focused only on tasks and lacked focus on people. So it was crucial to build leadership for supervisors or leaders in order to help them motivate and manage their staff.

2) Job Autonomy – job autonomy means freedom of employees to make a decision about their work and plan their own work activities. The focal company is a manufacturing company and operated by customer orders. Staff tended to work as a routine and followed whatever the supervisors/managers ordered. This limited productivity and creativity, as the staff were the ones who know the most about their tasks; supervisors should therefore give them freedom to decide what was best for them.

3) Performance Feedback – performance feedback means the ability to know how well the workers perform their jobs, both good and bad. In company X, there was only one feedback which was annual performance and it was too late for the staff to improve or adjust themselves. Staff wouldn't know whether their work or performance meets objectives at the end of the year. Employees should receive feedback regularly as good feedback can help motivating them and bad feedback can help them improve in time.

4) Co-worker Support – co-worker support means employees help each other in getting a job done and care for each other. Co-worker support helps create a positive work environment and team work especially a cross-functional team.

Those variables are suitable for this research as they address the key issues from company analysis and were able to implement in a short period. In addition, they have been studied and proven that those variables of job resources (supervisor support, job autonomy, performance feedback and co-worker support) can increase the level of employee engagement (Bakker & Demerouti, 2008; Schaufeli & Bakker, 2004b; Rothmann & Jordaan, 2006; Halbesleben, 2010; Mauno, Kinnunen, Mäkikangas, & Feldt, 2010; Rhenen, 2008).

2.5   Action research Framework

The Action research framework consists of three key stages and is illustrated in Figure 16.
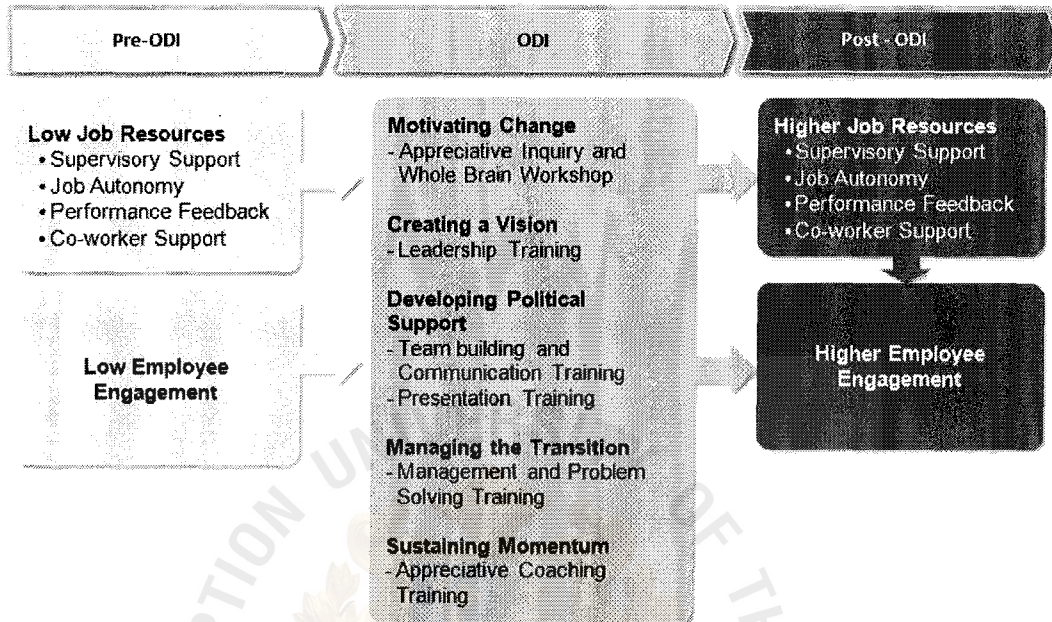
Figure 16. Action research Framework

Pre-ODI

In this stage, the focal company is fully assessed through quantitative and qualitative methods such as one-to-one interview, questionnaires, observation and report analysis. The purpose of this assessment is to understand the current situation, attitudes, behaviour of participants. All data will be collected, analysed and compared with the post-ODI.

Interventions (ODI)

OD Intervention (ODI) includes activities, actions, sequenced planned actions to help an organization to change or move to the desired stage (Cummings & Worley, 2008). Cummings & Worley (2009) defines effective intervention must meet three criteria listed hereunder.

1. It fits with the needs of the organization's meaning, that intervention must be relevant to the organization and its members, it must link to organization aspiration and how the organization functions.

2. Causal knowledge of intended outcomes meaning that the results must be based on valid knowledge that outcome can really produce

3. Enhanced organization capacity to manage change, meaning that ODI should help organization members increase their competency. They should gain knowledge and skills during intervention via participated activities and able to manage and sustain change by themselves.

In order for an OD practitioner to select an appropriate intervention, he/she must know the potential results of the technique whether it can really work in the client organization and whether clients accept these techniques (Brown, 2011). This stage objective is to improve job resources and the level of employee engagement in the focal company.

Post -ODI

Post-ODI is an evaluation stage after interventions have been conducted. The final goal is to improve the level of employee engagement; the same questionnaire used for the pre-ODI was used to compare the results.

Chapter 3

Research Methodology

The ultimate goal of this study is to improve employee engagement through the improvement of job resources. This chapter describes the research methodology covering the research design, research instruments, analysis tools, OD interventions, and data gathering procedure and analysis.

3.1   Research Methodology

This study used both qualitative and quantitative methods in the collection and analysis of data.

Quantitative Method

Survey was the main tool used in gathering the perceptual data on job resources and employee engagement.

Qualitative Method

Interview was the main instrument used to understand the opinions of management with regard to work environment and engagement behaviours witnessed both after and before the ODI. One-on-one interviews were conducted in order to seek both feedback and insight on employee engagement.

3.2   Research Design

The research approach employed in this study was action research as it was designed not only to investigate the relationship between job resources and employee engagement, but also to conduct the actual interventions in the focal company. The approach was the most preferred method as it enabled knowledge creation orientation which normally arises in the practical context and expects the researcher to operate with employees.

Action research

Action research is about studying and undertaking action. It is about improving the organization through interventions which involves careful planning, action, reflection, re-planning and validating via the method of collaboration and interaction between client system and OD practitioner (Coghlan & Brannick, 2001). Action research Model (Cummings & Worley, 2008) is shown in Figure 17 below.
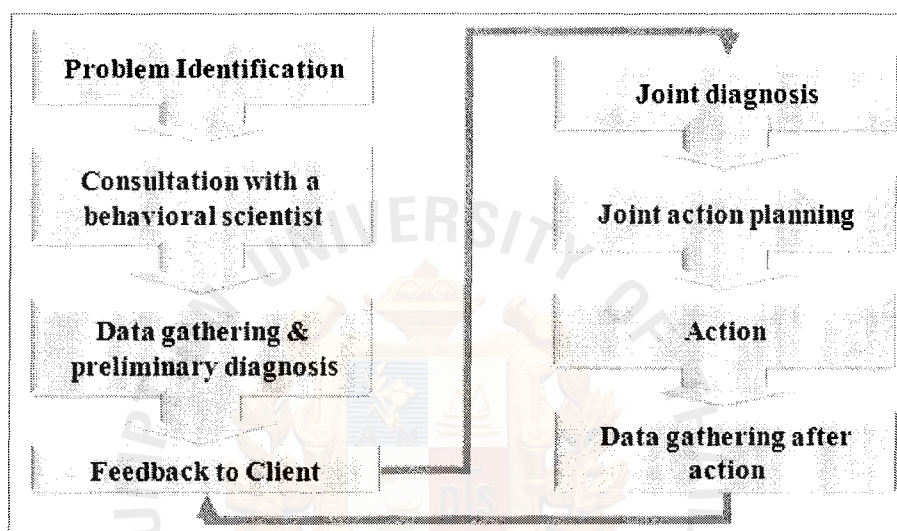
Figure 17. Action research Model. Source: Cummings & Worley (2009)

1) Problem Identification – Starts with someone who is powerful such as executive senses that the organization has something wrong and needs to be fixed by experts

2) Consultation with Behaviour Science expert – OD practitioners and clients discuss the problems together by sharing assumptions and values to get a collaborative relationship.

3) Data Gathering and Preliminary Diagnosis –OD practitioners identify problems through interviews, observations, questionnaires.

4) Feedback to a key client – OD practitioners present the diagnosed data to a client to gain feedback.

5) Joint Diagnosis of Problem – OD practitioners and organization's members together discuss and explore the identified problems and agree together for working on those problems.

6) Joint Action Planning –OD practitioner and organization's members agree together on actions and plans for those actions.

7) Action – Execution of actions and actual change happen at this stage, moving from one stage to a desired state.

8) Data Gathering after Action –In order to determine the effects, data gathering must be performed after the action, which might lead to re-design or new actions.

OD Intervention involves collaboration between the client and members and the OD practitioner; there are four types of OD intervention:

1. Human Process Intervention – focuses on process and people, to achieve the organizational goal i.e. leadership, interpersonal relations and problem solving

2. Technostructural Intervention – focuses on technology, structure, hierarchy, task and job design

3. Human Resource Management Intervention – focuses on developing, integrating and supporting people in the organization i.e. career planning, reward system, goal setting and performance appraisal.

4. Strategic Intervention – focuses on linking an organization to the larger environment, consider organizationa wide i.e. organization design, culture change, integrated strategic change, self-designing organization.

Figure 18 shows four types of OD intervention and the primary effect at an organizational level.

INTERVENTIONS	Primary Organization Level Affected		
	INDIVIDUAL	GROUP	ORGANIZATION
Human process			
Process consultation		X	
Third-party interventions	X	X	
Team building		X	
Organization confrontation meeting		X	X
Intergroup relations interventions		X	X
Large-group interventions			X
Technostructural			
Structural design			X
Downsizing			X
Reengineering		X	X
Parallel structures		X	X
Total quality management		X	X
High-involvement organizations	X	X	X
Work design	X	X	
Human resources management			
Goal setting	X	X	
Performance appraisal	X	X	
Reward systems	X	X	X
Coaching and mentoring	X		
Career planning and development interventions	X		
Management and leadership development	X		
Workforce diversity interventions	X	X	X
Employee stress and wellness interventions	X		
Strategic			
Integrated strategic change			X
Organization design			X
Culture change			X
Self-designing organizations		X	X
Organization learning and knowledge management		X	X
Built to change			X
Merger and acquisition integration			X
Strategic alliance interventions			X
Network Interventions			X

Figure 18. Types of OD Intervention. Source: Cummings & Worley (2009)

In summary, action research is about conducting interventions and evaluating the result as it takes place. It is about improving organizations through interventions which involve careful planning, action, reflection, re-planning and validating via the method of collaboration and interaction between the client system and OD practitioner (Coghlan & Brannick, 2001). The Action research framework is presented in Figure 2.8 and designed

interventions are presented in Figure 19; the detail of each intervention is described in detail in the next section.

Pre-ODI	Interventions	Post-ODI
Assessment • Interview • Questionnaire • Observation	**Motivating Change** -Whole Brain Workshop -Appreciative Inquiry Workshop **Creating a Vision** -Leadership & Management Training **-Developing Political Support** -Team building -Communication **Managing the Transition** - Leadership & Management Training **Sustaining Momentum** -Job Design -Appreciative Coaching	**Evaluation** • Interview • Questionnaire • Observation • Organization Performance Report

Figure 19. Designed Interventions

The researcher has already received an approval from the company to do a research study on this matter. According to Iltis (2006), it is important to avoid disrespecting the research survey respondents by not violating their dignity, autonomy and privacy. The researcher requires to respect the privacy and confidentiality of each research survey respondent by the law of confidentiality (Gregory 2003). In respect to that, the researcher will protect each of the research survey participants by keeping them anonymous at all times. Even though in the survey questionnaire the researcher asked participants to provide their name in order to compare between pre and post ODI survey, the researcher used the code to present in this study to remain anonymous; there are three main stages in the Action research, pre-ODI, intervention, and post-ODI as described below.

3.2.1 Pre-ODI Stage

The Pre-ODI Stage began with participant selection and kicked off the program to all participants; at this stage, the HR manager of the company selected 60 participants (30

participants for a control group and 30 participants for an experimental group). In addition, the researcher conducted one-on-one interviews with management members to understand the current job resources and employee engagement; the data was gathered by qualitative method (observations and interviews).

After selecting participants, the researcher gathered data via a questionnaire as a quantitative method. The job resources and employee engagement questionnaire was distributed to all 60 participants to answer about the current job resources and employee engagement. The questionnaire is displayed in Appendix D. The purpose of gathering data at this stage was to understand the current situation to help shape the interventions.

3.2.2 ODI Stage

The ODI Stage involves the execution of interventions. Those interventions were designed to improve job resources (supervisor support, Job autonomy, performance feedback and co-worker support) and employee engagement. The whole intervention process took six months (June – November 2013). The main purposes of ODI process were:

1) To develop job resources in the focal company.

2) To develop skills and competency of participants in leadership, team building, communication, problem solving and coaching.

3) To develop and utilize the whole brain concept and thinking preference.

Interventions were executed in the experimental group only. The control group did not receive any intervention; the researcher did not use the placebo intervention on the control group. The placebo effect occurs in medical studies where some patients are given a simulated or medically ineffectual treatment as a cure for a disease or a condition in order to deceive the patient, when the medicine is called a placebo (Sharmar, Dwivedi, & Rawat, 2013). According to Rosenthal and Frank (1956), psychological studies are not effective in using a placebo as participants cannot be interviewed or engage in interventions for hours

without knowing that the analysis is a placebo or the real activity. It is not like taking a pill, where participants do not know what is inside. Similar results were found in a research by Boot, Simons, Stothart, & Stutts (2013), using the active control group or giving a placebo intervention to the control group in psychology study will not guarantee the placebo effect; it is therefore hard to use the placebo in psychology unlike in medical treatments.

The researcher designed interventions based on Whole brain Literacy and Appreciative Inquiry concepts as described below.

3.2.2.1 ODI Design Stages

The ODI process is designed based on effective change management from Cummings and Worley (Cummings & Worley, 2009, p.164) and Whole Brain Literacy (Tayko & Reyes-Talmo, 2010). The researcher grouped those activities into the whole brain concept to ensure the whole system thinking of a process, displayed in Figure 20.
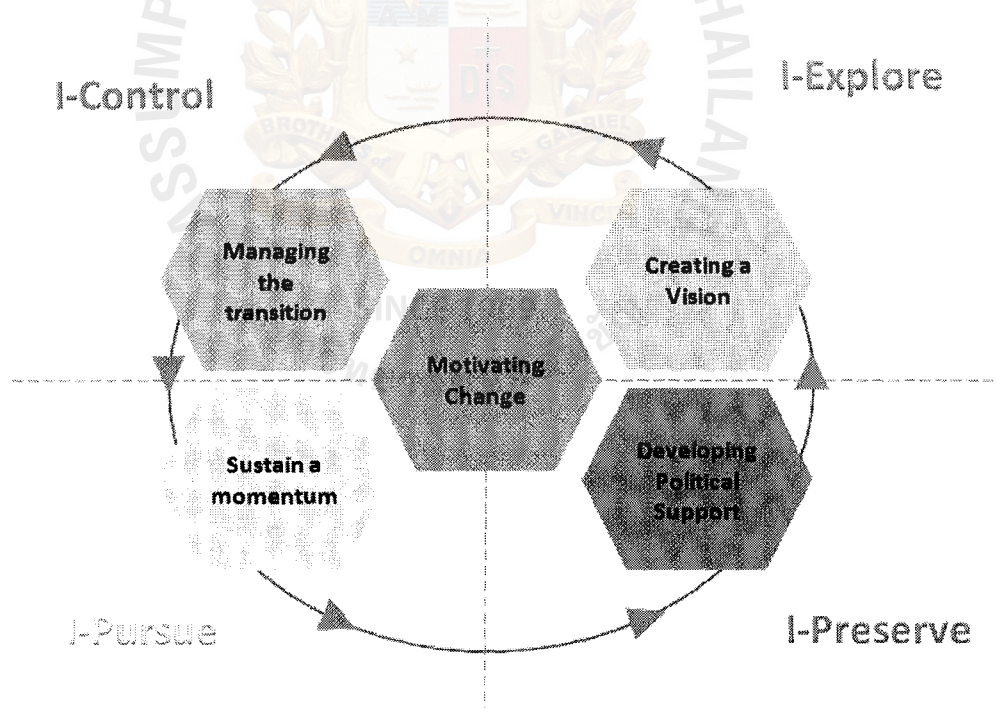
Figure 20. Activities Contributing to Effective Change Management

Source: Adapted from Cummings & Worley (2009). *Organization development and change 9th edition.* and Tayko, P. R., & Reyes Talmo, M. L. (2010). *Whole Brain Literacy: Key to Wholistic Education and Success in Today's World.*

The summary of ODI interventions are displayed in Table 2 and the action research plan is displayed in Figure 21.

Table 2

Summary of OD Interventions

Effective Change Management Stages	Objectives	OD Interventions	Job Resource Mapping	Company X's SWOT Mapping
Motivating Change	1. To learn the theory and practice of Appreciative Inquiry (AI) 2. To tap into strengths, inspired future and positive energy to achieve better employee engagement 3. To engage a whole team to find an effective solution 4. To experience the benefit of reframing problems into opportunities. 5. To introduce whole brain concept and thinking preference 6. To understand the strength and weaknesses of individuals and how to use the whole brain to function.	1. Workshop – Appreciative Inquiry and Whole Brain Workshop (1 Day) • Introduction and Workshop Objectives • Change Management and Why • Appreciative Inquiry Concept • 4D cycle and employee engagement group exercise • Whole brain concept • How to make the whole brain to function • Whole brain exercise on job resources	- co-worker support - supervisor support - performance feedback - job autonomy	- Lack of soft skills (Analytical) - Innovation and Participation from Staff - New Technology (Change) - Change in Customer Preferences
Create a Vision	1. To understand different leadership styles and apply the right style in different situations 2. To be able to influence people to get things done 3. To gain cooperation at every level and empower others to deliver results	2. Training - Leadership (0.5 Day) • Introduction and Training Objectives • Meaning of Leadership • Leadership Style • Leader vs. Manager	- supervisor support	- Lack of Leadership skills

Effective Change Management Stages	Objectives	OD Interventions	Job Resource Mapping	Company X's SWOT Mapping
Developing Political Support	1. To introduce DISC personality and how to manage different personality styles 2. To understand the team building process 3. To introduce task management and how to delegate tasks effectively 4. To understand verbal and non-verbal communication 5. To enhance active-listening skills to avoid misunderstandings 6. To communicate effectively with people at all levels 7. To build collaborative relationships that emphasize trust and respect 8. To understand the key importance of a presentation 9. Use body language to be more effective in presentations 10. Handle questions professionally	3. Training – Communication & Team Building (0.5 Day) • Introduction and Objectives • DISC Personality • Teambuilding process (Forming, Storming, Norming, Performing) • RACI • Type of communication • Active listening 4. Training – Presentation (0.5 Day) • Introduction and Training Objectives • Presentation skill • Questioning and Answering Techniques Presentation Exercise	- co-worker support	- Lack of soft skills (Communication) - More demands from AEC (needs communication and Presentation skills for Sales)
Managing Transition	1. Management Process (Planning, Organizing, Staffing, Directing) 2. Problem Solving process 3. Problem Solving techniques (Five Why, Mind map, Fishbone)	5. Training – Management and Problem Solving (0.5 Day) • Introduction and Training Objectives • Management Process • Management of Meeting • Analytical thinking • Problem solving tools and techniques	- job autonomy	- Big skill gaps between manager and supervisor level - Lack of soft skills (Analytical)

Effective Change Management Stages	Objectives	OD Interventions	Job Resource Mapping	Company X's SWOT Mapping
Sustaining Momentum	1. To coach others using a strengths-based process 2. To motivate others through strengths and possibilities 4. To incorporate positive language and positive inquiry into new coaching practices 5. To understand and offer constructive feedback and apply it to day to day work	6. Appreciative Coaching (0.5 Day) • Five principle of appreciative coaching • Appreciative Coaching Technique • Performance Appraisal Technique • Feedback	- performance feedback - supervisor support	- Big Skill gaps between manager and supervisor level - Flow out of talented workforce after the AEC is commissioned - Lack of leadership skills

	M1 May-13				M2 Jun-13				M3 Jul-13				M4 Aug-13				M5 Sep-13				M6 Oct-13				M7 Nov				M8 Dec-13			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Pre-ODI Kick off Project	x																															
Pre-ODI Data Gathering (Pre-ODI Survey)		x	x																													
Pre-ODI Data Gathering (Pre-ODI Management Interview)				x	x																											
Pre-ODI Organization Performance Report Collection					x																											
ODI Appreciative Inquiry and Whole Brain Workshop					x																											
ODI Leadership Training									x																							
ODI Team building and Communication Training													x																			
ODI Presentation Training														x																		
ODI Management and Problem Solving Training																			x													
ODI Appreciative Coaching Training																									x							
Post-ODI Data Gathering (Post-ODI Survey)																									x	x	x					
Post-ODI Data Gathering (Post-ODI Management Interview)																											x	x				
Post-ODI Organization Performance Report Collection																													x			
Post-ODI Data Analysis																													x	x	x	x

▲ Individual Reflection and Trainign Evaluation Form

Figure 21. Action research Plan

The linkage of ODI and job resources is described in table 3.

Table 3

Linkage of ODI to job resources

job resources	Operational Definition	Interventions supported job resources
Supervisor Support	Supervisors have the ability to bring people to work together and get the job done. It also includes how supervisors or leaders build a positive work environment by paying attention to their employees, creating teamwork environment and helping solve work related problems.	*Leadership Training* *In this training, the intervention taught them that a good leader / supervisor must pay attention to their staff from both the task and people side. It also emphasized on techniques influencing and motivating staff to achieve common goals.* *Management Training* Management concept to get the work done by planning, organizing, staffing and directing. Good management helps structure the process and policy so that the staff know what they have to do and get people on the same page. *RACI* A technique to delegate work or assign work when they have many people/parties involved. RACI helps to eliminate finger-pointing and task duplication. This helps supervisors/managers to assign work more effectively.
Job Autonomy	Freedom of employees to make decisions on their work and plan their own work activities.	*Leadership Training* In this intervention, the researcher introduced consultative and participative leadership styles which encouraged participation in decision-making, gives freedom to plan their work and supported them whenever they needed help instead of giving orders and asking the staff to obey him/her. *Problem Solving Techniques* This intervention focused on the analytical thinking process and problem solving tools to help the staff find the root-causes of the problems in order to solve find the right solution. This intervention helps the staff to solve problems by themselves more effectively so that they can plan and manage their own work.

job resources	Operational Definition	Interventions supported job resources
Performance Feedback	Ability of the employees to know how well they perform their jobs and what are the area of improvement.	*Appreciative Coaching* Appreciative Coaching (AC) brings out the strengths from the staff and find possibilities to improve. This intervention included coaching skills, coaching process and coaching techniques to help groom the staff for a better work performance. *Constructive Feedback & Feedback Form* This intervention taught participants how to give constructive feedback that can benefit both the staff and supervisors. The researcher also explained the feedback process, techniques and feedback form that can be used regularly during the tasks or projects.
Co-worker Support	Employees help each other in getting a job done, care and trust each other.	*DISC* Know your style and how to communicate effectively with other styles. Each person has different styles, learning what their styles are and what they like can help improve the relationship and create a more efficient team work. *Communication and Teamwork Training* How to build good teamwork, team development process, conflict handling methods; for team work, the interventions addressed characters of an efficient team and how to manage conflict to ensure good relationship and at the same time achieve the goals. *Appreciative Inquiry* Use a positive concept, finding strengths to develop dreams together. AI improves the working environment from pin-pointing the issues to finding opportunities and building from strengths. It helps improve the working relationship and atmosphere.

3.2.3 Post-ODI Stage

In Post-ODI, the managers were engaged in a one-to-one interview to measure job resources and employee engagement after interventions; also, all participants, both the control and experimental group were administered job resources and employee engagement questionnaires to compare between Pre and Post ODI. All these measurements intend to evaluate the impact of ODI on job resources and employee engagement. In addition, there is a comparison of the organization performance for 2012 and 2013 for the duration of ODI (June – November).

3.3   Subjects of the Study

The experimental and control groups were selected by the HR manager of the focal company. The selection of subjects was based on "purposive sampling" method. Purposive sampling or selective sampling is a non-probability sampling focusing on the judgement of the researcher.

Initially, there were 30 participants each in the control group and experimental group. Participants were selected by a HR manager from the company. The criteria used for selection was, to have members from all departments to represent the company; originally each group consisted of 14 participants from the factory, 10 participants from the sales department and two participants from the human resources department, and three participants from the finance department and one participant from the administrative department. During the research period, two people had resigned and two more people dropped out from the control group and three people dropped out from the experimental group as they were unable to attend the interventions. Finally, there were 27 participants in the experimental group and 26 participants in the control group. Table 4 and Table 5 show the subjects of the study.

Table 4

Subjects of study (Experimental group)

Department	Frequency	Percent	Remark
Factory	11	41%	3 drop out from program
Sales	10	37%	
HR	2	7%	
Finance	3	11%	
Admin	1	4%	
Total	27	100%	

Table 5

Subjects of study (Control group)

Department	Frequency	Percent	Remark
Factory	14	54%	
Sales	9	35%	1Resign from company
HR	0	0%	2 drop out from program
Finance	2	8%	1Resign from company
Admin	1	4%	
Total	26	100%	

The experimental group was the group that was involved in interventions, while the control group was the group that did not involve in any intervention or activity during the ODI process.

3.4   Tools and Instruments

Data gathering tools were used in both pre-ODI and post-ODI. To ensure quantity and quality in a short period, both quantitative and qualitative methods were used to monitor the change of variables between Pre and Post ODI. To avoid misunderstanding or interpretation, all questionnaires were translated into Thai. Some questionnaires had already been translated into Thai version by other researchers used in previous studies.

The researcher conducted a pilot test with fifteen employees, randomly selected by the HR of the focal company. These fifteen employees were not part of the control or experimental group. The purpose of the pilot test was to determine the employee engagement survey's questionnaire translation; both validity and reliability tests were conducted during the pilot test.

Furthermore, all questionnaires were designed by the researcher subjected to the validity and reliability tests. Reliability means the level to which the data collected from the research can be affected by any external happenings which may occur after the research has been carried out . The researcher used Cronbach's alpha for the reliability test. Validity

basically means the best manner in which the data collected can be interpreted; the researcher used the content validity test by three peer reviews to ensure the meaningfulness of the translation.

3.4.1 Qualitative Method

A one-on-one interview with both scale and open ended questions were used in this method because they are flexible and can provide a good platform for the respondents to as a number of questions which are not inclusive on the questionnaire in order to get quality data; they gave the respondents the freedom to answer.

To gain a deeper understanding, manager interviews and work observations were applied to this study; an interview question was developed to gather feedback from all the managers and the interview sessions were conducted in Thai focusing on pre-ODI and post-ODI stages.

Instrument # 1 (see Appendix A) was designed for managers. The instrument consisted of the rating and open-ended questions to measure both the independent and dependent variables during pre-ODI and post-ODI stages; the classifications of instruments are presented in Table 6.

Table 6

Classification of Instrument # 1

Classification of Questions	Question No.
1. Job Autonomy	1
2. Supervisor Support	4
3. Co-worker Support	2
4. Performance Feedback	3
5. Employee Engagement	5,6,7,10

Instrument # 2 (see Appendix B) was designed for the researcher to capture the reflection during the ODI process. The observation focused on the behaviour of the participants, reflection from activities and the utilization of whole brain concept.

Instrument # 3 is BrainMap™ Test, the brain mapping self-assessment (The BrainMap, 1981-2008) was used to diagnose the overall functioning of a company. It is measured into four quadrants of whole brain literacy framework. The assessment is designed for the management team of the company; due to the copyright protection rules, the BrainMap assessment was not included in the Appendix.

Instrument # 4 (see Appendix C), the participant logbook; this was to keep records and reflections of participants after each intervention.

3.4.2 Quantitative Method

The questionnaire and organization performance comparison reports were developed to support this study.

Instrument # 5 (see Appendix D) was a Job Resource and employee engagement questionnaire. The questionnaire developed for this study included some representative items from several widely used instruments. Part I asked about age and name. Part II job resources, this section was divided into four subsections which were supervisor support (four item from job content questionnaire (Karasek, 1985)); job autonomy (11 item from experience and assessment of work (Van Veldhoven and Meijman, 1994)); performance feedback (three items were adapted from "The measurement of job characteristics", (Sims, Szilagyyi & Keller 1976)); co-worker support (four items from job content questionnaire (Karasek, 1985)). Part III employee engagement, this study used the Bakker's model which bases its measure of engagement on the Utrecht work engagement scale (Johnson, 2004). The original subscale on this scale is vigor, which has been represented by five items and is used to reflect elevated energy levels, persistence and resilience. The next subscale is on dedication and is

represented by six items just like the first subscale and it reflects enthusiasm, a sense of purpose, pride, inspiration and challenge at work. The third subscale is on absorption and it is based on measuring the level to which employees are absorbed in their respective performances (Colquit, 2001). Factor analysis confirmatory test has been used to authenticate the three facets in different notions (Kowalska, 2003). The classifications of Instruments are presented in Table 7.

Table 7

Classification of Instrument # 5

Classification of Questions	Question No.
1. Job autonomy	Part II, Section 2.1, items 1-11
2. supervisor support	Part II, Section 2.2, items 1-4
3. co-worker support	Part II, Section 2.3, items 1-4
4. performance feedback	Part II, Section 2.4, items 1-3
5. employee engagement	Part III, items 1-17

Instrument # 6 (see Appendix F) is a training evaluation form. It was designed to give all participants to evaluate the result after each ODI activity. It will help the researcher to understand feedback from training and workshop in order to improve the next interventions. Also, the evaluation form will help the researcher to evaluate whether that activity matches with work context, application for work situation and improvement of job resources.

Instrument # 7 (Appendix G) is the organization performance report that is used to present the comparison of the performance metrics in 2012 and 2013 for the period during the ODI (June – November). There are five measurements which are absenteeism rate, Employee turn over rate, % defect rate, gross profit and the number of customer complaints; measurements have been mutually agreed between the researcher and the focal company.

All instruments were translated into Thai due to the language barrier. The researcher used back translation to ensure the correct meaning. The researcher was aware of the Thai culture and the implications when translating a questionnaire. Cultural implications of translations take many forms including lexical content, syntax, ideologies and ways of life of a given culture. All these cultural aspects are to be kept in mind by any translator while translating a given language to another in order for one not to lose the meaning or to disrespect a given culture (Faull, 2004).

3.5 Data Collection

The data collection schedule was for six months. Each instrument was used in different timeframe. The data came from the researcher, managers, experimental group and control group; the data collection plan is shown in Table 8.

Table 8

Data Collection Plan

Instrument	Pre-ODI	ODI	Post ODI
1. job resources and employee engagement Interview questions	Managers		Managers
2. Logbook for the researcher		Researcher	
3. Brain Map Assessment		Manager	
4. Logbook for the participants		Experimental group	
5. Employee Engagement Questionnaire	Experimental & Control groups		Experimental & Control groups
6. Training Evaluation Form		Experimental group	
7. Organization Performance Report			Researcher

3.6 Data Analysis

The data analysis methods were varied with the instrument types. The researcher consulted a statistician[1] to validate the statistical tools for each instrument. Table 9 explains the analysis of each instrument.

- Content analysis was used to investigate qualitative data from interviews, logbooks and training evaluation form.

- Arithmetic Mean and Standard Deviation were used to the obtain respondent's average scores and variation or dispersion of scores.

- Percentage was used for demographic calculation

- ANOVA was used to determine the affects of age group and years with the company for employee engagement. ANOVA was used to determine whether there were any significant differences between the means of three or more independent (unrelated) groups. The independent variable in ANOVA must be categorical (either nominal or ordinal) and the dependent variable must be scale (either interval or ratio) (Vanichbuncha, 2010). In this test, the population was in a normal-curve and the independent variables were age group and years of work with the company group which was nominal data, while the dependent variable was employee engagement which was ratio data; therefore, ANOVA was used.

- Independent Samples t-test was used to determine the affects of positions on employee engagement. Independent Samples t-test was used to test whether there is a statistically significant difference between the mean of two unrelated groups (Vanichbuncha, 2010). In this test, the two groups were staff and supervisor.

- Paired t-test was used to compare the pre and post ODI of job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee

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[1] Anongpat Koolmongkolrat, Researcher of Nation 1997, National Research Council of Thailand.

engagement. The procedure was distributing the questionnaire in pre and post ODI, the researcher asked the participants to write down their names for the purpose of comparison between pre and post ODI in both experimental and control groups.

- Pearson Correlation was used to determine the relationship of job resources (supervisor support, job autonomy, performance feedback and co-worker support) on employee engagement.

- Percent improvement of job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement was used to compare the differences of experimental and control groups at the post-ODI stage.

Table 9

Data Analysis Methods

Instrument	Data Analysis Method
1. job resources and employee engagement Interview questions	Arithmetic Means , Content Analysis
2. Logbook for the researcher	Content Analysis
3. Brain Map Assessment	Content Analysis
4. Logbook for the participants	Content Analysis
5. job resources and employee engagement Questionnaire	Arithmetic Means, Standard deviations, Percentage, ANOVA, Independent Samples t-test, Paired t-test, Pearson Correlation
6. Training Evaluation Form	Arithmetic Means, Content Analysis
7. Organization Performance Report	Accumulated result (Jun-Nov)

In this study, the researcher used a p-value of 0.05 (5%) to test the hypothesis to determine whether the result was statistically significant ($p < 0.05$). According to Norman and Streiner (2008), p-value is usually set at 0.05 (5%). A statistically significant p-value for obtaining the result was less than 5% ($p < .05$) (Healey, 2007).

3.6.1 Quantitative Data Analysis for Pre-ODI

job resources

- Mean and Standard Deviation of supervisor support

- Mean and Standard Deviation of job autonomy

- Mean and Standard Deviation of performance feedback

- Mean and Standard Deviation of co-worker support

employee engagement

- Mean and Standard Deviation of employee engagement

Effect of age, years of employment and position held on Employee engagement

- Analysis of Variance (One-way ANOVA)

- Independent Samples T-test

3.6.2 Quantitative Data Analysis for Post-ODI

job resources

- Mean and Standard Deviation for supervisor support

- Mean and Standard Deviation for job autonomy

- Mean and Standard Deviation for performance feedback

- Mean and Standard Deviation for co-worker support

employee engagement

- Mean and Standard Deviation for employee engagement

Comparison of Pre and Post ODI

- Paired sample test for supervisor support

- Paired sample test for job autonomy

- Paired sample test for performance feedback

- Paired sample test for co-worker support

- Paired sample test for employee engagement

Relationship between job resources and employee engagement

- Pearson Correlation between supervisor support and employee engagement

- Pearson Correlation between job autonomy and employee engagement

- Pearson Correlation between performance feedback and employee engagement

- Pearson Correlation between co-worker support and employee engagement

Organization Performance

- Accumulated June to November of 2012 and 2013

  o Absenteeism Rate ((total days lost x 100)/ (total available working days x total employees))

  o Employee Turnover rate ((total number of staff who left x 100)/total staff). This counts only voluntary turn over.

  o Defect Rate ((total square meter of defects / total square meters of production)*100)

  o Number of customer complaints

  o Gross Profit Margin ((Sales – Cost of goods sold) / Sales)

3.6.3 Data Analysis on comparison between Experimental and Control group

Job Resources

- Percent improvement between Pre and Post ODI's mean score for supervisor support

- Percent improvement between Pre and Post ODI's mean score for job autonomy

- Percent improvement between Pre and Post ODI's mean score for performance feedback

- Percent improvement between Pre and Post ODI's mean score for co-worker support

Employee Engagement

- Percent improvement between Pre and Post ODI's mean score for employee engagement

3.6.4   Qualitative Data Analysis for Pre and Post ODI

The researcher used content analysis technique to analyse the qualitative data. The technique was used to analyse data from interviews which included rating and to be free-form answers. First, the researcher noted down interview answers during the interviews and then carefully reviewed all the interview notes and developed common and key themes for job resources and employee engagement. In addition, the researcher observed the day-to-day working style at both the factory and office to validate the results from interviews. The qualitative data was conducted to see an alignment with quantitatives result.

3.7   Reliability and Validity Test

To test the reliability of the questionnaire, the researcher conducted a pilot test with 15 employees. Those pilot participants worked in company X and did not participate in either the experimental or control groups. The reliability test was conducted before the pre-ODI to ensure the reliability of the research instruments (Instrument#5) which should have high internal consistency. Responses were analyzed by SPSS using Cronbach's alpha coefficient. Cronbach's Alpha was reported at 0.909 as shown in Table 10 and detailed in Appendix H.

Since Cronbach's Alpha was higher than 0.75, it can be considered that this questionnaire had

a high reliability (Coolican, 2004).

Table 10

Cronbach's Alpha test of Instrument#5

Questionnaire	Cronbach's Alpha	No. of Cases	No. of Items
Instrument #5 – job resources and employee engagement questionnaire	0.909	15	39

The researcher used the content validity test by three peers[2] (Ph.D. in Organization

Development) to ensure the translation meaningfulness; the researcher used three peer

reviews at this stage.

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[2] Three peers are (1) Dr. Pongpanu Damrongsiri, Ph.D. in Organization Development; (2)
Dr. Achara Ratanaphunsri, Ph.D. in Organization Development, (3)Dr. Krittiya Talomsin, Ph.D. in Organization
Development.

Chapter 4

The Findings, Analysis, and Interpretations of Data

This chapter presents the findings, analysis and interpretations of the data collection based on the action research conducted at company X over six months, from 7 May – 8 November 2013. The quantitative and qualitative findings of the experimental group is described according to Pre-ODI, ODI and Post-ODI stages along with the research questions and research hypotheses in the following sections.

The researcher also set up a control group which received no intervention to compare the impact of ODI during pre and post ODI stages, the comparison results between experimental and control groups is described in section 4.5.

4.1   Demographic Profile

4.1.1   Age

Table 11

Frequency distribution by Age

Age	Frequency	Percent
25-30	4	15%
31-35	5	19%
36-40	6	22%
41-45	6	22%
46-50	4	15%
51 +	2	7%
Total	27	100%

From table 11, the age of participants was mostly between from 36-45 years old (44% or 12 people).

4.1.2 Years with the company

Table 12

Frequency distribution by Years with company

Years with Company	Frequency	Percent
0-2	5	19%
3-5	3	11%
6-10	7	26%
11-15	3	11%
15+	9	33%
Total	27	100%

From table 12, the majority of participants worked more than 15 years with the company (33% or 9 people).

4.1.3 Position

Table 13

Frequency distribution by Position level

Position	Frequency	Percent
Supervisor and up	12	44%
Staff	15	56%
Total	27	100%

From table 13, the majority of participants were in staff position (56% or 15 people).

4.2 Quantitative and Qualitative Analysis of Pre-ODI phase

Quantitative analysis of job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement before performing ODI is presented herein by using the statistical mean; the questionnaire (Appendix D) had been distributed during 7-17 May 2013.

Qualitative analysis of job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement had been captured by interview (interview questions in Appendix A) with five management members from sales, human

resources, operations and finance departments of the focal company in June 2013 and by the researcher's observation during the study. Qualitative analysis was implemented to see whether there is an alignment with quantitative analysis. The detailed findings of each variable are explained in the following sections.

4.2.1 Pre-ODI status of job resources

Job resources mean the aspects or resources that support the employees to achieve their work. It can be physical, psychological, social or organizational aspects that support work, reduce job demands or stimulate personal learning and growth such as career opportunities, supervisor support, role-clarity, feedback, co-worker and autonomy. The job resources used in this study are supervisor support, job autonomy, performance feedback and co-worker support.

Table 14

Quantitative data analysis on Pre-ODI for job resources

Variable	N	Mean (4-point Scale)	Std. Deviation
supervisor support	27	2.8519	.60946
job autonomy	27	2.6970	.52406
performance feedback	27	2.9259	.46532
co-worker support	27	2.9537	.55486

Table 14 indicates that the mean score for each variable of job resources. The mean for supervisor support, job autonomy, performance feedback and co-worker support were 2,8519, 2.6970, 2.9259, 2.9537 on a 4-point scale respectively. The highest score was co-worker support while the lowest score was job autonomy.
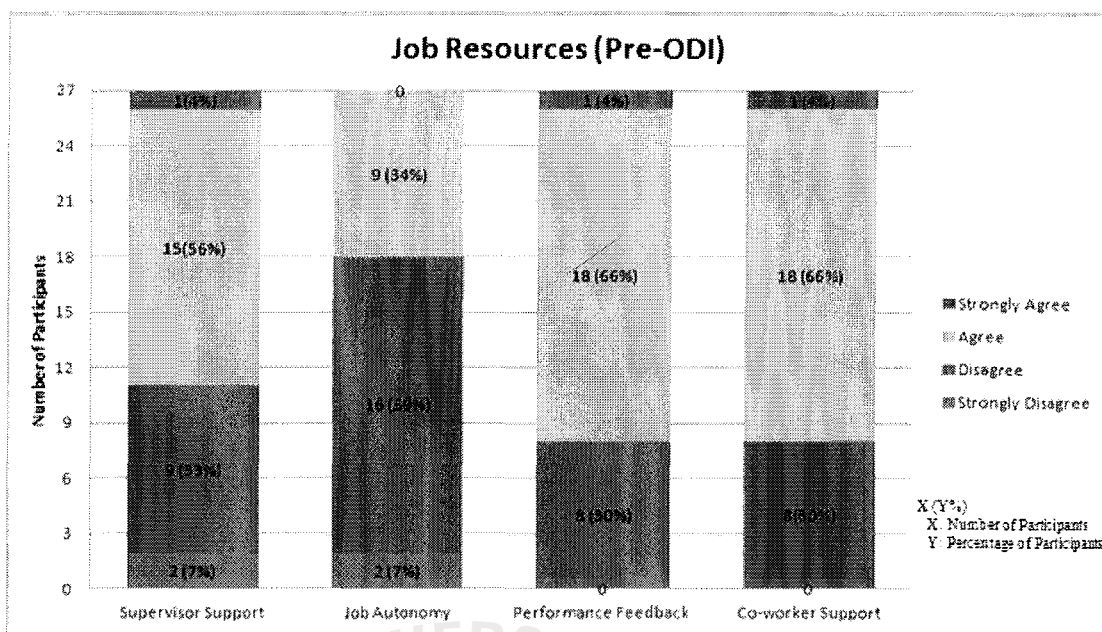
Figure 22. Percentage of Pre-ODI score for job resources

Figure 22 indicates that the majority of participants rated "Agree" for job resources provided by the company. A majority of the participants rated "Agree" for supervisor support, performance feedback and Co-worker support ((15, 56%), (18, 66%), (18, 66%) respectively) while a majority of the participants rated "Disagree" for job autonomy (16, 59%). The details of the findings for each variable are discussed as follows:

Supervisor Support

Supervisor Support means how supervisors or leaders build a positive work environment by paying attention to their employees, creating teamwork environment and helping to solve work related problems.

Table 15

Quantitative data analysis on Pre-ODI for supervisor support

Question	Number	Mean (4-point scale)	Std. Deviation
My supervisor is successful in getting people to work together.	27	2.8889	.84732
My supervisor is concerned about the welfare of those under him.	27	2.7037	.72403
My supervisor pays attention to what I am saying.	27	2.7778	.84732
My supervisor is helpful in getting the job done.	27	3.0370	.64935
Overall - supervisor support	27	**2.8519**	**.60946**

Table 15 indicates the mean score for supervisor support which was 2.8519 (*M*=2.8519, *SD* = .60946). The highest score was for supervisor helping them to get the job done while the lowest score was for concern on their welfare. The result indicated that the supervisor character of company X was more focused on being task oriented rather than being people oriented.

Figure23. Pie Chart showing score level in supervisor support

Figure 23 indicates that a majority of the participants (15 persons, 56%) rated "Agree" for supervisor support provided by the Company; two participants (7%) rated "Strongly Disagree", nine participants (33%) rated "Disagree", 15 participants (56%) rated "Agree", and one participant (4%) rated "Strongly Agree".

Qualitative analysis from both the researcher's observation and management interview also supported the quantitative results. The mean score from the management interview was 2.70 out of 4.00 which was similar to quantitative result. As company X is in the manufacturing industry, most of the work were routine jobs. Supervisors assumed that employees knew what they were doing and what they expect from them. There was not much communication from supervisors to employees. There was also no encouragement from the company to help supervisors communicate more with their own employees. There was no coaching culture in the company; it was mainly based on on-the-job training and focussed

only on the job itself; here are some excerpts from the management interview that support the results.

"Our company has routine work, people think that they know what they doing." (Interview with management members, Jun 2013)

"Nothing from the company helps support supervisor communication. Supervisors are open for employees to discuss but no one seems to come by." (Interview with management members, Jun 2013)

Supervisors at the company are more focussed in getting the job done. Their main interaction with their employees was about teaching the jobs but there was not much that was done for coaching them on soft skills or in improving their thinking foundation. (The researcher's observation, May 2013)

Job Autonomy

Table 16

Quantitative data analysis on Pre-ODI for job autonomy

Question	N	Mean (4-point scale)	Std. Deviation
Do you have freedom in carrying out your work activities?	27	2.5926	.84395
Do you have influence in the planning of your work activities?	27	2.8148	.83376
Do you have an influence on the pace of work?	27	2.4444	.84732
Can you decide how your work is executed on your own?	27	2.6296	.68770
Can you interrupt your work for a short time if you find it necessary to do so?	27	2.3704	.74152
Can you decide the order in which you carry out your work on your own?	27	3.0370	.75862
Can you participate in the decision about when something must be completed?	27	2.5926	.93064
Can you personally decide how much time you need for a specific activity?	27	2.3704	.88353
Do you resolve problems arising in your work yourself?	27	2.9630	.70610
Can you organize your work yourself?	27	3.2593	.81300
Can you decide on the content of your work activities yourself?	27	2.5926	.93064
Overall - job autonomy	27	**2.6970**	**.52406**

Table 16 indicates the mean score for job autonomy which was 2.6970 (M=2.6970, SD = .52406). The highest score was for freedom to organize their work while the lowest

score was for interrupting work for a short time and freedom to decide how much time was needed for an activity; since it was manufacturing work, interrupting the work or deciding how much time was required for work might not be an option as machines have to run 24/7 and it depends on customers' orders.
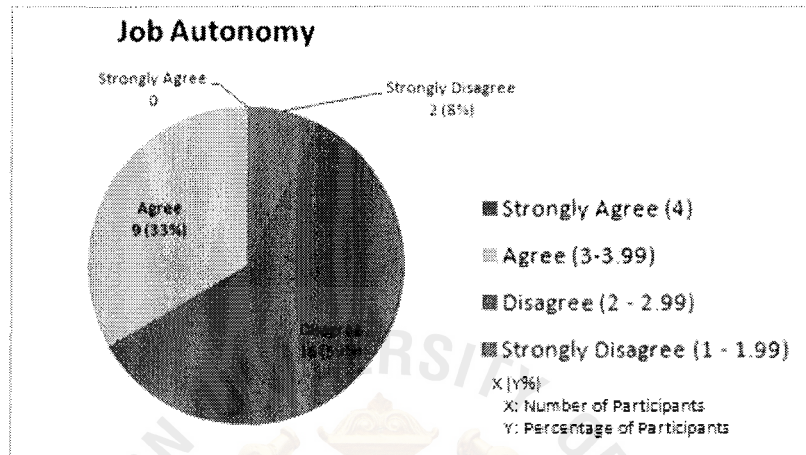
Figure 24. Pie Chart showing score level in job autonomy

Figure 24 indicates that the majority of participants (16 persons, 59%) rated "Disagree" for job autonomy provided by the company; two participants (7%) rated "Strongly Disagree", nine participants (33%) rated "Disagree", 15 participants (56%) rated "Agree", one participant (4%) rated "Strongly Agree".

Qualitative analysis from both the researcher's observation and management interview also supported the quantitative result. The mean score from the management interview was 2.60 out of 4.00 which was similar to quantitative results. The company operates on customer orders, most of the work schedule was decided by customers' orders. There were big skill gaps in the organization, most of the staff had high school level. Staff tend to work on routine and followed the supervisors/managers orders; here are some excerpts from the management interview that clearly support the result.

"Our staff do not have analytical skills, they are more at the execution level." *(Interview with management members, Jun 2013)*

"Sales people were not empowered to do any work; everything has to come back to their managers for approval. We should give them a certain level of approval, so that they can front customers and have the autonomy to make decisions. This will improve the response from customers and create satisfaction for the sales Team." (Interview with management members, Jun 2013)

Management tends to think that staff do not want to think, they prefer to follow orders, rather than thinking on their own as they are incapable and have low education. (The researcher's observation, May 2013)

Performance Feedback

Performance Feedback means the ability to know how well the workers perform in their jobs; it was aimed to know how effective of his/her work was.

Table 17

Quantitative data analysis on Pre-ODI for performance feedback

Question	N	Mean (4point scale)	Std. Deviation
This job provides feedback on how well I am doing as I am working.	27	2.8148	.55726
This job enables me to find out how well I am doing.	27	3.0000	.48038
This job provides me with the feeling that I know whether I am performing well or poorly.	27	2.9630	.64935
Overall - performance feedback	27	**2.9259**	**.46532**

Table 17 indicates the mean score for performance feedback which was 2.9259 (*M*=2.9259, *SD* = .46532). In Company X, there was an annual performance appraisal, when the supervisors evaluated the staff according to their KPIs. It was considered formal feedback and was only once a year; the appraisal was one criteria for annual bonus and pay raise.
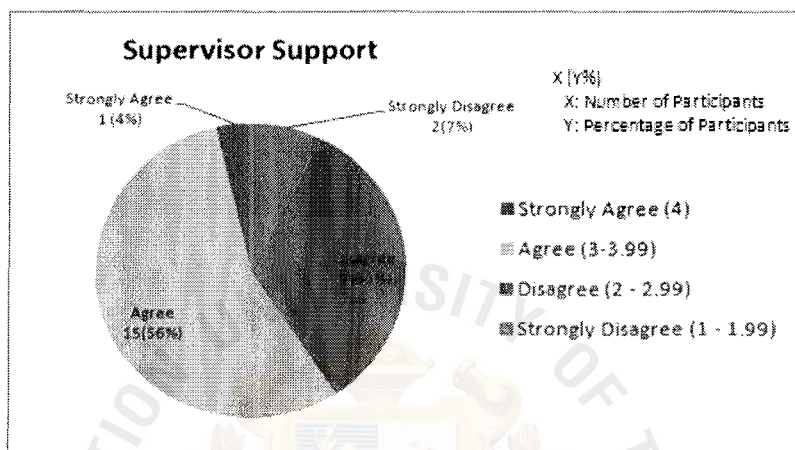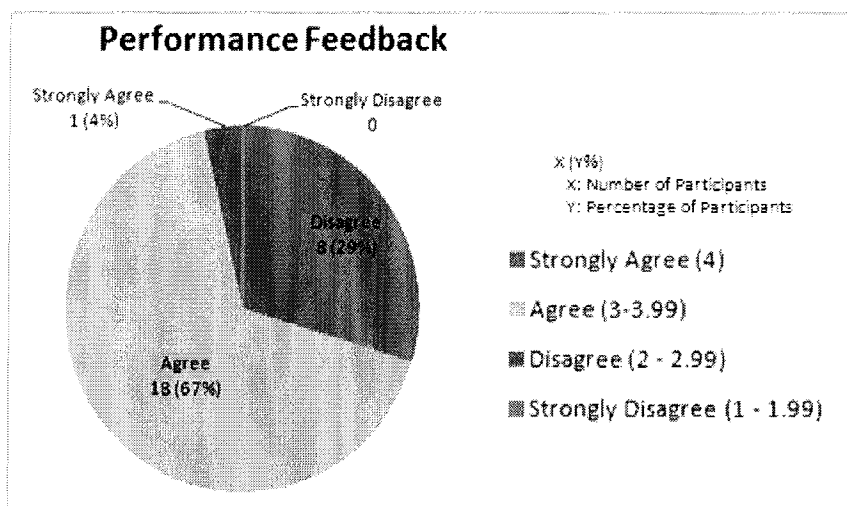
Figure 25. Pie Chart showing score level in performance feedback

Figure 25 indicates that a majority of participants (18 persons, 67%) rated "Agree" for performance feedback provided by the company; eight participants (30%) rated "Disagree", 18 participants (66%) rated "Agree, one participant (4%) rated "Strongly Agree".

Qualitative analysis from both the researcher's observation and management interview was less than quantitative results. The mean score from management interview was 2.40 out of 4.00. The management felt that annual appraisal was an HR process which was not enough to give feedback to employees. Employees should receive feedback from their supervisors regularly so that they will know how to improve themselves overtime; here are some excerpts from the interviews with the management team which clearly support the results.

"Employees do not want feedback, they are afraid of getting feedback as they think it will be only negative feedbacks" (Interview with management members, Jun 2013)

"Performance appraisal does not really impact on the performance of employees. The way it is measured is more about company policy rather than performance. There is little coaching to employees as supervisors do not know how." (Interview with management members, Jun 2013)

Employees feel that there is no difference in performance evaluation among us.

Everybody gets the same rating as appraisal is measured, so why do they have to put extra

effort into work. (The researcher's observation, May 2013)

Co-worker Support

Co-worker Support means the relationship with employees; workers trust and help

each other, and they have a concern for each other's well-being.

Table 18

Quantitative data analysis on Pre-ODI for Co-worker support

Question	N	Mean (4-point scale)	Std. Deviation
People I work with are helpful in getting the job done	27	3.0000	.73380
People I work with are friendly.	27	3.1111	.69798
People I work with are competent in doing their jobs.	27	2.9630	.75862
People I work with take a personal interest in me.	27	2.7407	.52569
Overall - Co-worker support	27	**2.9537**	**.55486**

Table 18 indicates the mean score for co-worker support which was 2.9537

(M=2.9537, SD = .55486). The highest score was for people are friendly, while the lowest

score was for personal interest; in the company, there was no competition among employees

as people were nice to each other.
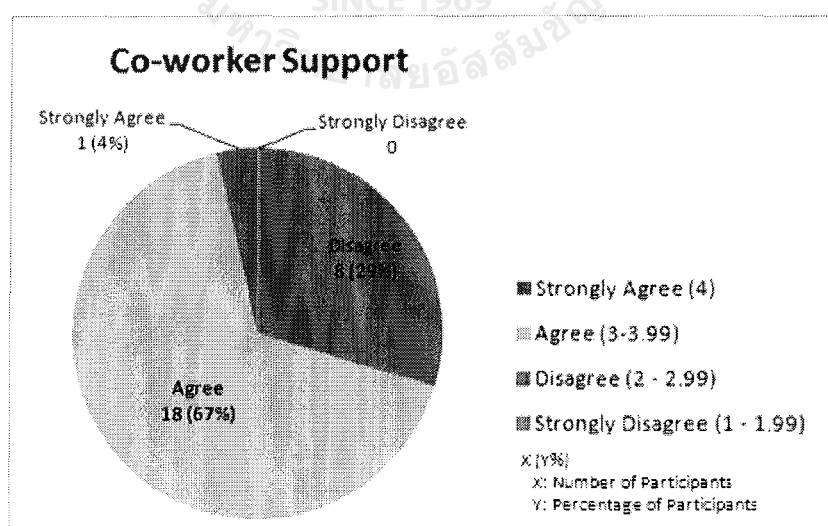
Figure 26. Pie chart showing score level in co-worker support

Figure 26 indicates that a majority of the participants (18 persons, 67%) rated "Agree" of co-worker support in the company; eight participants (30%) rated "Disagree", 18 participants (66%) rated "Agree", one participant (4%) rated "Strongly Agree".

Qualitative analysis from both the researcher's observation and management interview were less than shown by the quantitative results. The mean score from the management interview was 2.40 out of 4.00. The management feels that people help each other more in the old time; they were like family; but now people tend to focus only on their jobs; company activities were also much less than in the old times such as badminton, dinner party; here are some excerpts from the management interview that clearly supports the results.

"Employees feel like it will increase their works if they offer to help other people." *(Management interview, Jun 2013)*

"There is not much cross-functional work, people don't ask cross departments as they don't know them and don't think that they can help." (Interview with management members, Jun 2013)

There are big gaps in the generation in the company. For those people who stay with the company for more than 15 years, they know everyone and feel very comfortable to ask for help, while the new generation tends to know only those in their own department. (The researcher's observation, May 2013)

4.2.2 Pre-ODI status of employee engagement

Employee Engagement means to have a high level of energy to put effort into work, inspire and proud to work and fully concentrate in their work.

Table 19

Quantitative data analysis on Pre-ODI for employee engagement

Question	N	Mean (6-point scale)	Std. Deviation
1. At my work, I feel bursting with energy	27	4.1481	.98854
2. I find the work that I do full of meaning and purpose	27	4.1111	1.15470
3. Time flies when I'm working	27	4.2222	1.12090
4. At my job, I feel strong and vigorous	27	4.0000	1.14354
5. I am enthusiastic about my job	27	4.3333	1.07417
6. When I am working, I forget everything else around me	27	3.9259	1.10683
7. My job inspires me	27	3.9259	1.23805
8. When I get up in the morning, I feel like going to work	27	4.1852	1.30198
9. I feel happy when I am working intensely	27	4.3704	.88353
10. I am proud on the work that I do	27	4.8148	1.17791
11. I am immersed in my work	27	4.5185	.89315
12. I can continue working for very long periods at a time	27	4.6667	.91987
13. To me, my job is challenging	27	3.9259	1.35663
14. I get carried away when I'm working	27	3.4815	1.08735
15. At my job, I am very resilient, mentally	27	4.4815	1.12217
16. It is difficult to detach myself from my job	27	3.6667	1.10940
17. At my work I always persevere, even when things do not go well	27	4.4815	1.28214
Overall - employee engagement	27	**4.1917**	**.71107**

Table 19 indicates that the mean score for employee engagement was at the average level (M=4.1917, SD = .71107). The highest score was, for being proud of the work which was about dedication for work (heart) while the lowest score was getting carried away while working which was about absorption (head). The researcher used the classification of the engagement level from UWES Preliminary Manual (Schafelli and bakker 2003). The average score of UWES-17 were categorized as a very low (score <=1.93), low (19.4-3.06), average (3.07-4.66), high (4.67-5.53) and very high (>= 5.54).
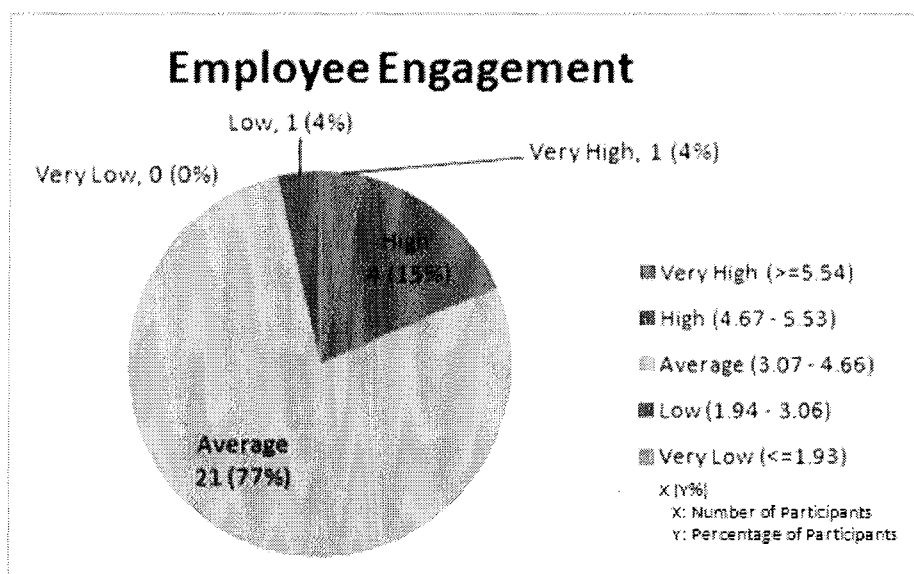
Figure 27. Pie Chart showing score level in employee engagement

Figure 27 shows that the majority of participants (21 persons, 77%) have an "Average" level of employee engagement; one Person (4%) has "Low" level of engagement, 21 Persons (77%) have "Average" level of engagement, 4 Persons (15%) have "High" level of engagement and one Person (4%) has "Very High" level of engagement.

Qualitative analysis from both researcher's observation and management interview supported the quantitative result. The mean score from the management interview was 3.40 out of 6.00 which was also in "Average" engagement level as well. Management felt that employees loved the company but due to the culture of no competition, people tend not to work hard or put extra effort to work. Another main reason for low engagement is that there is no clear career path or growth opportunity in the organization thus people do not push themselves; here are some excerpts from the management interview that clearly supports the results.

"They love the company but they didn't put extra effort because there is no motivation." (Interview with management members, Jun 2013)

"For old generation of people, they love and feel attached to the company very much as they think that the company has supported their children to finish school." (Management interview, Jun 2013)

"People do not engage because of no connection, no communication, and no growth path in the company." (Interview with management members, Jun 2013)

"The company has a working culture which is comfortable, no competition, no fighting which is why people do not put extra effort. (Interview with management members, Jun 2013)

Employees work in the a routine job. They finish work right on time everyday, no one stays late as they feel that they can continue to work tomorrow. (The researcher's observation, May 2013)

Employees value the company and feel commit to stay with the company. Average tenure of employees is 10.3 years. (The researcher's observation, May 2013)

4.2.3   Summary of Pre-ODI phase

The Pre-ODI phase was to assess the current status of job resources and employee engagement in the focal company and assess the effect of demographics on employee engagement. The data from Pre-ODI were used to answer the research questions#1 and question#2 and test Hypothesis 1.1 – 1.3.

Research Question#1: What is the current level of job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement in Company X?

Figure 14 and Table 22 summarize the value of each variable of job resources. Majority of participants (more than 50%) rated "Agree" for Supervisor support, Performance feedback and Co-worker support while a majority of participants rated "Disagree" for job

autonomy. job autonomy has the lowest mean score. Overall job resources are in "Agree" level, qualitative analysis also supports the quantitative results

Figure 27 and Table 19 summarize employee engagement in the company. The mean score is 4.197 which means that the company has an **"Average"** level of employee engagement. Qualitative analysis also supports the quantitative results.

Research Question#2: Is there a different level of employee engagement with reference to age, years of employment with the company and position held in the company?

Table 20

employee engagement by Age

Age	Numbers	Mean score for employee engagement	Standard Deviation
25-30	4	3.7206	.78829
31-35	5	4.8235	.30281
36-40	6	4.3627	.81967
41-45	6	4.0490	.77631
46-50	4	3.7941	.41176
51 +	2	4.2647	.45754
Total	27	4.1917	.71107

Table 20 shows the mean score for employee engagement for different age groups. The highest mean score was for those aged between 31-35 (*M*=4.8235) while the lowest mean score was in age 25-30 (*M*=3.7206)

Table 21

Employee Engagement by Years with Company

Years with Company	Number	Mean score of employee engagement	Standard Deviation
0-2	5	3.9176	.81253
3-5	3	4.3922	.39167
6-10	7	4.0252	.66625
11-15	3	4.5686	.68178
15+	9	4.2810	.82289
Total	27	4.1917	.71107

Table 21 shows the mean score for employee engagement by the number of years with the company. The highest mean score was 11-15 years with the company (M=4.5686) while the lowest mean score was 0-2 years with the company (M=3.9176).

Table 22

Employee Engagement by Position level

Position	Number	Mean score of employee engagement	Standard Deviation
Supervisor and up	12	4.3431	.73421
Staff	15	4.0706	.69288
Total	27	4.1917	.71107

Table 22 shows the mean score of employee engagement by position; supervisor and higher have a better mean score for employee engagement (M=4.3431).

A one-way ANOVA was conducted to compare the effect between age, and years of employment in the company. An independent sample t-test was conducted to compare employee engagement with supervisor and staff positions. The researcher used quantitative data analysis from the experimental group at pre-ODI to answer the research question #2 and test hypothesis 1

Hypothesis 1.1: There is a different level of employee engagement with reference to age.

Hypothesis 1.2: There is a different level of employee engagement with reference to years of employment with the company.

Hypothesis 1.3: There is a different level of employee engagement with reference to the position held in the company.

Table 23

Analysis of Variance (Age)

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	36.519	19	1.922	.594	.827
	Within Groups	22.667	7	3.238		
	Total	59.185	26			

Table 23, an Analysis of Variance showed that the effect of age on employee engagement **was not statistically significant**, at p<.05 level [F(19,7) =.594, p = .827]. This result suggests that age did not have an effect on employee engagement.

Table 24

Analysis of Variance (Years with Company)

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Yeas with Company	Between Groups	37.713	19	1.985	.634	.798
	Within Groups	21.917	7	3.131		
	Total	59.630	26			

Table 24, shows the Analysis of Variance and the effect of years with the company on employee engagement **was not statistically significant**, at p<.05 level [F(19,7) =.634, p = .798]. This result suggests that years with company did have an effect on employee engagement.

Table 25

Independent Samples T-test

	N	Mean	SD	t	df	Sig. (2-tailed)
Supervisor	12	4.34314	.73421	0.9893	25	0.332
Staff	15	4.07059	.69288			

An independent samples t-test was conducted to compare employee engagement in supervisory and staff positions. Table 25 shows the results of the independent samples t-test, that there **was no significant difference** in the scores for supervisor (M= 4.34314, SD=.73421) and staff level (M= 4.07059, SD=.69288); t(25)= .9893, p = .332. This result suggests that positions do not have an effect on employee engagement.

Hence, the statistically results **reject Hypothesis 1.1-1.3** that there is no difference in the level of employee engagement with reference to age, years with the company and position.

4.3   ODI Phase

The researcher used effective change management framework from Cummings and Worley (Cummings & Worley, 2009, p.164) and Whole Brain Literacy (Tayko & Reyes-Talmo, 2010) to design the OD process and interventions. The interventions consisted of a series of training and workshops over a period of six months starting from 31 May to Nov 2013. At the end of the workshop/training, the researcher asked the participants to fill in a training evaluation form and reflection log book. The training evaluation was to evaluate whether the training/workshop met the objectives and how they can bring the contents to work, while the reflection log books asked them to reflect on what they learnt today, how they applied what they learnt to real life and what action they planned to take. Figure 28 shows the summary of OD intervention wuth change steps over the six month period.
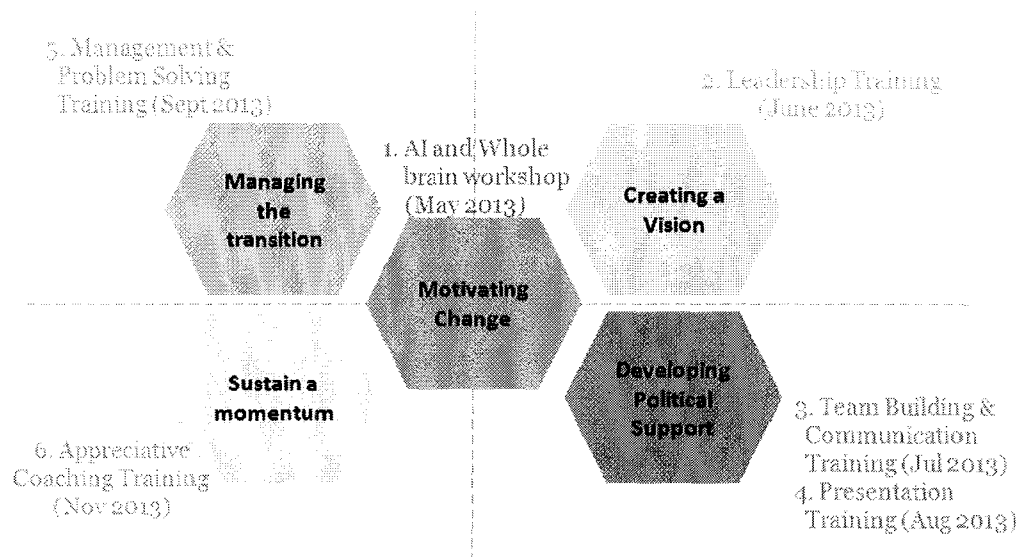
Figure 28. Summary of OD interventions in each step of effective change management framework

From the total of six OD interventions conducted, fourteen experimental participants (52%) attended all the six interventions, six participants (22%) attended five interventions, six participants (22%) attended four interventions and one participant (4%) attended three interventions. Along with participants, the management team (Finance Manager, Operation Manager and HR Manager) attended all the intervention sessions as observers. Table 26 shows the number of participants who attended each intervention session.

Table 26

Number of participants in each intervention

Date	Intervention	Number of participants (total 27 participants)
31 May 2013	AI and Whole brain Workshop	18
19 June 2013	Leadership & Management Training	27
18 July 2013	Team Building and Communication Training	26
09 August 2013	Presentation Training	23
12 September 2013	Problem Solving and Analytical Thinking Training	21
08 November 2013	Appreciative Coaching Training	25

4.3.1   Step 1 – Motivating Change

Start from step 1 – Motivating change, the researcher used appreciative inquiry workshop and whole brain exercise to create readiness for change and overcome change resistance. Organizational change means changing from the known to the unknown; most people will resist change at the first time so we need a compelling reason to change. The researcher conducted a one-day workshop with participants; the workshop was held on 31 May 2013. The objectives of the workshop were to understand change management process, and thinking by using the whole brain literacy and appreciative inquiry. The workshop went very well, most participants had never attended soft skills training or interactive workshops before; they were so nervous and shy at the beginning; the first agenda was about the lecture on change management concept, why we need to change and how to manage change effectively. The second agenda was about Whole Brain Literacy; the researcher divided participants into four groups and conducted an exercise on four variables of job resources to drive company employee engagement by using the four quadrants concept of WBL (I-control, I-explore, I-Pursue, I-preserve). The exercise had made them brainstorm on how to improve job resources (supervisor support, job autonomy, performance feedback and co-worker support) to drive employee engagement in the company. Appendix K shows the template on WBL exercise on job resources.

The last agenda was about Appreciative Inquiry. The researcher used the AI workshop concept by a walkthrough, theory and activities on 4-D. The affirmative topic was "Awesome Company X". This exercise got a lot of intentions; people were less stressed and participated more. At the end, each group was asked to present the results in pictures; it was very interactive and lively. From observation, participants used more appreciative dialogue, expressed more ideas and were more engaged with the company since the first workshop.

Some evidence and excerpts from the participants during the workshop support the researcher's findings as shown below.

At the beginning, most participants were quiet and passive as the management also attended. But when the AI exercise started, participants were very interactive and lively. They were excited to dream of the company's future and showed enthusiasm to do the exercise together. (The researcher's observation, May 2013)

Positive thinking is easier than I think and it's more fun to brainstorm something positive than problems (Participants, May 2013)

Participants are very lively and keen which is not normal in our training. The results are very useful for our company; we now know more about what they like and want. (Management Observation, May 2013)

In addition, BrainMap Test was conducted with the management team (Sales, Finance, Operation and HR) to analyse the thinking process and the overall company functioning; the results are shown in Appendix L.

4.3.2 Step 2 – Creating a Vision

Creating a vision means to envision the future and provide members with a common goal so that the members understand the desired future and have a clear picture of what the new stage will look like. The researcher conducted a leadership training for this stage with the objectives of using the right leadership style in each situation and bringing the team to achieve goals. Most of the employees in the company lacked leadership skills. They had been promoted due to years of work, so they have very good technical skills while lacking soft skills especially leadership. This training session guided them to understand the roles and responsibilities of leaders, how leaders differed from managers and on how they could become a good leader. Participants understood the importance of leadership in an organization and it will become one of the key success factors for change. The researcher

used the helium stick and stepping stone games to reflect the importance of leaders and needs for leaders to guide followers to achieve the goals. From observations, participants knew how to improve their leadership skills and needs for them to be a good leader, even if they were not CEO's of the company. Some evidence and excerpts from the participants during the training support the researcher's findings, which are shown below.

This training taught me the techniques on how to become a good leader. (Training Evaluation Form, June 2013)

I learnt new perspectives on how to work with others happily. (Training Evaluation Form, June 2013)

I learnt great stories about why good leaders fail and will not become like them. (Training Evaluation Form, June 2013)

This training helped me to reflect on what I have missed in the past as a leader. (Log book, June 2013)

4.3.3 Step 3 – Developing Political Support

Developing Political support means managing the key stakeholders by identifying key stakeholders and assessing their power and influence. The researcher conducted two interventions at this step. The first one was about team work and communication and the second one was presentation techniques; during the training sessions, the researcher started with a DISC exercise: before you know how to work or influence others, you need to know yourself and how to interact with people of other types. On team work, the researcher trained them on the character of efficient team, conflict management and task delegation by using RACI. The last topic was about communication skills: both sessions went very well and got a lot of attention as they are skills that they use in day to day life. Participants know their style and know how to communicate with people of other styles. To make the change successful, it

needs a lot of support from stakeholders; communication and team work are very important in this step.

In the reflection session, one of the participants presented to the class that she used the RACI matrix from the training for their cross-functional project right away and it was very successful. Some evidence and excerpts from the participants during the training support the researcher's findings as below.

I've been working for more than 30 years, I just really know what my style is and why sometimes it is difficult to communicate with other people as they are of different types. (Training Participants, July 2013)

I learnt about planning work and how to make people work as a team. (Training Evaluation Form, July 2013)

I just know that presentation is about non-verbal communication than content. I learnt new techniques for presentations and I can use them with my work (Log Book, August 2013)

I can apply this training on how to meet customers and how to deal with difficult customers by using communication skills. (Log Book, August 2013)

4.3.4 Step 4 – Managing the transition

This step was about ensuring smooth transition and reaching the desired state. This step includes activity planning, identifying tasks and setting up support structure. The researcher conducted a management and problem solving training. In this training, objectives were about steps in managing work, problem solving and analytical thinking. The training used the group exercise with real problems in the focal company, for recruiting and quality related issues. The management members as observers were very interested on the problem solving results; this intervention has helped the participants to ensure that change is managing over time to ensure it will reach the desired state. They can use all the contents in the

previous interventions to be applied during the transition. Some evidence and excerpts from the participants during the training support the researcher's findings as shown below.

Planning is the most important factor; better plan before actually doing it. (Training Evaluation Form, September 2013)

Thanks to all the interventions, now I have more self-confidence as I learnt a lot of frameworks and sample cases from the training. (Training Evaluation Form, September 2013)

The exercise gave me a chance to contribute my ideas to the group. I am a very shy person, this is the first time I can express my ideas (Training Evaluation Form, August 2013)

There were cross-functional team meetings between the R&D and marketing departments, I feel that people communicate better and are open more to each other. (Log Book, August 2013)

4.3.5 Step 5 – Sustaining the momentum

Making change stick is very important; in this step, the organization must ensure that change will be sustained by integrating into the business as usual. Many organizations fail in change management because they cannot make it stick. People do not embrace change, so they come to the old stage without knowing. The researcher used the technique of coaching as the intervention in this step. Effective coaching will help sustain the change as it will bring the best from people and generate new leaders from time to time. Appreciative coaching was used instead of normal coaching; it is continuous learning by using the appreciative inquiry concept from step one, to adapt oneself to the to coaching techniques to generate positive energy from the employees. The focal company never had a coaching culture; the best coaching they had was only on focussing on teaching technical skills on the job which did not include motivation, inspiration or grooming the staff. The intervention included the assignment for participants to formally coach their staff or request them to be coached by

their supervisor. The feedback was not only coaching skills improvement but also enhancing leader-staff relationship; some evidence and excerpts from the participants during the training, support the researcher's findings as discussed below.

I learnt that as a supervisor that it is not only about training staff but also to find the best in the staff and bring it out. (Training Evaluation Form, November 2013)

I learnt how to solve problems systematically and use the whole brain literacy to solve it (Training Evaluation Form, November 2013)

Coaching can help with trust and that leads to loyalty. (Log Book, November 2013)

4.3.6 Summary of the ODI phase

During the six months of intervention, the researcher could notice the change in participants; from the first session, everybody kept quiet until the last session when sharing, caring and giving to each other. The change has been embedded in participants bit by bit. The participants were more mature, were thinking logically, leading the team and were committed to the company. They learnt new techniques and framework to help their work to be more efficient; in the last session, the researcher asked the participants to think back over the last six months and what they had learnt, what they had applied and what they will change; some excerpts from the participants are shown below.

I am more confident, more assertive and not afraid to share my ideas. (Log Book, November 2013)

I learnt a lot of new techniques, theories and framework that can be used with my work. Now I have a framework to help me to think and solve problems. (Log Book, November 2013)

The most important aspect I learnt, is that how to work with others happily; first think positively and everything will be positive. (Log Book, November 2013)

I understand more about my co-workers; I feel more empathy and want to help them

to achieve the goal together. (Log Book, November 2013)

I can be a good leader. (Log Book, November 2013)

I learnt how to put a purpose for my life and my work. (Log Book, November 2013)

Before the first session, I thought it was only the theory which I had learnt in the

university, but from the six sessions, I found that there are many things that I can improve,

the most important thing I learnt, was to achieve goals and making everyone happy was still

valid in this world and it was the nicest thing we must maintain;this course has helped me

apply that to my life. (Log Book, November 2013)

4.4 Post -ODI Phase

Quantitative analyses of job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement are presented herein by using the statistical mean; the questionnaire had been distributed during 8th-30th November 2013.

Qualitative analyses of job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement had been captured by interviews with five management members from sales, human resources, operations and finance departments of the company in November 2013 and observations by the researcher; qualitative analysis was implemented to find support for the quantitative analysis.

4.4.1 Post-ODI status of job resources

Table 27

Quantitative data analysis on Pre and Post-ODI for job resources

		Pre-ODI		Post-ODI		
Variable	N	Mean (4-point Scale)	Std. Deviation	Mean (4-point Scale)	Std. Deviation	Percent Improvement (Pre vs. Post)
supervisor support	27	2.6970	.52406	2.9529	0.47464	**9.49%**
job autonomy	27	2.8519	.60946	3.2407	0.4975	**13.63%**
performance feedback	27	2.9537	.55486	3.2315	0.48001	**9.41%**
co-worker support	27	2.9259	.46532	3.1852	0.47442	**8.86%**

Table 27 indicates that the mean score for each variable of job resources. The mean scores for supervisor support, job autonomy, performance feedback and co-worker support were 2,8519, 2.6970, 2.9259, 2.9537 respectively on a four-point scale. The mean for every variable had increased, indicating that job resources had improved after implementing ODI.
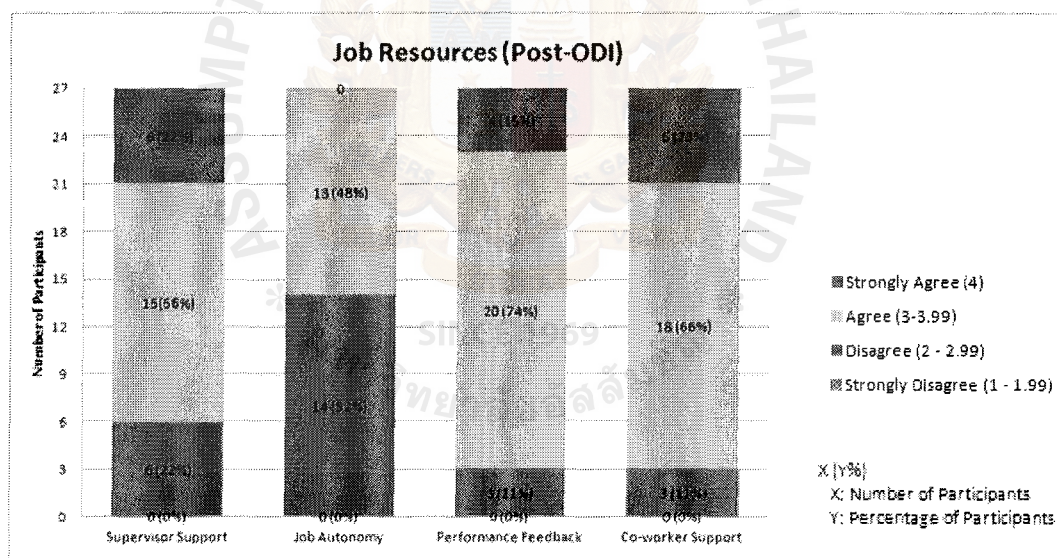
Figure 29. Proportion of Post-ODI score for job resources

Figure 29 indicates that the majority of participants still rated "Agree" for job resources provided by the company. There was no "Strongly Disagree" for any variable; this means that participants had rated job resources higher after the ODI; a majority of the participants rated "Agree" for supervisor support, performance feedback and co-worker support ((15, 56%), (20, 74%), (18, 66%) respectively) while the majority of participants still

rated "Disagree" for job autonomy (14, 52%); the details of the findings for each variable are

discussed as follows:

Supervisor Support

Table 28

Quantitative data analysis on Pre and Post-ODI for supervisor support

Question	N	Pre-ODI		Post-ODI		Percent Improvement (Pre vs. Post)
		Mean (4-point scale)	Std. Deviation	Mean (4-point scale)	Std. Deviation	
My supervisor is successful in getting people to work together.	27	2.8889	0.84732	3.1852	0.68146	10.26%
My supervisor is concerned about the welfare of those under him.	27	2.7037	0.72403	3.2222	0.50637	19.18%
My supervisor pays attention to what I am saying.	27	2.7778	0.84732	3.2222	0.57735	16.00%
My supervisor is helpful in getting the job done.	27	3.037	0.64935	3.3333	0.62017	9.76%
Overall - supervisor support	**27**	**2.8519**	**0.60946**	**3.2407**	**0.4975**	**13.63%**

Table 28 indicates the improvement of the mean scores after ODI. Overall, the post-ODI mean score for supervisor support was 3.2407 (M=3.2407, SD = .4975). All the questions have been improved and the overall post-ODI mean score for supervisor support has improved by 13.63%.
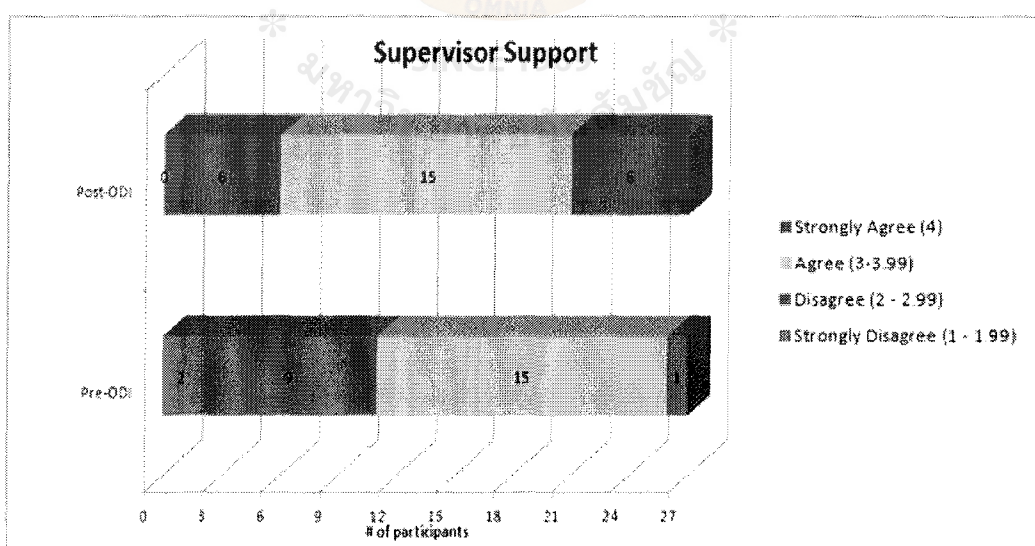
Figure 30. Pre and Post-ODI score for supervisor support

Figure 30 indicates the improvement of supervisor support between Pre and Post ODI, the "Strongly Disagree" level has moved up and there was more "Strongly Agree" level. The results of interviews which supported the improvement of supervisor support after ODI are as follows:

"The supervisors from Intervention group seem to be more focussed on the soft side of their employees and have better communication between them." (Interview with management members, November 2013)

"The coaching form helps to get supervisors and employees understand more about each other and what was expected from each other and how to improve them." (Interview with management members, November 2013)

"Supervisors have more confidence in working as they applied leadership style and framework from the training session. They are able to manage and plan their work more effectively" (Interview with management members, November 2013)

Job Autonomy

Table 29

Quantitative data analysis on Pre and Post-ODI for job autonomy

Question	N	Pre-ODI		Post-ODI		
		Mean (4-point scale)	SD	Mean (4-point scale)	SD	Percent Improvement (Pre vs. Post)
Do you have freedom in carrying out your work activities?	27	2.5926	.84395	2.8519	0.7698	10.00%
Do you have influence in the planning of your work activities?	27	2.8148	.83376	3.2593	0.59437	15.79%
Do you have an influence on the pace of work?	27	2.4444	.84732	2.8889	0.75107	18.18%
Can you decide how your work is executed on your own?	27	2.6296	.68770	2.9259	0.54954	11.27%
Can you interrupt your work for a short time if you find it necessary to do so?	27	2.3704	.74152	2.7037	0.77533	14.06%
Can you decide the order in which you carry out your work on your own?	27	3.0370	.75862	3.1481	0.66238	3.66%
Can you participate in the decision about when something must be completed?	27	2.5926	.93064	2.8519	0.7181	10.00%
Can you personally decide how much time you need for a specific activity?	27	2.3704	.88353	2.6296	0.79169	10.94%
Do you resolve problems arising in your work yourself?	27	2.9630	.70610	3	0.62017	1.25%
Can you organize your work yourself?	27	3.2593	.81300	3.2963	0.6688	1.14%
Can you decide on the content of your work activities yourself?	27	2.5926	.93064	2.9259	0.72991	12.86%
Overall - job autonomy	27	**2.6970**	**0.52406**	**2.9529**	**0.47464**	**9.49%**

Table 29 indicates the improvement of the mean scores after the ODI. Overall, the post-ODI mean score for job autonomy was 2.9529 (M=2.9529, SD = .47464). All the questions have been improved and overall Post-ODI mean score for job autonomy had improved by 9.49%.

Job Autonomy

Legend:
- Strongly Agree (4)
- Agree (3-3.99)
- Disagree (2 - 2.99)
- Strongly Disagree (1 - 1.99)
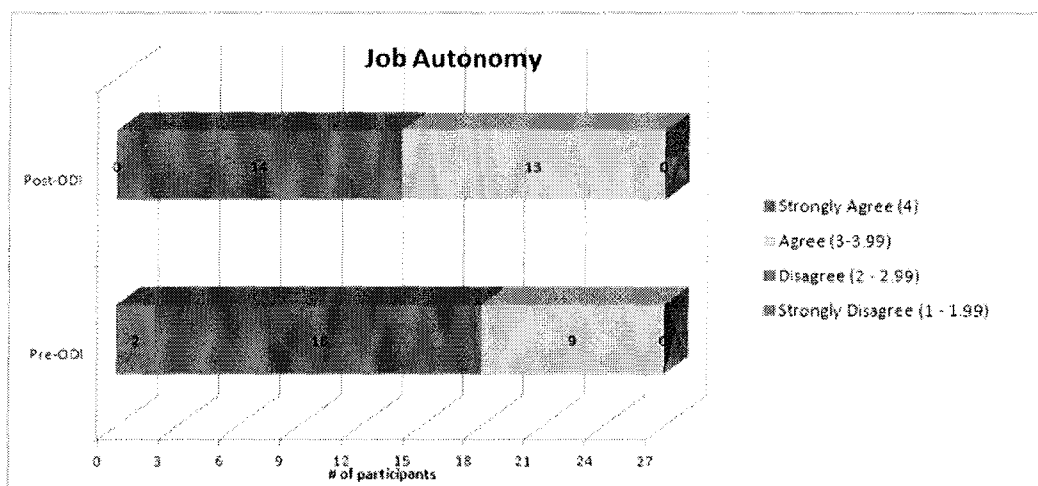
Figure 31. Pre and Post-ODI score for job autonomy

Figure 31 indicates the improvement of job autonomy between the pre and post ODI, the "Strongly Disagree" level has moved up and there was more "Agree" level; the results of the interviews which supported the improvement of job autonomy after ODI are as follows:

"We learnt from the training that employees actually prefer to have autonomy than telling what to do in every step. This changed our mind sets as we thought workers in manufacturing rather do than think. The style of working has been changed from telling what to do to what and why it needs to be done so that employees can find the way to do the job on their own with support when they need help." (Interview with management members, November 2013)

"Employees are braver to voice their ideas and supervisors/management are also better listeners which made the working atmosphere more collaborative." (Interview with management members, November 2013)

Performance Feedback

Table 30

Quantitative data analysis on Pre and Post-ODI for performance feedback

Question	N	Pre-ODI Mean (4-point scale)	SD	Post-ODI Mean (4-point scale)	SD	Percent Improvement (Pre vs. Post)
This job provides feedback on how well I am doing as I am working.	27	2.8148	0.55726	3.074	0.61556	9.21%
This job enables me to find out how well I am doing.	27	3	0.48038	3.222	0.50637	7.40%
This job provides me with the feeling that I know whether I am performing well or poorly.	27	2.963	0.64935	3.259	0.52569	9.99%
Overall - performance feedback	27	**2.9259**	**0.46532**	**3.185**	**0.47442**	**8.86%**

Table 30 indicates the improvement of the mean scores after the ODI. Overall, the post-ODI mean score for performance feedback was 3.185 (M=3.185, SD = .47442). All the questions have been improved and overall Post-ODI mean score for performance feedback has improved by 8.86%.
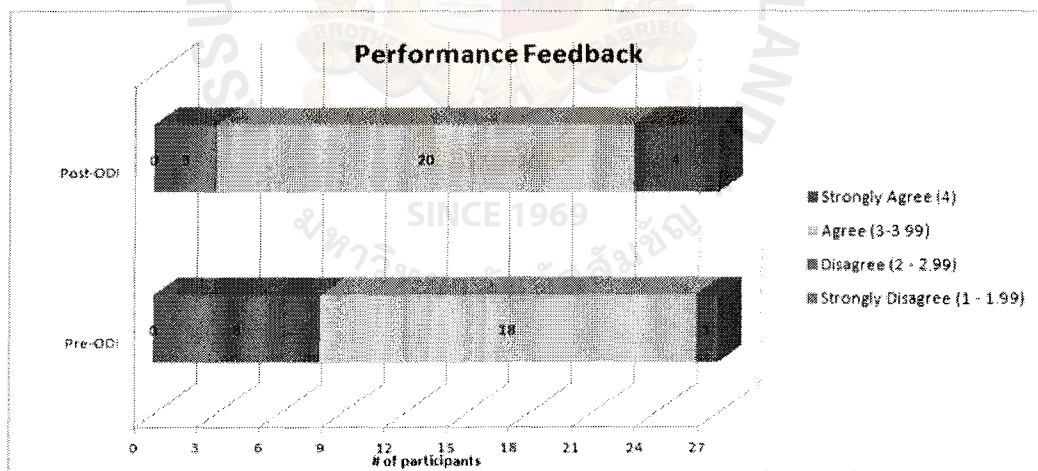
Figure 32. Pre and Post-ODI score for performance feedback

Figure 32 indicates the improvement of performance feedback between the pre and post ODI. There was less on "Disagree" level while more on "Agree" and "Strongly Agree" levels. The results of the interviews which supported the improvement of performance feedback after ODI are shown as follows:

"Appreciative Inquiry has helped us know that results can be better with positive thinking. It seems like before we forgot to give feedback on positives, we only had feedback for negative actions which made employees feel disengaged and less enthusiastic. The change we found was that supervisors gave more frequent feedback on the job and they have better ways of givimg feedback so employees do not feel desperate but want to do better next time. " (Interview with management members, November 2013)

"Supervisors give more frequent feedback and employees also ask more for their feedback immediately; they not wait for the year end. It helps us in the improvement of the quality of work or fixing problems before it is too late." (Interview with management members, November 2013)

Co-worker Support

Table 31

Quantitative data analysis on Pre and Post-ODI for co-worker support

Question	N	Pre-ODI		Post-ODI		Percent Improvement (Pre vs. Post)
		Mean (4-point scale)	Std. Deviation	Mean (4-point scale)	Std. Deviation	
People I work with are helpful in getting the job done	27	3	0.7338	3.2963	0.60858	9.88%
People I work with are friendly.	27	3.1111	0.69798	3.2963	0.54171	5.95%
People I work with are competent in doing their jobs.	27	2.963	0.75862	3.1852	0.55726	7.50%
People I work with take a personal interest in me.	27	2.7407	0.52569	3.1481	0.60152	14.86%
Overall - Co-worker support	27	**2.9537**	**0.55486**	**3.2315**	**0.48001**	**9.41%**

Table 31 indicates the improvement of the mean scores after the ODI. Overall, the post-ODI mean score for co-worker support was 3.2315 (M=3.2315, SD = .48001). All the questions have been improved and overall the post-ODI mean score for co-worker support has improved by 9.41%.
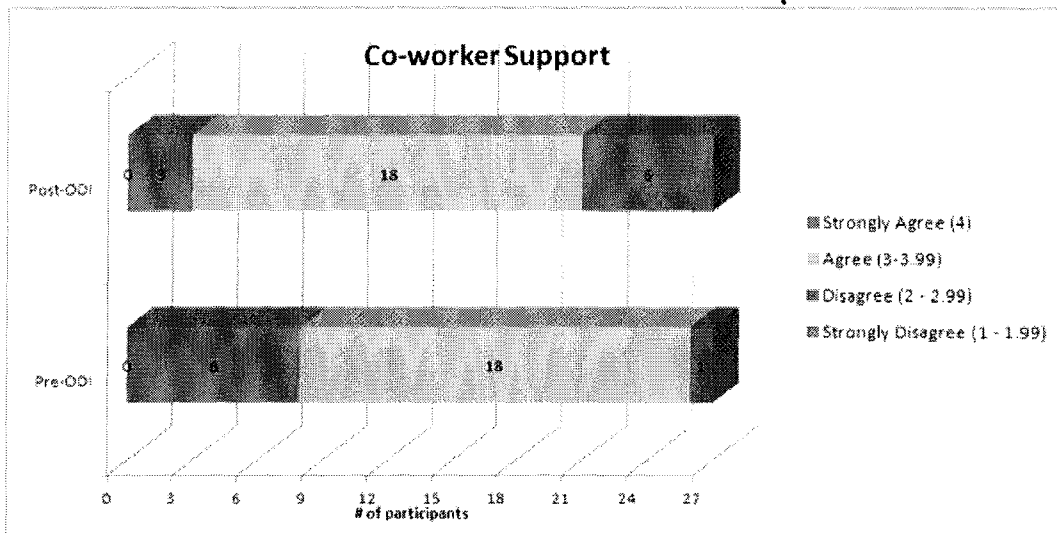
Figure 33. Pre and Post-ODI score for co-worker support

Figure 33 indicates the improvement of co-worker support between the pre and post ODI, the "Disagree" level has moved up and there was more "Strongly Agree" level. The results of interviews which supported the improvement of co-worker support after ODI are as follows:

"From six months in training, it's clear that they are closer especially from different departments. It is because of group exercise, they got a chance to work as a cross-functional team. After training, the level of collaboration and support are much higher." (Interview with management members, November 2013)

"People give more attention to the co-worker's personal life rather than just work. It helps them bond and easily support each other" (Interview with management members, November 2013)

"Communication from cross-departments had improved, it is more effective. Thanks to DISC, they know how to communicate with other different styles." (Interview with management members, November 2013)

4.4.2 Post-ODI status of employee engagement

Table 32

Quantitative data analysis on Pre and Post-ODI for employee engagement

Question	N	Pre-ODI Mean (6-point scale)	Std. Deviation	Post-ODI Mean (6-point scale)	Std. Deviation	Percent Improvement (Pre vs. Post)
1. At my work, I feel bursting with energy	27	4.1481	0.98854	4.4444	1.1209	7.14%
2. I find the work that I do full of meaning and purpose	27	4.1111	1.1547	4.6296	1.04323	12.61%
3. Time flies when I'm working	27	4.2222	1.1209	4.5185	1.34079	7.02%
4. At my job, I feel strong and vigorous	27	4	1.14354	4.3333	0.96077	8.33%
5. I am enthusiastic about my job	27	4.3333	1.07417	4.6667	0.91987	7.69%
6. When I am working, I forget everything else around me	27	3.9259	1.10683	4	1.27098	1.89%
7. My job inspires me	27	3.9259	1.23805	4.2222	1.01274	7.55%
8. When I get up in the morning, I feel like going to work	27	4.1852	1.30198	4.2963	1.10296	2.65%
9. I feel happy when I am working intensely	27	4.3704	0.88353	4.4444	0.9337	1.69%
10. I am proud on the work that I do	27	4.8148	1.17791	4.8148	1.03912	0.00%
11. I am immersed in my work	27	4.5185	0.89315	4.5185	0.80242	0.00%
12. I can continue working for very long periods at a time	27	4.6667	0.91987	4.5185	0.93522	-3.18%
13. To me, my job is challenging	27	3.9259	1.35663	4.3704	1.21365	11.32%
14. I get carried away when I'm working	27	3.4815	1.08735	4.0741	0.9578	17.02%
15. At my job, I am very resilient, mentally	27	4.4815	1.12217	4.5556	0.84732	1.65%
16. It is difficult to detach myself from my job	27	3.6667	1.1094	3.8519	0.81824	5.05%
17. At my work I always persevere, even when things do not go well	27	4.4815	1.28214	4.5926	0.97109	2.48%
Overall - employee engagement	27	**4.1917**	**0.71107**	**4.4031**	**0.70733**	**5.04%**

Table 32 indicates the improvement of the mean scores after the ODI. Overall, the post-ODI mean score for employee engagement was 4.4031 (M=4.4031, SD = .70733). Most of the questions have been improved and overall Post-ODI mean score for employee engagement has improved by 5.04%.
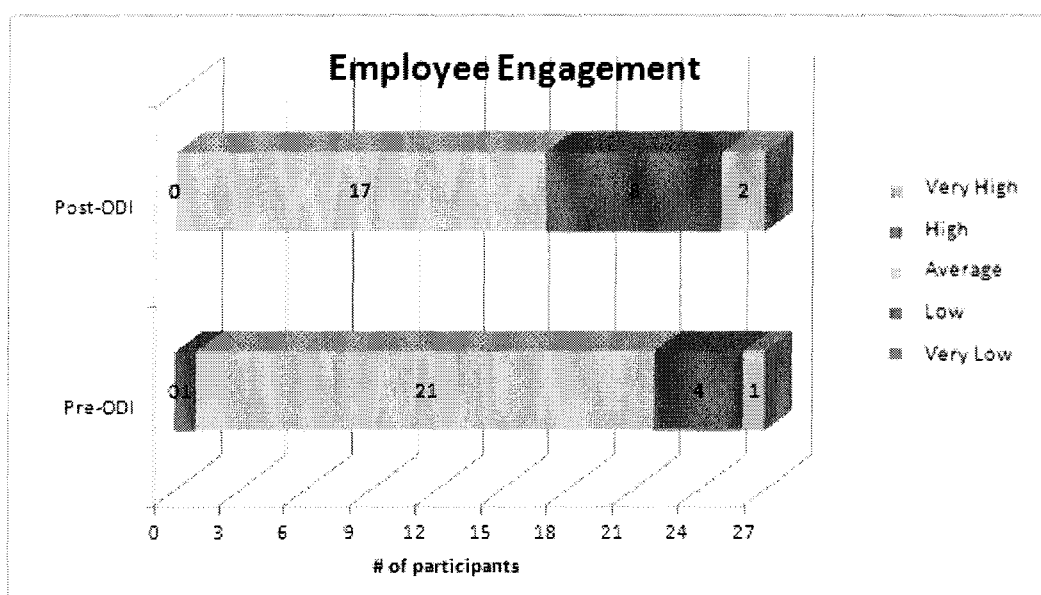
Figure 34. Pre and Post-ODI score for employee engagement

Figure 34 indicates the improvement of employee engagement between the pre and post ODI, the "Low" level has moved up and there was more on "High" and "Very High" level. The results of interviews which supported the improvement of employee engagement after ODI are as follows:

"Employees from the experimental group are more active and confident; they are more energetic in working and more creative." (Interview with management members, November 2013)

"People use more positive statements instead of complaints; this helps to improve the working atmosphere and collaboration." (Interview with management members, November 2013)

"People were more participative and take more ownership as they are proud that people accepted their ideas." (Interview with management members, November 2013)

4.4.3 Summary of Post-ODI status

Table 33

Comparison between Pre and Post ODI for each variable

Variable	Pre-ODI Mean	Post-ODI Mean	% Improvement
supervisor support	2.8519	3.2407	13.64%
job autonomy	2.6970	2.9529	9.49%
performance feedback	2.9259	3.1852	8.86%
co-worker support	2.9537	3.2315	9.40%
employee engagement	4.1917	4.4031	5.04%

Table 33 summarizes each variable of job resources and employee engagement of the company before and after ODI. All variables have improved after ODI. The greatest improvement in job resources was supervisor support while performance feedback had the least improvement. From the researcher's observation after six months of ODI, participants were more confident and able to articulate their ideas. Many comments from training evaluations suggested to further conduct interventions to all the people as they can apply it to both their day to day work and personal life. One of the management members has given the quote about change after all interventions as below.

"I can see the improvement of employees in the experimental group after the ODI period. They have better logical thinking and realize how to improve themselves as they learnt from the class. They are more knowledgeable and more structured, which helps our company develop faster. In addition, they feel that they are a part of the company, they are important to the company, which enhances the engagement." (Interview with management members, November 2013)

Research Question # 4: Are there any relationship between job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement?

To answer research question#4 and test the hypothesis three that there are relationships between job resources and employee engagement, Pearson Correlation was used

to determine the degree of relationship between two sets of variables at post-ODI (see Table 4.22). The statistical findings support that all variables of job resources (supervisor support, job autonomy, performance feedback and co-worker support) have a statistically significant relationship with employee engagement; hence, the research findings answer the research question#4 and support hypothesis three as follows:

Hypothesis 3.1: Supervisor support has a significant relationship with employee engagement

Hypothesis 3.2: Job autonomy has a significant relationship with employee engagement

Hypothesis 3.3: Performance feedback has a significant relationship with employee engagement

Hypothesis 3.4: Co-worker support has a significant relationship with employee engagement

Table 34 shows the summary of the relationship between job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement.

Table 34

Pearson Correlation between job resources and employee engagement

Variable (job resources)		employee engagement
supervisor support	Pearson Correlation	.567[*]
	Sig. (2-tailed)	.002
	N	27
job autonomy	Pearson Correlation	.575[*]
	Sig. (2-tailed)	.002
	N	27
performance feedback	Pearson Correlation	.702[*]
	Sig. (2-tailed)	.000
	N	27
co-worker support	Pearson Correlation	.586[*]
	Sig. (2-tailed)	.001
	N	27

* Correlation is significant at the 0.05 level (2-tailed).

The quantitative results **supported hypothesis three**. Job resources; supervisor support (r = .567, p < 0.05), job autonomy (r = .575, p < 0.05), performance feedback (r = .702, p < .05) and co-worker support (r = .586, p < .05) have a significant relationship with employee engagement. Performance feedback had the most positive correlation on employee engagement (r = .702).

4.5   Experimental group and Control group Comparison

The researcher used quantitative data analysis from the experimental group and the control group to validate the impact of ODI during the pre and post ODI stages to answer research question#3 and test the hypothesis two as follows:

Research Question # 3: Can ODI contribute to the improvement and development of job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement?

Hypothesis 2.1:   There is a significant improvement between pre-ODI and post-ODI on supervisor support

Hypothesis 2.2:   There is a significant improvement between pre-ODI and post-ODI on job autonomy

Hypothesis 2.3:   There is a significant improvement between pre-ODI and post-ODI on performance feedback

Hypothesis 2.4:   There is a significant improvement between pre-ODI and post-ODI on co-worker support

Hypothesis 2.5:   There is a significant improvement between pre-ODI and post-ODI on employee engagement

This section presents a summary of the findings of differences between pre-ODI and post-ODI on job resources and employee engagement; the researcher used the paired sample test to test the hypothesis.

Supervisor Support

Table 35

Paired sample test for supervisor support

supervisor support	Pre-ODI	Post-ODI	Paired Differences	Variance	Incremental Rate (%)
Experimental group Mean	2.8519	3.2407	t =-2.657	-0.3889	13.64%
SD	.60946	.49750	Sig. = .013		
Control group Mean	3.1442	3.2115	t =-.727	-0.0673	2.14%
SD	.41936	.42245	Sig. = .474		

As seen from the descriptive statistics of the experimental group's paired sample test, shown in Table 35, there was a statistically significant improvement in the scores for the pre-ODI (M=2.8519, SD=.60946) and post-ODI (M=3.2407, SD=.49750) for supervisor support; $t(26)$ = -2.657, p <.05. The results suggested that ODI contributes to the improvement of supervisor support. As for the control group, there was no statistically significant difference in the scores for the pre-ODI (M=3.1442, SD=.41936) and post-ODI (M=3.2115, SD=.42245) for supervisor support; $t(25)$ = -.727, p >.05. These results suggest that without ODI, there is no statistically significant improvement between pre-ODI and post-ODI.

Hence the results from both the experimental and control groups indicated that ODI contributed to the development and improvement of supervisor support. The results also supported hypothesis 2.1 that, there is a statistically significant improvement between pre-ODI and post-ODI on supervisor support whereas those experiencing no intervention showed no statistically significant improvement for supervisor support.

Job Autonomy

Table 36

Paired sample test on job autonomy

job autonomy	Pre-ODI	Post-ODI	Paired Differences	Variance	Incremental Rate (%)
Experimental group Mean	2.6970	2.9529	t = -2.768	-0.2559	9.49%
SD	.52406	.47464	Sig. = .010		
Control group Mean	2.4476	2.6853	t =-2.271	-0.2377	9.71%
SD	.65198	.62044	Sig. = .032		

As seen from the descriptive statistics of the experimental group's paired sample test, shown in Table 36, there was a statistically significant improvement in the scores for the pre-ODI (M=2.6970, SD=.52406) and the post-ODI (M=2.9529, SD=.47464) for job autonomy; t(26) = -2.768, p<.05. The results suggested that ODI contributes to the improvement of job autonomy. Hence the results support hypothesis 2.2 that, there was a statistically significant improvement between pre-ODI and post-ODI on job autonomy.

Although the control group received no intervention, there was also a statistically significant improvement in the scores for the pre-ODI (M=2.4476, SD=.65198) and the post-ODI (M=2.6853, SD=.62044) for job autonomy; t(25) = -2.271, p < .05. From the discussion with the company's HR manager, the explanation for control group having a higher score in job autonomy might be attributed to the fact that there was an announcement from the management to encourage employees to take accountability of their work and to propose ideas to make work more efficient. This might have some impact on the control group resulting in a higher score after ODI.

Performance Feedback

Table 37

Paired sample test on performance feedback

performance feedback	Pre-ODI	Post-ODI	Paired Differences	Variance	Incremental Rate (%)
Experimental group Mean SD	2.9259 .46532	3.1852 .47442	t =-3.155 Sig. = .004	-0.2593	8.86%
Control group Mean SD	3.1538 .31596	3.0769 .27175	t = .881 Sig. = .387	.0769	- 2.44%

As seen from the descriptive statistics of the experimental group's paired sample test, shown in Table 37, there was a statistically significant improvement in the scores for the pre-ODI (M=2.9259, SD=.46532) and the post-ODI (M=3.1852, SD=.47442) on performance feedback; $t(26)$ = -3.155, p < .05. The results suggested that ODI contributes to the improvement of performance feedback. As for the control group, there was no statistically significant difference in the scores for the pre-ODI (M=3.1538, SD=.31596) and the post-ODI (M=3.0769, SD=.27175) for performance feedback; $t(25)$ = .881, p > .05. In fact, there was a slight decrease after ODI. These results suggest that without ODI, there was no statistically significant improvement between pre-ODI and post-ODI.

Hence the results from both the experimental and control groups indicated that ODI contributed to the development and improvement of performance feedback. The results also supported hypothesis 2.3 that, there was a statistically significant improvement between pre-ODI and post-ODI on performance feedback whereas those experiencing no intervention showed no statistically significant improvement in performance feedback.

Co-worker Support

Table 38

Paired sample test on co-worker support

co-worker support	Pre-ODI	Post-ODI	Paired Differences	Variance	Incremental Rate (%)
Experimental group Mean	2.9537	3.2315	t =-3.126	-0.2778	9.41%
SD	.55486	.48001	Sig. = .004		
Control group Mean	3.1923	3.0385	t = 1.568	0.1538	-4.82%
SD	.45993	.51329	Sig. = .130		

As seen from the descriptive statistics of the experimental group's paired sample test, shown in Table 38, there was a statistically significant improvement in the scores for the pre-ODI (M=2.9537, SD=.55486) and the post-ODI (M=3.2315, SD=.48001) for co-worker support; $t(26)$ = -3.126, p < .05. The results suggest that ODI contributes to the improvement of co-worker support. As for the control group, there was a decrease and no statistically significant difference in the scores for the pre-ODI (M=3.1923, SD=.45993) and the post-ODI (M=3.0385, SD=.51329) for co-worker support; $t(25)$ = 1.568, p > .05. These results suggest that without ODI, there would be no statistically significant improvement between pre-ODI and post-ODI.

Hence the results from both the experimental and control groups indicated that ODI contributed to the development and improvement of co-worker support. The results also support hypothesis 2.4 that, there was a statistically significant improvement between pre-ODI and post-ODI for co-worker support whereas those experiencing no intervention showed no statistically significant improvement in co-worker support.

Employee Engagement

Table 39

Paired sample test on employee engagement

Employee engagement	Pre-ODI	Post-ODI	Paired Differences	Variance	Incremental Rate (%)
Experimental group Mean	4.1917	4.4031	t =-2.782	-0.2114	5.04%
SD	.71107	.70733	Sig. = .010		
Control group Mean	4.5113	4.1267	t = 2.938	0.3846	-8.53%
SD	.73711	.85595	Sig. = .007		

As seen from the descriptive statistics of the experimental group's paired sample test, shown in Table 39, there was a statistically significant improvement in the scores for the pre-ODI (M=4.1917, SD=.71107) and the post-ODI (M=4.4031, SD=.70733) for employee engagement; $t(26) = -2.782$, $p < .05$. The results suggest that ODI contributes to the improvement of employee engagement. As for the control group, there was a statistically significant decline in the scores for the pre-ODI (M=4.5113, SD=.73711) and the post-ODI (M=4.1267, SD=.85595) for employee engagement; $t(25) = 2.938$, $p <.05$. From the observation and interviews with the HR manager, the decline in the score might be because employees in control group felt upset that they did not get selected to the intervention group so they can learn new things; another explanation for the result might be that employee engagement levels tend to go down if companies do nothing after a survey, this was supported by the study of Blessing White (2011) that those employees who participated in a survey and saw no action or follow up from the companies after the survey will be less engaged. This study suggested that surveying and not following up can actually result in decreasing the engagement.

Hence the results from both the experimental and control groups indicated that ODI contributed to the development and improvement of employee engagement. The results also

support hypothesis 2.5 that, there was a statistically significant improvement between pre-ODI and post-ODI on employee engagement whereas those experiencing no intervention showed no statistically significant improvement in employee engagement.

4.6   Coincident impact (Organization Performance)

The researcher compared the five organizational metrics between 2012 and 2013 during the ODI period. This research did not intend to conclude that there was a direct impact from the ODI programs, however, it was interesting to notice that the results were better for the ODI period.

Organizational performance can be measured by both financial and non-financial metrics such as Sales, Gross Profit, Net Profit, Customer Satisfaction index, Customer complaints, Productivity, Defect Rate, Employee Satisfaction Index, Absenteeism Rate, and Employee Turnover rate (Kaplan & Nortan, 2004). In this research, the researcher used five metrics to measure organization's performance effectiveness (Absenteeism Rate, Employee turnover rate, Defect Rate, Customer Complaints and Gross Profit). The researcher and the management team from the company mutually selected the metrics that can suitably reflect the results in a short period. The researcher compared the accumulated results from June to November during the years 2012 and 2013, which was the ODI period; there were five organizational performance metrics used in this research as follows:

- Absenteeism Rate ((total days lost x 100)/ (total available working days x total employees))

- Employee Turnover rate ((total staff who left x 100)/total staff). This calculation was from voluntary turnover only.

- Defect Rate ((total square meter of defects / total square meter of production)*100)

- Number of Customer complaints

- Gross Profit Margin ((sales – cost of goods sold) / sales)

Figure 35 shows the comparison results of five organizational performance metrics during 2012 and 2013, the ODI period.
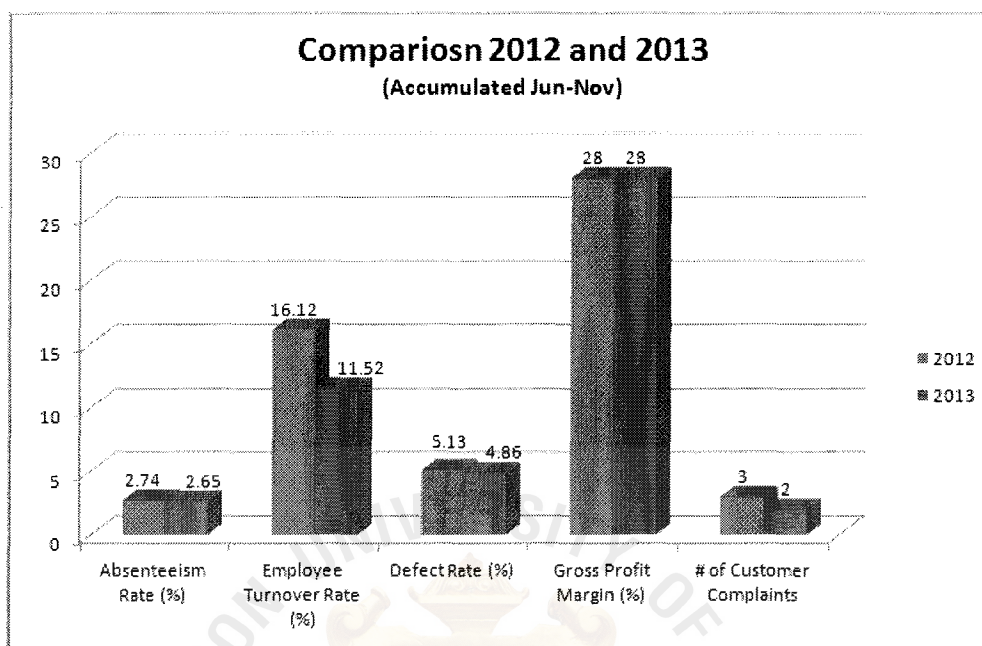
Figure 35. Comparison between 2012 and 2013 for Organizational Performance

The result found that absenteeism rate, employee turnover rate, defect rate and customer complaints were better during the ODI stage. For gross profit margin, the percentage in 2012 and 2013 was the same but if we exclude the unusual high sales in 2012 due to the recovery of the construction industry after flooding, the performance of gross profit in 2013 could be considered better than in 2012.

Chapter 5

Summary, Conclusions, Recommendations, and Reflections

This chapter presents a summary of the research findings, conclusions, recommendation and reflections on the research.

5.1   Summary of Research Intentions

The purpose of this research was to study the impact of ODI on employee engagement through the improvement of job resources. The relationship between job resources and employee engagement was the conceptual framework for the study. To develop job resources and employee engagement, the researcher led the research as OD practitioners using action research methodology.

The researcher conducted six interventions over six months (May-November 2013) at a focal company, company X, which is a mid-sized floor tile manufacturing company. From the early discussion with the company's management, the main challenges were in getting employees to commit and be enthusiastic about their work. Since most employees were with the company for over ten years, the work culture had become complacent and too relaxed according to the management. The company would like to boost the energy and commitment of employees to be able to survive in the competitive market especially penetration from China and AEC. In addition, the company faced the problems of adaptability to change of employees. The researcher and management have together agreed to conduct the action research on employee engagement to address those issues; how to improve employee engagement level in the company and how to build an effective response to change.

The OD interventions were designed under effective change management framework from Cummings and Worley (Cummings & Worley, 2009, p.164) and Whole Brain Literacy (Tayko & Reyes-Talmo, 2010). The researcher conducted workshops and offered trainings and exercises for intervention. The interventions were conducted with 27 participants from

various departments (experimental group) over a 6-month period. The researcher also set up a control group of 26 participants in order to compare the impact of interventions.

5.2 Summary of Findings

Research findings indicated that the ODI had a significant impact on job resources and employee engagement. There was supportive evidence from both quantitative and qualitative data analysis. After the ODI, all the mean scores of job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement were significantly increased in the experimental group; while in the control group only job autonomy's score had significantly increased and the others had a similar score or less than the pre-ODI. In summary for the experimental group, there is a statistically significant improvement between pre-ODI and post-ODI for job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement. In addition, all variables of job resources (supervisor support, job autonomy, performance feedback and co-worker support) indicated a positive impact on employee engagement. A summary of the findings from each stage are explained in the following section.

5.2.1 Pre-ODI

The focal company is into floor tile manufacturing; a majority of employees were factory workers with high school level education. The working style was very routine work; most supervisors are lack of soft skills especially leadership and management skills. They have been promoted due to long years of service rather than skills. They are good in technical skills but lack people management skills. The working culture is like a family, the challenge is that employees are too relaxed and not enthusiastic about their work. They love the company and were not likely to leave the company but at the same they do not take any effort or take accountability for their work.

The management realized the issues and were worried about the future of the company. The market has become more competitive due to the Chinese penetration and AEC. There will be many changes along the way; they need to find a way to boost energy levels and commitment of employees and to build their capability to be able to cope with change to survive in a more competitive world.

For Pre-ODI assessment, the findings found that the company had an "Average" level of employee engagement, the mean was 4.1917 and a majority (21 participants or 71%) were in "Average" level (3.07 – 4.66). It can be said that our study group has an average level of Engagement which has a mean score higher than the average scores of UWES-17 International database (M= 3.82, N=2,312) (Schaufeli & Bakker, 2004a). Compared to other Thai studies that used the same instrument ("UWES"); the study of 300 front-officers in a hotel business in Pattaya (M = 3.80, N=300) and the study of 270 supervisor officers from the Provincial Electricity Authority (M = 4.66, N = 270) (แสนอุบล, โสภณสิริ & พลโยราช, 2012; Yodrakang, 2011); the result is in between which indicates that the company's employee engagement level is not too bad and still have rooms to improve.

The study also indicated that there is no statistically significant relationship between age and employee engagement; the result is aligned with the studies of Wilmar Schaufeli &Arnold Bakker (Schaufeli &Bakker, 2003) who had tested the same questionnaire with more than 10,000 participants in more than nine countries, which stated that Engagement is very weakly positively related to age. For Position, the study found that supervisors were more engaged than staff but it was not a statistically significant relationship between position and employee engagement. The results are also aligned with many studies which showed that higher positions have more level of engagement (Aon Hewitt, 2012; Dale Carnegie Training, 2012; Quantum Workplace, 2013; CIPD, 2010). For years with the company, this study has similar results to the study from Dale Carnegie Training (2012) which stated that new

employees will have less engagement as they feel less confident about their roles; employees with 20 years+ also have less level engagement compared to those who have been with the company for 3 years or more as for long years of experience it is difficult to maintain motivation in their career path. In this study, the employees who have been for 11-15 years with the company have the highest level of engagement but the study did not find a statistically significantly relationship between years with the company and employee engagement.

5.2.2 ODI

The researcher conducted six OD interventions over a 6-month period with 27 participants. The intervention process was designed based on effective change management from Cummings and Worley (Cummings & Worley, 2009, p.164) and Whole Brain Literacy (Tayko & Reyes-Talmo, 2010). The researcher discovered three key findings during the ODI phase.

First, it is very important to design an ODI process that addresses the stage of change. Starting from motivating change, the researcher emphasized on a compelling reason to change from both internal and external factors. The whole brain intervention helped participants see the company differently. It is the thinking process that shifts the mindset and helps to explore from different angles. It helps identify issues, challenges, opportunities which are a starting point of change. Then latter interventions were about building the capability of participants. Leadership, communication, problem solving training were conducted and the last one was about sustaining the change by using appreciative coaching to ensure that change was continuously monitored and improved along the way.

Second, the content in each intervention should address the needed capability to bring them to the desired stage of change. Leadership, communication and problem solving skills were important for the company. It's not only the knowledge that they learnt, it is the

confidence that they gained from knowing the content that helped them to become more effective. Participants were now found to be more open and braver. The group exercises in interventions had enhanced teamwork atmosphere, making people from different departments work together and understand each other more. Overall, the process of learning new things, new theories and new frameworks made them more confident in working, thus generating innovation and creativity.

Interventions during the last six months had transformed the participants to be more mature, confident and logical. They understand that change has happened all the time and no one can stop it, the best way is to effectively respond to it. The content, context and process of interventions had built a new environment of working. Participants had applied it to their daily work and found that it was more smooth, collaborative and effective using the structured frameworks. The overall interventions had transformed them by building capability to respond to change.

5.2.3 Post -ODI

The results from the questionnaires and interviews indicated that the ODI contributed to the development and improvement of job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement. There is a statistically significant improvement between pre-ODI and post-ODI for job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement. Post-ODI means were increase for all variables; the results are summarized below.

- The ODI impact on supervisor support indicated that participants understood more about leadership styles and how to apply the right style to each situation. They realized that good leaders should focus on both task and people dimensions. This changed their mindset to start caring more about the staff's

soft side. In addition, appreciative coaching technique improved their coaching skills. Some participants started using the researcher's coaching form as a tool to communicate and offer feedback to their employees.

- The ODI impact on job autonomy indicated that participants understood more about the freedom of working, which helped generate more creativity and commitment from employees. This change their mindset and also that of their supervisors to be more objective and supportive rather than being directive.

- The ODI impact on performance feedback suggested that the practice of performance appraisal be more interactive, guiding and setting goals rather than one-way communication on giving the score. In addition, participants had learnt how to give the constructive feedback by using the appreciative concept to build from a strength based system.

- The ODI impact on co-workers indicated the improvement of team work by enhancing communication skills and understanding different styles of people. Participants had learnt their styles from the DISC exercise and realized how to interact people from with other styles. After ODI, the cross-functional team seemed have improved, especially from the sales and back office teams.

- The ODI impact on employee engagement indicated more collaboration from cross-function teams, more participation in the meeting and more commitment to work. The quality and morale of work were better after the ODI as indicated in the organization performance result comparison. Participants were more involved and focused on their tasks. The appreciative inquiry concept improved the working style to build from their strength rather than pin point the problems. The improvement in employee engagement seems to have a

positive impact on organizational effectiveness and working atmosphere in the focal company.

In addition, the empirical results show that job resources (supervisor support, job autonomy, performance feedback and co-worker support) has a statistically positive impact on employee engagement. Increasing job resources would increase the level of employee engagement. The results are supported by many studies which found that job resources play a significant role in improving employee engagement (Bakker & Demerouti, 2008; Schaufeli & Bakker, 2004b; Rothmann & Jordaan, 2006; Halbesleben, 2010; Mauno, Kinnunen, Mäkikangas, & Feldt, 2010).

5.3   Conclusions based on Findings

Development of job resources (supervisor support, job autonomy, performance feedback and co-worker support) has resulted in a positive impact on employee engagement. There was a positive correlation between each of the Job Resource variables (supervisor support, job autonomy, performance feedback, co-worker support) and employee engagement.   The findings indicated that the improvement of job resources in the organization can result in improvement in employee engagement.

The research provided supportive evidence that job resources can be developed through ODI. The ODIs conducted in this research helped improve Job resource (supervisor support, job autonomy, performance feedback, co-worker support) and employee engagement. ODI had been designed by using end-to-end change management process to build the capability of participants. The mean score of job resources and employee engagement increased after the ODI, interviews and observations also support the result. There was a statistically significant improvement between pre-ODI and post-ODI for job resources (supervisor support, job autonomy, performance feedback and co-worker support) and employee engagement at 0.05 level of significance. Compare to the control group which

has no experience in ODI, there is no significant improvement in all variables except job autonomy (some variables also decreased after ODI).

In conclusion, the ODI program has successfully increased job resources in the organization. This development impacts the improvement of employee engagement. There was also a coincidentally, positive impact which showed better organizational performance. Organizational performance (Absenteeism, Employee Turnover, Defect Rate, Customer complaints are Gross Profit) was better during ODI than the same period before ODI. The improvement of organizational performance in 2013 might not be a direct result of ODI but it is good to notice that the overall performance is better. The impact of employee engagement to the organization performance were supported from many literature reviews in the past (Zaleznik, 1996; Lasher, 1971; Hater et al., 2003; Schaufeli et al., 2002; Harter et al., 2002; Gibbons, 2006).

5.4 Recommendations

This section proposes some recommendations for the company in order to sustain the development of job resources and employee engagement and also offer recommendations for future research.

5.4.1 Recommendations for the focal company

The research findings reveal that ODI had a positive impact on the development of job resources and employee engagement and also improved in organizational effectiveness. As this research focused only on a pilot group, it would be worthwhile to expand the scope to the whole organization to get a higher impact. The recommendations also integrated with the management' comments after ODI; the researcher makes the following recommendations for future plans at the company.

- Roll out ODI to the rest of the organization

The company should further apply ODI to the whole organization to make it a whole-system. Team building, communication and problem solving training should be rolled out to all employees. Presentation and communication skills should be offered to the sales team as they have to face customers and understand their needs. There was also positive feedback from the training evaluation forms that these interventions should be conducted regularly in the whole organization.

- Career Development

Some ODI programmes such as offering coaching and giving feedback should be implemented as a part of career development to be integrated into the day to day operations. The company can customize the researcher's tools from the workshop and use as a company's human resources tool, which can help ensure both on-going and sustainable development.

- Sustain the program

Employee engagement can be decreased if the company does nothing. Therefore, the focal company should have a solid annual plan to engage with employees. Whole brain exercise should be a part of the annual planning to help identify issues and opportunities. After rolling out the interventions to the whole organization, the company should develop a training plan that integrates ODI such as teamwork and communication and make it mandatory for new employees and offer regular update or make it a part of the career development plan, which will help ensure its sustainability and capability along with the level of engagement.

5.4.2 Recommendations for future research

Due to limitation of time this research was done using a pilot group in an organization to prove the impact of ODI in developing job resources and employee engagement. It will be beneficial to determine whether the design can be replicated to a wider group or to other industries.

For future studies, researchers may need to explore more dimensions of job resources such as growth opportunities, advancement, and Job security to prove whether other dimensions of job resources have a positive impact on employee engagement. Also, future studies should test the design and hypothesis with other types of organizations e.g. large-sized organization, non-profit organization. Expanding the duration of research would be beneficial to test the ODI impact on organizational performance such as financial results.

A limitation of this Action research was that this research was derived from a single mid-sized organization with non-randomized participants and based on only one period of time. Hence, there is a limitation in generalizing the findings from this research. Therefore, a full quantitative research should be conducted in order to gain a deeper understanding about the relationship between job resources and employee engagement.

5.5 Reflections on this research

This research has given avaluable and knowledgeable experience for the researcher; along the journey, the researcher has gained a lot of experience and learnt the truth of life.

First, the researcher has learnt deeply about organizational development, what drives OD and why OD is so important for an organization. From many books, articles and literature reviews during the period of research, the researcher can understand the whole value chain of OD, how to prepare an organization to handle for change. We are now living in an exponential time, change now happens faster and is more complex. Hence, organizations must prepare their workforce to handle change for survive in the competitive world; and OD is one of the answers to achieve that goal.

Second, this was an action research which was actually implemented at a focal organization; the researcher had learnt new contexts which is the company. The researcher realized that designing an ODI process was very critical in this research especially to suit with the context. Initially, the researcher doubted the approach and how action research can

measure the differences in such a short period; the results surprised the researcher as the participants have gradually changed their behaviour. From workshops to workshops, they improved their soft and hard skills. Their attitudes about the organization have been improved. This research has taught the researcher that OD interventions are very effective and can be implemented in any kind of organization.

Third, by conducting AI and Whole brain workshop, the researcher had a clearer understanding of the concepts and found it very powerful. The researcher realized that everybody is different and we have to appreciate the differences; difference is not something bad; actually the company needs the differences in each employee to create a whole organization, which will do better when they practise using whole brain as a team. Whole brain can help us see the bigger picture from a holistic view. It enables us to see multiple perspectives which help to connect and find the missing link enhancing greater chance for success. Whole brain also helps us to look at the world differently and find our hidden strengths. It brings human potential by using inside-out energy. It is a very good thinking process that can be applied to the self, work and life.

Finally, this research has reflected the researcher's personal development. The researcher has improved her communication, facilitation and problem solving skills. The research gave the researcher a chance to know and connect with more people. In conclusion, this research has been a priceless journey for the researcher to experience action research and become a better OD practitioner.

Epilogue

Implementing the action research at the focal company helped me to gain valuable experience, not only academic expertise but also real life intervention. I have learnt various perspectives, types and characters of people. I have worked with interesting people and they provided valuable feedback for me and for my research; I have developed my communication and facilitation skills during conducting intervention: the feedback and reflections from participants changed my view, and I am now more open and accept the differences of perspectives from others. I learnt to appreciate the opinions from others even if it was against what I believed. Working with the company's management team and the participants to understand the real issues, conducted interventions and found out that they can improve the organization makes me really proud and believe that I can make change happen.

Joining the Ph.D. OD program was one of my best decisions; I was reluctant at the beginning and thought that it will be just a paper degree, but this program changed my mind; I can actually create change for the organization and create a better and happier workplace leading to a better society. I see the world with the opportunities and energies to explore. I selected employee engagement as the topic as I have seen issues from many organizations. The organization that has all smart employees does not guarantee their success; people are not machines, organizations have to bring the best out of them from their head, heart and hand as a whole.

Finally, this Ph.D. OD program has really transformed me. My inner being has been transformed to a new level, to the level of the society instead of myself. I now connect myself to the bigger universe. I've never thought that I can change the world, but now I can and I have. I have learnt a lot from my teachers, my colleagues and most importantly myself. Everything is possible if you think possitively, you can change the world.

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Appendix A

Instrument # 1: job resources and employee engagement Interview questions

Objectives

- To gain understanding of how company provide job resources to employees

- To understand current engagement level of employees in manager's perceptions

- To find ways of improvement of employee engagement in Company X

Interview Approach

The interview will take around 30-40 minutes, some questions will be rating and some will be open-end. Please be honest and open as much as possible. All results will be kept confidential and will be displayed as a summary without disclosing the source.

Name: _____   **Date:** _____

Department : _____

1. How much the company permits freedom to perform role as you wish, at your own pace and style?

1	2	3	4
Never	Sometimes	Often	Always

What is it you do to involve staff members in decisions that affect their work? Does employees' opinion count?

_____

_____

2. How people perceive other departments or colleagues commit to help them?

1	2	3	4
Never	Sometimes	Often	Always

Please explain:

3. How often employees find out about how well they are doing?

1	2	3	4
Never	Sometimes	Often	Always

Explain how employees hear about what's going on in the company.

4. How much subordinates know what their supervisors expect from them?

1	2	3	4
Never	Sometimes	Often	Always

Describe what you do to create an environment that encourages staff members to communicate to supervisors about what is going on in their jobs or to give you feedback.

5. Company does enough recognition or praise employees?

1	2	3	4
Never	Sometimes	Often	Always

How do you recognize your employees?

6. Employees always have the opportunities to learn and grow.

1	2	3	4
Never	Sometimes	Often	Always

How do you plan for their career path?

_____

7. People tend to work harder to get a job done with better quality job.

1	2	3	4	5	6
Almost Never	Rarely	Sometimes	Often	Very Often	Always

8. People are very focus when they are doing their job.

1	2	3	4	5	6
Almost Never	Rarely	Sometimes	Often	Very Often	Always

9. People are enthusiastic about their job.

1	2	3	4	5	6
Almost Never	Rarely	Sometimes	Often	Very Often	Always

Please explain current level of employee engagement.

_____

10. What do you think employees like most about working here?

_____

11. What do you think employees dislike most about working here?

_____

12. What is the best way to improve level of employee engagement?

_____

Appendix B

Instrument # 2: Logbook for the researcher

ODI Stage

Event/ Activity: _____   **Date:** _____

Objectives: _____

Event/ Activity	Reflection

Appendix C
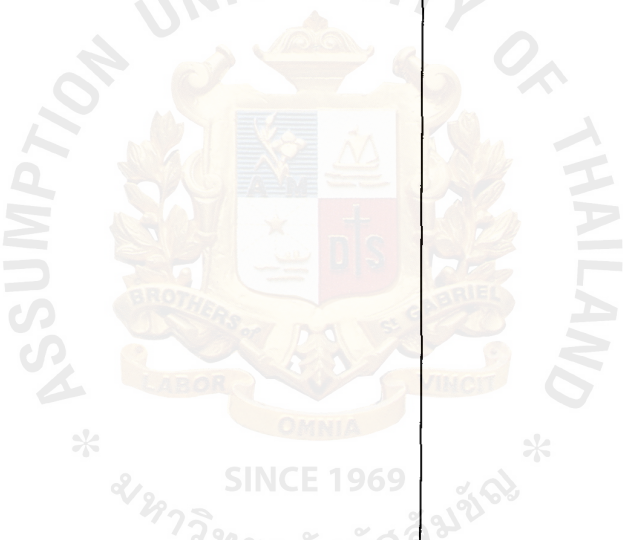
Instrument # 4: Logbook for the participants

ODI Stage

Name:_____

Position: _____

Department: _____

Date	Event/ Activity	Reflection

Appendix D

Instrument # 5: job resources and employee engagement Questionnaire

Pre-ODI and Post-ODI

Instructions: The questionnaire aims to get your attitude and perception about your current job environment. Information will be kept confidential and will be presented as a summary or average. Please be open and honest to your answer.

Part 1 - Demographic

Age

☐ 20-30 years old

☐ 31-40 years old

☐ 41-50 years old

☐ >50 years old

Gender: Male   Female

Name _____
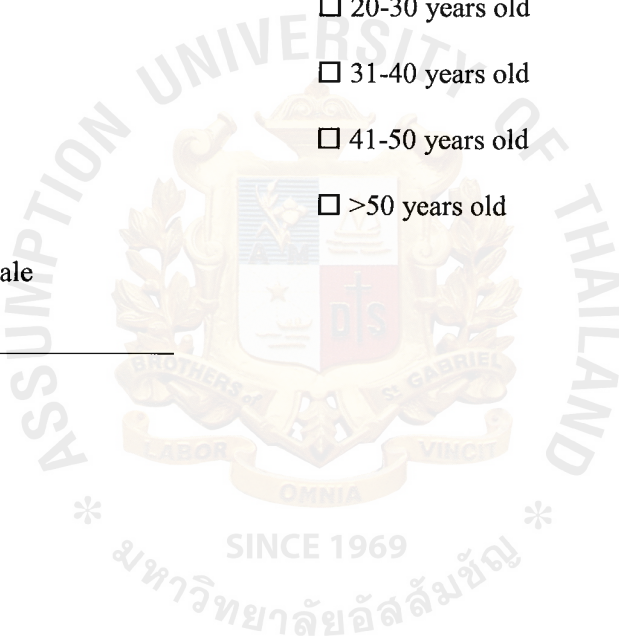
Part 2 - job resources

Instructions: Please answer all the questions that as it applies to your current work situation.

Please select only one answer that suits you the most.

2.1 job autonomy

		Strongly Disagree	Disagree	Agree	Strongly Agree
1	Do you have freedom in carrying out your work activities?	1	2	3	4
2	Do you have influence in the planning of your work activities?	1	2	3	4
3	Do you have an influence on the pace of work?	1	2	3	4
4	Can you decide how your work is executed on your own?	1	2	3	4
5	Can you interrupt your work for a short time if you find it necessary to do so?	1	2	3	4
6	Can you decide the order in which you carry out your work on your own?	1	2	3	4
7	Can you participate in the decision about when something must be completed?	1	2	3	4
8	Can you personally decide how much time you need for a specific activity?	1	2	3	4
9	Do you resolve problems arising in	1	2	3	4

	your work yourself?				
10	Can you organize your work yourself?	1	2	3	4
11	Can you decide on the content of your work activities yourself?	1	2	3	4

2.2 supervisor support

		Strongly Disagree	Disagree	Agree	Strongly Agree
1	My supervisor is successful in getting people to work together.	1	2	3	4
2	My supervisor is concerned about the welfare of those under him.	1	2	3	4
3	My supervisor pays attention to what I am saying.	1	2	3	4
4	My supervisor is helpful in getting the job done.	1	2	3	4

2.3 Co-Worker Support

		Strongly Disagree	Disagree	Agree	Strongly Agree
1	People I work with are helpful in getting the job done	1	2	3	4
2	People I work with are friendly.	1	2	3	4
3	People I work with are competent in doing their jobs.	1	2	3	4

4	People I work with take a personal interest in me.	1	2	3	4

2.4 performance feedback

		Strongly Disagree	Disagree	Agree	Strongly Agree
1	This job provides feedback on how well I am doing as I am working.	1	2	3	4
2	This job enables me to find out how well I am doing.	1	2	3	4
3	This job provides me with the feeling that I know whether I am performing well or poorly.	1	2	3	4

Part 3 - employee engagement

Instructions: The following 17 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have had this feeling, indicate how often you feel it by crossing the number (from 1 to 6) that best describes how frequently you feel that way.

1 = Almost Never, 2 = Rarely, 3 = Sometimes, 4= Often, 5 = Very often, 6 = Always

Items	Almost Never	Rarely	Someti mes	Often	Very Often	Always
1. At my work, I feel bursting with energy	1	2	3	4	5	6
2. I find the work that I do full of meaning and purpose	1	2	3	4	5	6
3. Time flies when I'm working	1	2	3	4	5	6
4. At my job, I feel strong and vigorous	1	2	3	4	5	6
5. I am enthusiastic about my job	1	2	3	4	5	6

6. When I am working, I forget everything else around me	1	2	3	4	5	6
7. My job inspires me	1	2	3	4	5	6
8. When I get up in the morning, I feel like going to work	1	2	3	4	5	6
9. I feel happy when I am working intensely	1	2	3	4	5	6
10. I am proud on the work that I do	1	2	3	4	5	6
11. I am immersed in my work	1	2	3	4	5	6
12. I can continue working for very long periods at a time	1	2	3	4	5	6
13. To me, my job is challenging	1	2	3	4	5	6
14. I get carried away when I'm working	1	2	3	4	5	6
15. At my job, I am very resilient, mentally	1	2	3	4	5	6
16. It is difficult to detach myself from my job	1	2	3	4	5	6
17. At my work I always persevere, even when things do not go well	1	2	3	4	5	6

Appendix E

Instrument # 5: job resources and employee engagement Questionnaire

Pre-ODI and Post-ODI (Thai version)

แบบสอบถามความผูกพันของพนักงาน

คำแนะนำ: แบบสอบถามนี้มีวัตถุประสงค์เพื่อเข้าใจทัศนคติและการรับรู้ของคุณเกี่ยวกับสภาพแวดล้อมการทำงานของคุณในปัจจุบัน <u>กรุณาตอบคำถามทุกข้อด้วยความจริงใจ</u> ข้อมูลจะถูกเก็บเป็นความลับและจะนำเสนอเป็นบทสรุปหรือค่าเฉลี่ยเท่านั้น จะไม่มีการปิดเผยรายชื่อผู้ตอบ แบบสอบถามมีทั้งหมด 4 หน้า โปรดตอบให้ครบทุกข้อ

ส่วนที่ 1 - ข้อมูลผู้ตอบแบบสอบถาม

อายุ ☐ 20-30 ปี

☐ 31-40 ปี

☐ 41-50 ปี

☐ >50 ปี

เพศ ☐ ชาย ☐ หญิง

ชื่อ _____

หมายเหตุ : ชื่อที่ใส่เพื่อเป็นการวัดเปรียบเทียบก่อนและหลังการทำวิจัย จะไม่ถูกนำมาเปิดเผยใดๆ โดยผู้วิจัยจะทำมาเป็นคะแนนสรุปเท่านั้นโดยไม่เปิดเผยรายบุคคล

เมื่อทำแบบสอบถามเสร็จแล้ว โปรดนำไปหย่อนในกล่องที่ห้องแผนกบุคคล ซึ่งกล่องนี้จะปิดสนิทเพื่อไม่ให้ใครสามารถมาดูได้ โปรดส่งก่อน <u>วันที่ 15 พฤศจิกายน 2556</u>

ส่วนที่ 2 - ลักษณะของงาน

คำแนะนำ: คำถามนี้เกี่ยวกับสภาพแวดล้อมการทำงานของคุณในปัจจุบัน   กรุณาตอบคำถามที่ใกล้เคียงกับงานปัจจุบันของคุณที่สุด

2.2 ความมีอิสระในการทำงาน

		ไม่เลย	บางครั้ง	บ่อยครั้ง	ตลอดเวลา
1	ฉันมีอิสระในการดำเนินกิจกรรมการทำงานของฉัน	1	2	3	4
2	ฉันสามารถกำหนดแผนการทำงานของฉัน	1	2	3	4
3	ฉันมีอิทธิพลในการกำหนดจังหวะ ความเร็วของการทำงาน	1	2	3	4
4	ฉันสามารถตัดสินใจว่าจะทำงานอย่างไรได้ด้วยตัวของฉันเอง	1	2	3	4
5	ฉันสามารถหยุดการทำงานของฉันในช่วงเวลาสั้นๆ ถ้าฉันเห็นว่ามีความจำเป็นต้องทำเช่นนั้น	1	2	3	4
6	ฉันสามารถตัดสินใจจัดลำดับงานของฉันด้วยตัวฉันเอง	1	2	3	4
7	ฉันสามารถมีส่วนร่วมในการตัดสินใจว่างานส่วนใดจะเสร็จเมื่อใด	1	2	3	4
8	ฉันสามารถตัดสินใจด้วยตัวของฉันเองว่าฉันต้องการเวลาเท่าไหร่ในการทำงานใดงานหนึ่ง	1	2	3	4
9	ฉันแก้ปัญหาที่เกิดขึ้นในงานของฉันเอง	1	2	3	4
10	ฉันสามารถจัดระเบียบงานของฉันเอง	1	2	3	4
11	ฉันสามารถตัดสินใจเนื้อหาในกิจกรรมการทำงานของฉัน	1	2	3	4

2.2 การสนับสนุนจากหัวหน้า

		ไม่เห็นด้วยอย่างยิ่ง	ไม่เห็นด้วย	เห็นด้วย	เห็นด้วยอย่างยิ่ง
1	หัวหน้าของฉันเก่งในการทำให้คนทำงานร่วมกันได้	1	2	3	4
2	หัวหน้าของฉันเอาใจใส่ทุกข์สุขของลูกน้อง	1	2	3	4
3	หัวหน้าของฉันให้ความสนใจกับสิ่งที่ฉันพูด	1	2	3	4
4	หัวหน้าของฉันช่วยเหลือให้งานสำเร็จลุล่วงไป	1	2	3	4

2.3 การสนับสนุนจากเพื่อนร่วมงาน

		ไม่เห็นด้วยอย่างยิ่ง	ไม่เห็นด้วย	เห็นด้วย	เห็นด้วยอย่างยิ่ง
1	ผู้ร่วมงานของฉันช่วยเหลือกันเพื่อให้งานเสร็จ	1	2	3	4
2	ผู้ร่วมงานของฉันเป็นมิตรดี	1	2	3	4
3	ผู้ร่วมงานของฉันมีความสามารถในงานที่เขารับผิดชอบ	1	2	3	4
4	ผู้ร่วมงานของฉันให้ความสนใจในตัวฉัน	1	2	3	4

2.4 ผลประเมินการทำงาน

		ไม่เห็นด้วยอย่างยิ่ง	ไม่เห็นด้วย	เห็นด้วย	เห็นด้วยอย่างยิ่ง
1	งานที่ฉันทำให้ข้อเสนอแนะว่าฉันทำงานได้ดีอย่างไร	1	2	3	4
2	งานที่ฉันทำนี้เอื้อให้ฉันได้รู้ว่าฉันทำได้ดีอย่างไร	1	2	3	4
3	งานที่ฉันทำสามารถทำให้ฉันรู้สึกว่าฉันทำมันได้มีประสิทธิภาพดีหรือไม่ดี	1	2	3	4

ส่วนที่ 3 - ความผูกพันของพนักงาน

คำแนะนำ: คำถามทั้ง 17 คำถามถามถึงความรู้สึกของคุณในการทำงาน โปรดอ่านคำสั่งแต่ละอย่างระมัดระวังและตัดสินใจว่าคุณเคยรู้สึกแบบนี้กับงานของคุณ ให้ระบุตัวเลข 1 = เกือบจะไม่มี, 2 = ไม่ค่อยเกิด, 3 = บางครั้ง, 4= บ่อยครั้ง, 5 = บ่อยครั้งมาก, 6 = ตลอดเวลา

Items	*เกือบจะ ไม่มี*	*ไม่ค่อย เกิด*	*บางครั้ง*	*บ่อย ครั้ง*	*บ่อย ครั้งมาก*	*ตลอด เวลา*
1. ในที่ทำงาน ฉันรู้สึกมีพลังเต็มที่ในการทำงาน	1	2	3	4	5	6
2. ฉันพบว่างานที่ฉันทำเต็มไปด้วยความหมายและคุณค่า	1	2	3	4	5	6
3. ขณะที่ฉันทำงาน ฉันรู้สึกว่าเวลาผ่านไปอย่างรวดเร็ว	1	2	3	4	5	6
4. ฉันรู้สึกมีพลังและกระฉับกระเฉงในที่ทำงาน	1	2	3	4	5	6
5. ฉันรู้สึกกระตือรือร้นในงานของฉัน	1	2	3	4	5	6
6. เมื่อฉันทำงาน ฉันลืมเรื่องทุกอย่างที่อยู่รอบตัว	1	2	3	4	5	6
7. งานที่ฉันทำสร้างแรงบันดาลใจให้ฉัน	1	2	3	4	5	6
8. เมื่อฉันตื่นขึ้นมาในตอนเช้า ฉันรู้สึกอยากไปทำงาน	1	2	3	4	5	6
9. ฉันมีความสุขขณะที่ได้ทำงานอย่างขะมักเขม้น	1	2	3	4	5	6
10. ฉันภูมิใจในงานที่ฉันทำ	1	2	3	4	5	6
11. ฉันจดจ่ออยู่กับงานของฉัน	1	2	3	4	5	6
12. ฉันสามารถทำงานได้อย่างต่อเนื่องเป็นระยะเวลานาน	1	2	3	4	5	6
13. ฉันพบว่างานที่ฉันทำอยู่เป็นงานที่ท้าทายสำหรับฉัน	1	2	3	4	5	6
14. ฉันหลงใหลในงานขณะทำงาน	1	2	3	4	5	6
15. ในที่ทำงานฉันมีความยืดหยุ่นสูงและมีสภาพจิตใจเข้มแข็ง	1	2	3	4	5	6
16. การดึงความสนใจของฉันออกจากงานเป็นเรื่องยาก	1	2	3	4	5	6
17. ในการทำงาน ฉันมีความมุ่งมั่นเสมอ แม้ในบางครั้งงานบางอย่างจะไม่ราบรื่นก็ตาม	1	2	3	4	5	6

Appendix F

Instrument # 6: Training Evaluation Form

ODI Stage

Event/Activity:_____ **Date:** _____

Instructions: Please indicate your impressions of the items listed below.

	Need improvement	Fine	Good	Very good
1. The training met my expectations.	O	O	O	O
2. I will be able to apply the knowledge learned to work.	O	O	O	O
3. The topics were relevant to me.	O	O	O	O
4. The content was organized and easy to follow.	O	O	O	O
5. The trainer was knowledgeable and able to transfer knowledge	O	O	O	O
6. How would you rate overall for this training	O	O	O	O

7. What did you gain from this training?

8. What aspects of the training could be improved?

9. What would you like to learn from the next training?

Appendix G

Instrument # 7: Organization Performance Report

Measurement	Accumulate (Jun – Nov 2012)	Accumulate (Jun – Nov 2013)
1. Absenteeism Rate		
2. Employee Turnover Rate		
3. Defect Rate		
4. Number of Customer Complaints		
5. Gross Profit Margin		

Appendix H

Cronbach's Alpha Test of job resources and employee engagement Questionnaire

Case Processing Summary

		N	%
Cases	Valid	15	100.0
	Excluded[a]	0	.0
	Total	15	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.909	39

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
JA1	134.4000	299.543	-.187	.912
JA2	134.5333	289.410	.233	.909
JA3	134.0667	290.210	.184	.909
JA4	134.2667	291.781	.149	.910
JA5	134.0667	282.495	.474	.906
JA6	133.9333	282.495	.424	.907
JA7	133.9333	278.781	.616	.905
JA8	133.8667	289.695	.264	.908
JA9	134.0000	296.286	-.038	.911
JA10	133.7333	283.924	.374	.907
JA11	134.0667	280.638	.624	.905
SS1	133.8667	292.124	.152	.909
SS2	133.9333	295.638	-.015	.912
SS3	134.0000	294.143	.044	.911
SS4	133.7333	289.495	.138	.911
CS1	133.8667	293.267	.131	.909
CS2	133.6667	291.952	.220	.909
CS3	133.8667	289.838	.327	.908
CS4	134.0667	292.352	.211	.909
PF1	134.2000	298.171	-.136	.911
PF2	134.0667	295.781	.001	.910
PF3	133.8667	292.695	.252	.909
EE1	132.9333	267.352	.642	.903
EE2	132.5333	270.552	.649	.903
EE3	132.3333	269.810	.726	.902
EE4	132.8000	268.457	.694	.903
EE5	132.6667	267.810	.787	.901

EE6	133.1333	267.838	.565	.905
EE7	133.4000	267.971	.775	.902
EE8	133.1333	272.981	.470	.907
EE9	132.8000	265.743	.659	.903
EE10	132.1333	266.124	.775	.901
EE11	132.4000	265.829	.840	.901
EE12	132.3333	277.095	.599	.905
EE13	132.9333	268.924	.603	.904
EE14	133.3333	270.952	.608	.904
EE15	133.0667	284.638	.236	.910
EE16	133.4000	270.971	.640	.903
EE17	132.6667	266.810	.765	.901

Appendix I

Utrecht Work Engagement Test permission

Source: http://www.wilmarschaufeli.nl/downloads/test-manuals/

Appendix J

Interventions Detail, Observation and Reflection

ODI 1: Workshop – Appreciative Inquiry and Whole Brain

Date	31 May 2013
Time	09:00 – 15:00
Purpose	1) To learn the theory and practice of Appreciative Inquiry (AI)
	2) To tap into strengths, inspired future and positive energy to achieve better employee engagement
	3) To engage a whole team to find effective solution
	4) To experience the benefit of reframing problems into opportunities.
	5) To introduce Whole Brain concept and thinking preference
	6) To understand the strength and weakness of individual and how to use whole brain in functioning

Agenda

Change Management Overview

- What causes Change?

- Change Management Definition

- Why people resist to change?

- Why need Change Management?

- Change Management Process

- Key factors to successfully manage change

Whole Brain Literacy

- Whole Brain Model

- I-Control, I-Explore, I-Pursue, I-Preserve

- Whole Brain Exercises

Appreciative Inquiry

- What is Appreciative Inquiry?

- 4-D Process

- Sample Case Study (Apply AI to real work)

- Appreciative Inquiry Exercise on Topic "Awesome Company X"

Reflection and Next Steps

- Write down in Journal (what did you learn, how to link to your

  work, what will you change)

- Explain next training agenda and objectives

- Training Evaluation Form

Researcher's Reflection and Observation	- At first, people are very quiet, no question asked but after the first exercise, participants were more engaged so the class was fun and more interactive.
	- For Whole brain concept, participants were very interested and lots of them never heard of this concept. First they realized what their brain quadrants, what missing and how to improve the thinking process to make it as a whole. The whole brain quadrant has obviously matched with their personality, so they were enthusiast to learn what they're missing.
	- For AI concept, it is the first time that participants used it for work. For Thai people, we know the concept of think positive but asking positive is new. They can feel the different of the tone and samples that presented in the class.
	- During AI exercise, I can see people smiles, laugh and work as a team to come up with "Awesome Company X". Management as an observers were excited and very keen to listen to group presentation. They never thought about employees thinking of company future, what they dream about Company X. It changed their mindsets as employees are just employees. Seeing employees paint the future of the company, they are proud of them and think of them as part of company.
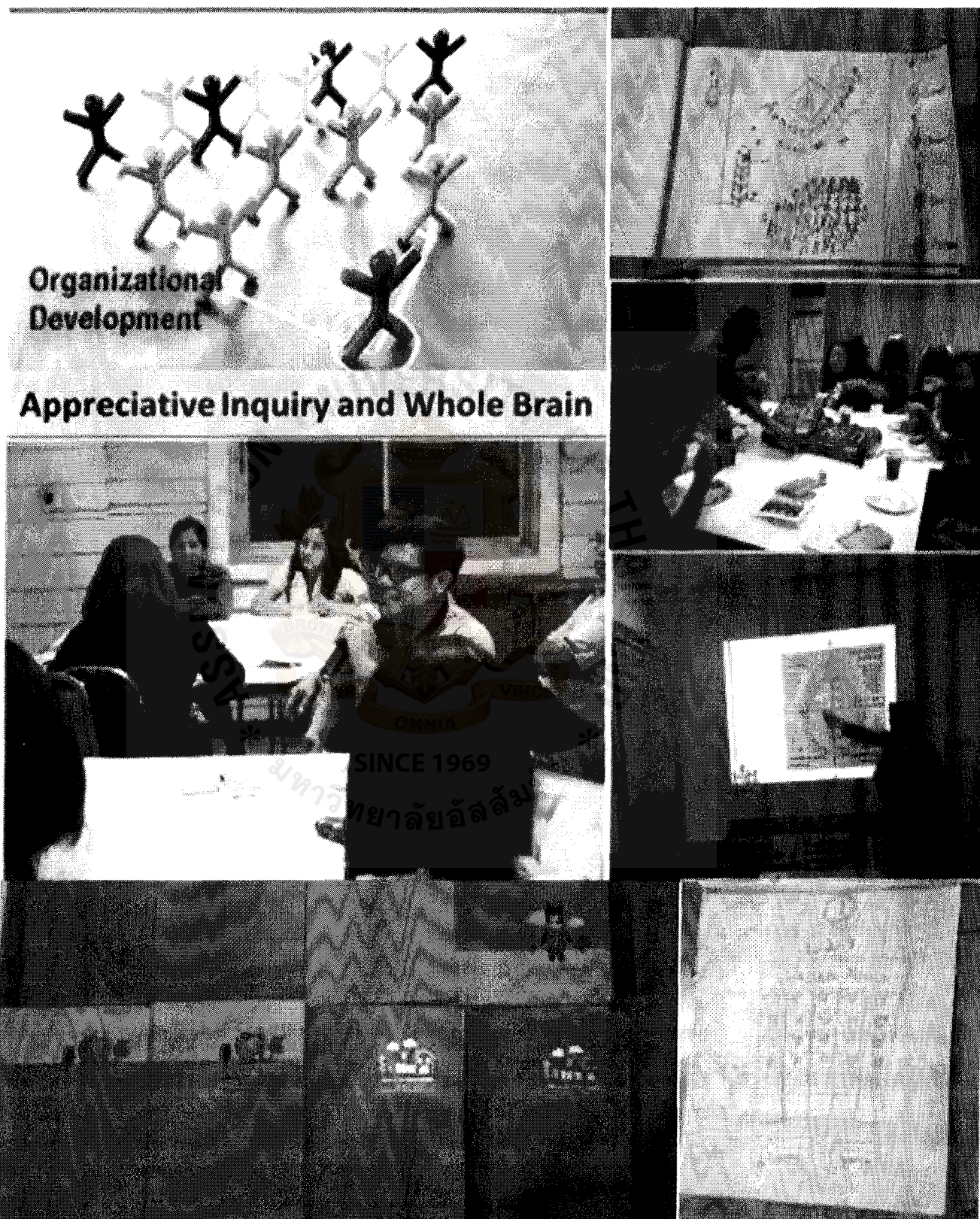
ODI 2: Training – Leadership Training

Date	19 June 2013
Time	09:00 – 12:00

Purpose

1) To understand the definition of leader and how it differs from manager
2) To understand the key characteristics of good leaders
3) How to develop yourself to be a good leader?
4) To analyze yourself as a leader
5) To understand motivation concept and how to apply to work environment

Agenda

Leadership

- Leadership Definition
- Leader vs. Manager
- Characteristics of good leaders
- Why good leaders fail?
- Exercise : Helium Stick

Johari window exercise

- Self assessment to understand 4 areas of yourself
- How to unveil the blind area

Motivation

- Maslow's Hierarchy of Needs Theory
- Herzberg Theory and how to apply to workplace
- 7 Habits
- Exercise : Stepping Stone

Reflection and Next Steps

- Write down in Journal (what did you learn, how to link to your

work, what will you change)

- Explain next training agenda and objectives

- Training Evaluation Form

**Researcher's**

Reflection and

Observation

- Participants especially supervisor level are very interested in topics. From interviews, management complaint that their supervisors are lack of Leadership skills as they were promoted due to technical skills and long year services.

- The concept that really hit them is that leader must have task and people focus. Their work culture is like a family, so no one really pays attention to people focus especially career development or what motivate them. So after the training, participants said it changed their mindset about how to be a good leader and they will focus more on people side.

- Everyone can be a leader and it showed them in the exercise. Both stepping stone and helium stick games need to have a good leader to lead the team to success. The reflection of this exercise that everyone can be a leader, depend on situation. So now they know that it's very important to study leadership even they're not supervisor yet.

- Motivation is a big problem in this company, people are too relaxed. From the reflection, the manager expressed that they just realized how the motivation works, it's not only about money. HR manager also will apply the recognition program to boost motivation in the company.
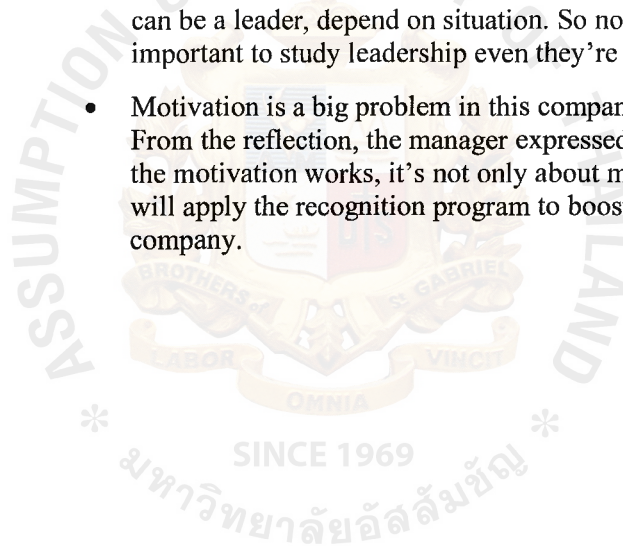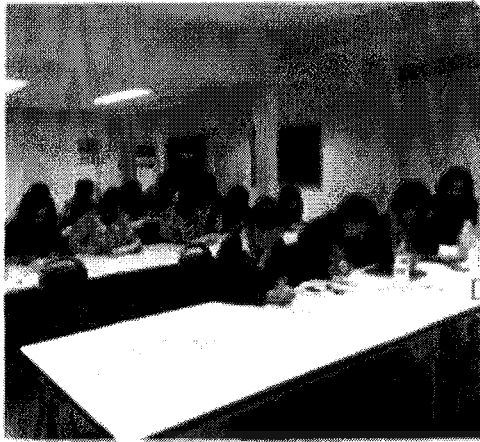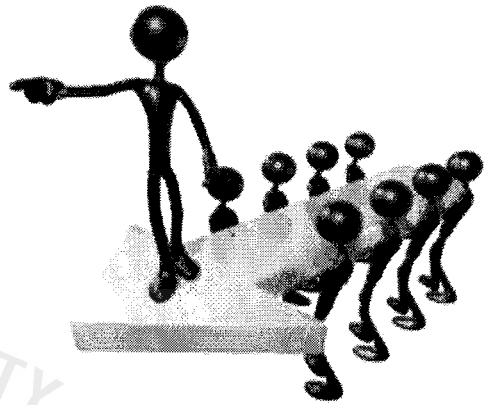
ODI 3: Training – Team building and Communication

Date	18 July 2013
Time	09:00 – 12:00
Purpose	1) Know yourself and how to communicate with others
	2) To enhance team working in Company X
	3) To improve communication skills
	4) To understand ways to solve conflicts
Agenda	**DISC**

- Self assessment

- Understand yourself (DISC)

- How to adapt yourself with other styles of people

Teamwork

- Stage of team development

- How to build a good teamwork

- Exercise: Tower Building

Conflict Management

- 5 Ways to solve conflicts

- Negotiation tips and techniques

Communication

- Components of communication

- Active Listening

- Verbal and Non-verbal

Reflection and Next Steps

- Write down in Journal (what did you learn, how to link to your

work, what will you change)

- Explain next training agenda and objectives

- Training Evaluation Form

Researcher's

Reflection and

Observation

- Most participants never done self-assessment before. So they are very excited about DISC exercise. Some said they are now 50 years old and just know who they really are. It also helps reflects the recruitment process i.e. Sales should be I style.

- For teamwork, they are quite good in their own department; the concept has helped in cross-department i.e. special project. It helps in pattern and framework on how to work together.

- The exercise was very active. It's a game with a brain and a team. It reflects on task allocation and put the right people to the right tasks.

- For communication, I would say active listening have them surprise. It is more than just listen. This is new for them and need a lot of practice.

อบรมการทำงานเป็นทีมและการสื่อสาร
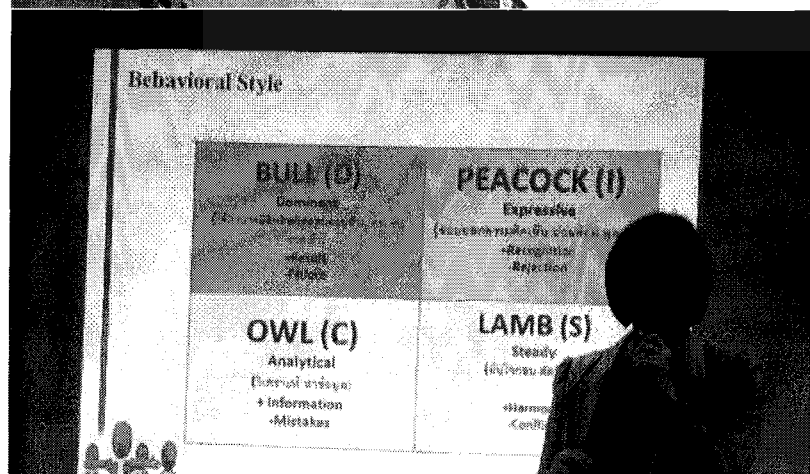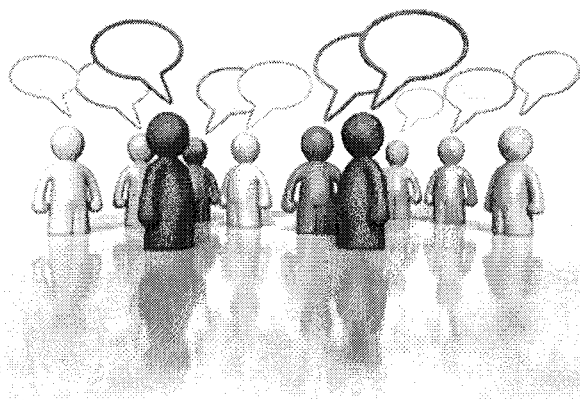
ODI 4: Training – Presentation

Date	9 August 2013
Time	09:00 – 12:00
Purpose	1) Know techniques in presentation
	2) To understand techniques to professionally answer questions during presentation
	3) To organize an effective meeting
Agenda	**Presentation**

- Three keys for presentation (Intro, content, summary)

- 4M Model

- How to find key message?

- How to use body language

- Learn from the best – Secrets of Steve Jobs

- 3 min Presentation exercise

Handling Q&A

- How to handle difficult questions

- Tips and Tricks to answer questions

Effective Meeting

- Exercise – Good vs. Bad meeting

- Potato Model

- How to write Meeting Minutes

- Solving problems during meeting

Reflection and Next Steps

- Write down in Journal (what did you learn, how to link to your work, what will you change)

- Explain next training agenda and objectives

- Training Evaluation Form

**Researcher's**

Reflection and

Observation

- For non-sales, they never have a chance to do presentation. Presentation is about convincing people. At first, it was difficult for them to speak in front of people (especially with Video recording). But we limited to 3 minute exercise and topics can be anything. I can see that they applied the techniques from training into the presentation right away. Management as observers are quite surprised on how they can improve in 2 hours.

- For Q&A session, sales team is very focus as they faced customers and always come up with difficult questions.

- In reflection, they are more confident in how they talk, present to others. Body language was very helpful for them. They now know that it's not content to convince people, the body languages counts more.
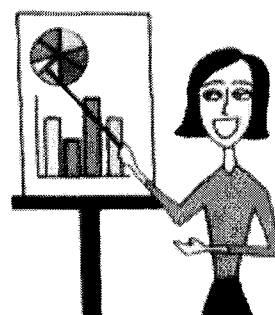
ODI 5:Training – Management and Problem Solving

Date	12 September 2013
Time	09:00 – 12:00
Purpose	1) To learn techniques in problem solving
	2) To learn how to think systematically
	3) To learn Mindmap techniques for summary work
Agenda	**Problem Solving**

- 5 Steps in problem solving (Problem, Hypothesis, Facts, Analysis, Solutions)

- SWOT analysis to identify problem

- Exercise – SWOT analysis of Company X

- Rootcause Analysis Technique – 5 Why, Fishbone diagram

- Exercise – Rootcause Analysis

Analytical Thinking

- Exercise – Left/Right brain

- Mindmapping technique

- Exercise - Mindmapping

Reflection and Next Steps

- Write down in Journal (what did you learn, how to link to your work, what will you change)

- Explain next training agenda and objectives

- Training Evaluation Form

|	
Researcher's Reflection and Observation	• This training emphasized in exercises as they have to get used to new tools and techniques. The techniques have helped as a framework for them to think and logically connected.
	• 5Why and Fishbone are a bit too difficult for them, they need time and guideline on how to frame a problem and analyze root causes. But after that, they can think by themselves. This reflects that they still

need to learn the thinking process, understand what the real problem is.

- I can see the improvement on the last exercise, Mindmapping. Participants understand the logics behind and can start thinking logically. They found it very useful in planning and summarizing key notes by using mindmaps.

การแก้ปัญหาและคิดอย่างมีระบบ
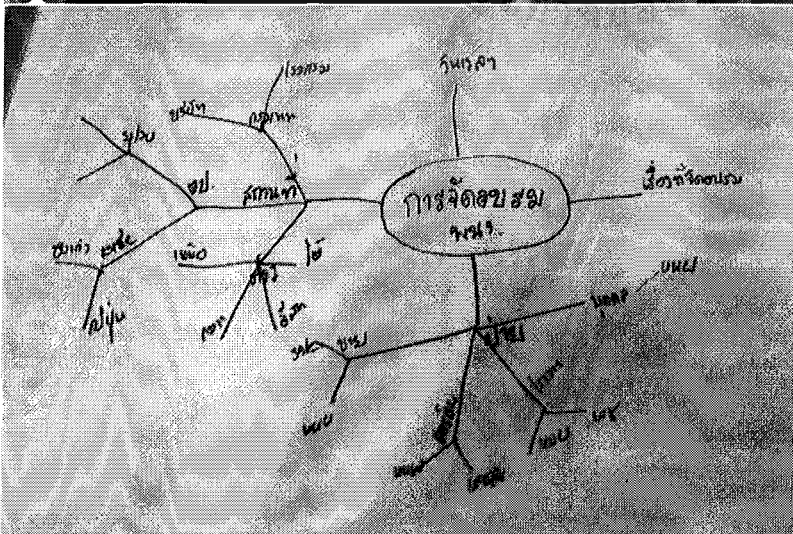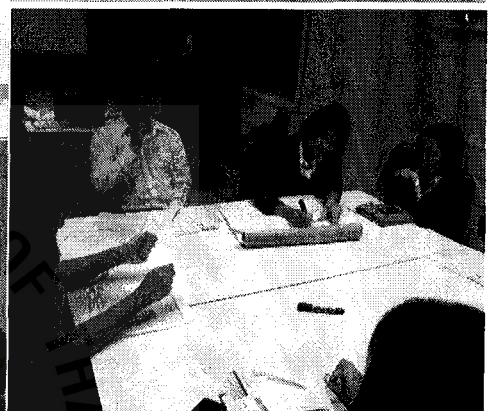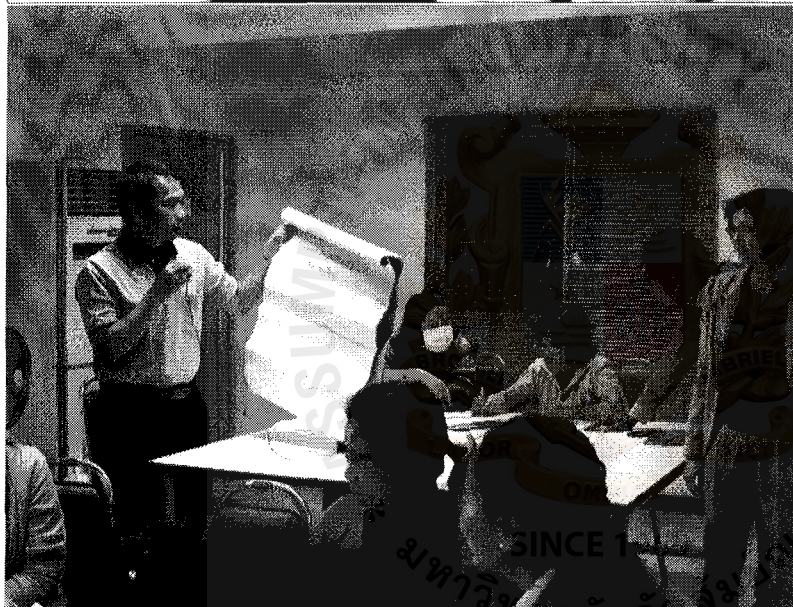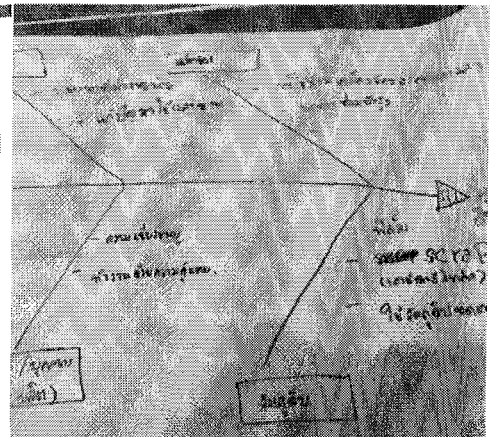
ODI 6: Training – Appreciative Coaching

Date	8 November 2013
Time	09:00 – 12:00
Purpose	1) To understand roles and responsibilities of Coach
	2) To learn tips and techniques in giving feedback
	3) To enhance employees' skills via coaching
	4) To learn how to assign work

Agenda

Coaching

- Purpose of Coaching

- Benefits of Coaching

- Roles of a good Coach

- Coaching process

- Exercise – Coaching assessment

- Appreciative Coaching concept

Feedback

- Principles of providing feedback

- How to give feedback to subordinates

- From "boss" to "coach"

Work delegation

- RACI concept
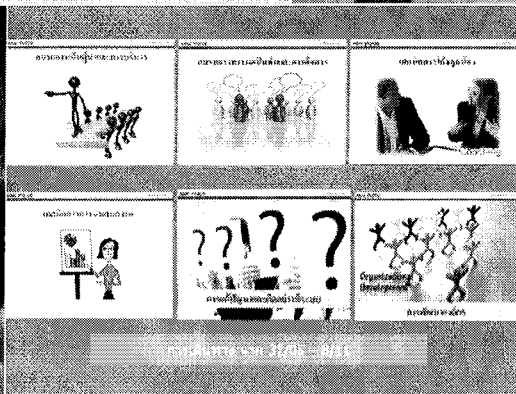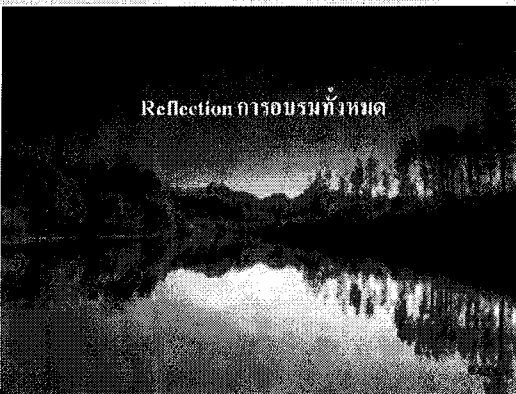
- Exercise – RACI Chart

Reflection and Wrap up

- Write down in Journal (what did you learn, how to link to your work, what will you change)

- Reflection on the whole journey

Researcher's

Reflection and

Observation

- Team work also improved, I can see from seating arrangement. They sat randomly, not in their own team. Exercises are more interactive, selecting the speaker is not a problem anymore. Most people are open to speak and some do want to speak up.

- Appreciative Coaching has complimented the AI concept. It also improved relationship between boss and subordinate. It increases respect and motivation to work better.

- Another good reflection is RACI, it is very useful for them as their works always in grey area and no one really takes ownership. RACI helps clear roles and responsibility and expectation from each person. They will implement as a standard tool to use across department.

- This is the last intervention. I can see the improvement from participants. They are more confidence and participated during the session.

- I would say 6 interventions have improved the soft skills and more importantly the thinking process. Appreciative Inquiry and Appreciative Coaching boosts the morale and relationship among them. The participants are more open and ready to change. Some of them already stated that they see the way differently, they are more options for them and they can make the choice in their own ways.

Appendix K

Whole Brain Literacy Exercise for job resources

การสนับสนุนจากหัวหน้า / ภาวะผู้นำ

เรารู้อะไรอยู่แล้วบ้าง ณ ปัจจุบัน ?	เราต้องการรู้อะไรบ้าง ต่อไป เพื่อให้บรรลุเป้าหมาย ?
เราต้องทำอะไรก่อนเป็นอย่างแรก เพื่อให้บรรลุเป้าหมาย ?	ความรู้สึกของผู้ที่ส่วนร่วมต่างๆในการบรรลุเป้าหมาย ?

จุดมุ่งหมายในการสร้างความผูกพันพนักงาน

ความมีอิสระในการทำงาน

เรารู้อะไรอยู่แล้วบ้าง ณ ปัจจุบัน ?	เราต้องการรู้อะไรบ้าง ต่อไป เพื่อให้บรรลุเป้าหมาย ?
เราต้องทำอะไรก่อนเป็นอย่างแรก เพื่อให้บรรลุเป้าหมาย ?	ความรู้สึกของผู้ที่ส่วนร่วมต่างๆในการบรรลุเป้าหมาย ?

จุดมุ่งหมายในการสร้างความผูกพันพนักงาน

การประเมินการทำงาน

เรารู้อะไรอยู่แล้วบ้าง ณ ปัจจุบัน ?	เราต้องการรู้อะไรบ้าง ต่อไป เพื่อให้บรรลุเป้าหมาย ?
เราต้องทำอะไรก่อนเป็นอย่างแรก เพื่อให้บรรลุเป้าหมาย ?	ความรู้สึกของผู้ที่ส่วนร่วมต่างๆในการบรรลุเป้าหมาย ?

จุดมุ่งหมายในการสร้างความผูกพันพนักงาน

การสนับสนุนจากเพื่อนร่วมงาน / Team Work

เรารู้อะไรอยู่แล้วบ้าง ณ ปัจจุบัน ?	เราต้องการรู้อะไรบ้าง ต่อไป เพื่อให้บรรลุเป้าหมาย ?
เราต้องทำอะไรก่อนเป็นอย่างแรก เพื่อให้บรรลุเป้าหมาย ?	ความรู้สึกของผู้ที่ส่วนร่วมต่างๆในการบรรลุเป้าหมาย ?

จุดมุ่งหมายในการสร้างความผูกพันพนักงาน

Appendix L

BrainMap Test Results
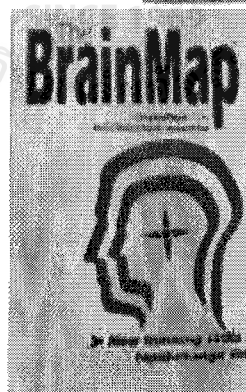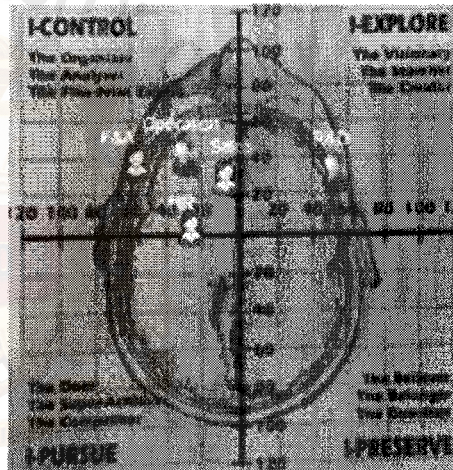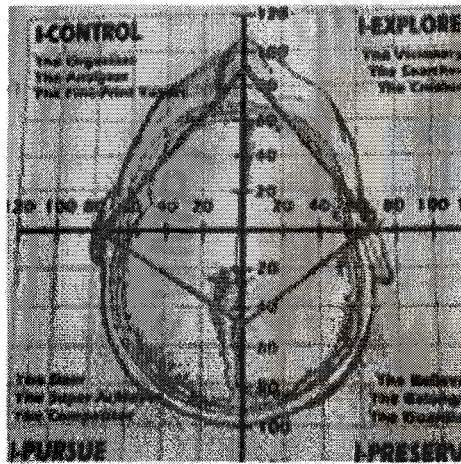
Appendix M

Data Analysis Experimental group

M-1: Paired Sample Statistics of pre-ODI and post-ODI on job resources

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	supervisor support_Pre	2.8519	27	.60946	.11729
	supervisor support_Post	3.2407	27	.49750	.09574
Pair 2	job autonomy_Pre	2.6970	27	.52406	.10085
	job autonomy_Post	2.9529	27	.47464	.09134
Pair 3	performance feedback_Pre	2.9259	27	.46532	.08955
	performance feedback_Post	3.1852	27	.47442	.09130
Pair 4	co-worker support_Pre	2.9537	27	.55486	.10678
	co-worker support_Post	3.2315	27	.48001	.09238

M-2: Paired Sample Statistics of pre-ODI and post-ODI on employee engagement

		Mean	N	Std. Deviation	Std. Error Mean
Pair 5	employee engagement_Pre	4.1917	27	.71107	.13684
	employee engagement_Post	4.4031	27	.70733	.13613

M-3: Paired Sample Test of pre-ODI and post-ODI on job resources

		Paired Differences							Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	
Pair 1	supervisor support_Pre - supervisor support_Post	-.38889	.76061	.14638	-.68978	-.08800	-2.657	26	.013
Pair 2	job autonomy_Pre - job autonomy_Post	-.25589	.48041	.09245	-.44594	-.06585	-2.768	26	.010
Pair 3	performance feedback_Pre - performance feedback_Post	-.25926	.42701	.08218	-.42818	-.09034	-3.155	26	.004
Pair 4	co-worker support_Pre - co-worker support_Post	-.27778	.46167	.08885	-.46041	-.09515	-3.126	26	.004

M-4: Paired Sample Test of pre-ODI and post-ODI on employee engagement

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 5	employee engagement_Pre - employee engagement_Post	-.21133	.39469	.07596	-.36746	-.05520	-2.782	26	.010

M-5: Pearson's Correlation Coefficient between job resources and employee engagement at Post-ODI

		job autonomy_Post	supervisor support_Post	co-worker support_Post	performance feedback_Post	employee engagement_Post
job autonomy_Post	Pearson Correlation	1	.598**	.337	.558**	.575**
	Sig. (2-tailed)		.001	.085	.002	.002
	N	27	27	27	27	27
supervisor support_Post	Pearson Correlation	.598**	1	.623**	.510**	.567**
	Sig. (2-tailed)	.001		.001	.007	.002
	N	27	27	27	27	27
co-worker support_Post	Pearson Correlation	.337	.623**	1	.396*	.586**
	Sig. (2-tailed)	.085	.001		.041	.001
	N	27	27	27	27	27
performance feedback_Post	Pearson Correlation	.558**	.510**	.396*	1	.702**
	Sig. (2-tailed)	.002	.007	.041		.000
	N	27	27	27	27	27
employee engagement_Post	Pearson Correlation	.575**	.567**	.586**	.702**	1
	Sig. (2-tailed)	.002	.002	.001	.000	
	N	27	27	27	27	27

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix N

Data Analysis Control group

N-1: Control group demographic profile

Frequency distribution by Age

Age	Frequency	Percent
25-30	3	12%
31-35	6	23%
36-40	1	4%
41-45	6	23%
46-50	5	19%
51 +	5	19%
Total	26	100%

Frequency distribution by Years with company

Years with Company	Frequency	Percent
0-2	3	12%
3-5	2	8%
6-10	4	15%
11-15	2	8%
15+	15	58%
Total	26	100%

Frequency distribution by Position level

Position	Frequency	Percent
Supervisor and up	9	35%
Staff	17	65%
Total	26	100%

N-2: Paired Sample Statistics of pre-ODI and post-ODI on job resources

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	supervisor support_Pre	3.1442	26	.41936	.08224
	supervisor support_Post	3.2115	26	.42245	.08285
Pair 2	job autonomy_Pre	2.4476	26	.65198	.12786
	job autonomy_Post	2.6853	26	.62044	.12168
Pair 3	performance feedback_Pre	3.1538	26	.31596	.06196
	performance feedback_Post	3.0769	26	.27175	.05329
Pair 4	co-worker support_Pre	3.1923	26	.45993	.09020
	co-worker support_Post	3.0385	26	.51329	.10066

N-3: Paired Sample Statistics of pre-ODI and post-ODI on employee engagement

		Mean	N	Std. Deviation	Std. Error Mean
Pair 5	employee engagement_Pre	4.5113	26	.73711	.14456
	employee engagement_Post	4.1267	26	.85595	.16787

N-4: Paired Sample Test of pre-ODI and post-ODI on job resources

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	supervisor support_Pre - supervisor support_Post	-.06731	.47200	.09257	-.25795	.12334	-.727	25	.474
Pair 2	job autonomy_Pre - job autonomy_Post	-.23776	.53386	.10470	-.45339	-.02213	-2.271	25	.032
Pair 3	performance feedback_Pre - performance feedback_Post	.07692	.44530	.08733	-.10294	.25678	.881	25	.387
Pair 4	co-worker support_Pre - co-worker support_Post	.15385	.50038	.09813	-.04826	.35596	1.568	25	.130

N-5: Paired Sample Test of pre-ODI and post-ODI on employee engagement

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 5	employee engagement_Pre - employee engagement_Post	.38462	.66743	.13089	.11503	.65420	2.938	25	.007

Appendix O

The Curriculum Vitae of Pirata Phakdeesattayaphong

Contact Information

9/164, Condo The complete Narathiwas,

Chongnonsi, Yannawa, Bangkok 10120

Education

- Executive MBA, Asian Institute of Technology (Outstanding Award), December 2008

- Bachelor of Computer Engineering (2nd Class Honour), Chulalongkorn University, April 2000

Professional Experiences

2012– Present	**PwC Consulting (Thailand)**
	Associate Director
2010– 2012	**IBM Thailand Company Limited**
	Senior Managing Consultant
2003– 2010	**Accellence (Thailand)**
	Vice President Consulting
2001– 2003	**Schlumberger (USA)**
	Consultant
2000– 2001	**Accenture (Thailand)**
	Analyst

Training and Seminar

- Organizational Development Program, Stanford Center for Professional Development – Nov. 5 -7, 2012

- World Conference of the International Organization Development Association (IODA), Melbourne, Mt. Eliza Conference Centre, Australia – Sep.27 – Oct. 1, 2011