The Impact of OD Interventions on Leadership Management, Cross-functional Team Work and Job Satisfaction on Productivity and Performance : a Case Study of OG Company Nauvarat Songswaddichai¹

Abstract

The business world today is confronted by various unstable external environments. At the same time, organizations seek to resolve their internal problems and difficulties as quickly as possible. To be competitive, organizations realize that not only cost reduction is necessary but also retaining the same level of quality. Apart from executives and management staff who run organizations, the company's workers also play major roles in the organizational performance. Leadership, teamwork, job satisfaction and productivity can affect the level of performance of the organization. Implementation of Organization Development Intervention (ODI) activities focused on the variables of leadership management, cross-functional teamwork and job satisfaction can therefore impact overall productivity and organizational performance.

This study used the action research model as the design to determine the impact of ODI on the selected variables at a Thai apparel manufacturing company where the researcher has worked for the past 28 years. From the research results, it was found that the ODI improved the level of leadership management, cross-functional teamwork, and job satisfaction in the company, resulting in a positive impact on its performance and productivity following the study period.

Key Words: Leadership management, team work, job satisfaction impact on productivity can affect organization performance

Introduction

Due to globalization and the advancement in technology, many firms have embarked on tremendously ambitious change efforts to innovate their products and/or improve their level of quality and cost efficiency. Such change initiatives are directed toward doing it better, not denigrating those who have pioneered such efforts in the past.

The global economy is creating both more hazards and more opportunities for everyone, forcing firms to make dramatic improvements not only to compete and prosper but also to merely survive and thrive. Globalization is being driven by a broad and powerful set of forces associated with technological change and international economic integration, affecting domestic market maturation even within the more developed countries. P. Kotter (1996:3-4) said the amount of significant, often traumatic, change in organizations has grown tremendously over the past two decades. Others predict that most of the reengineering, re-strategizing, mergers, downsizing, quality efforts, and culture renewal projects will soon disappear. However, in globalization, a flat world would depend on free trade.

While there is an increasing need for new organization forms and systems, individuals within organizations are affected by change (Caluve & Vermaak, 2002). But change in and outside of organizations appears inevitable to guarantee survival and to sustain competitiveness both presently and in the future. This is the result of business environments that are intertwined with the word "globalization"

Many Asian countries over the past several decades have increasingly experienced the benefit of a market economy over ideology. It is clear that the economic landscape in East Asia is quite different in 2006 from what it was in 1990.

^{1.}Nauvarat Songswaddichai, is a graduate of the PhD. OD program at Assumption University. She is currently the President of the Thai Leather Goods Association.

Individuals are wealthier, and the demand for consumer durable goods is growing. At the same the economic center of gravity-time. production, trade and finance--has shifted toward China and Northeast Asia. Regionalism within East Asia has risen sharply in the guise of formal economic trade agreements between two or more countries. In the last ten years, 24 new agreements have been concluded and 34 more are under negotiation. In part, regionalism has its roots in the currency and financial crisis of 1997-1998, a determining moment when many policy makers saw for the first time the risk that comes with the benefit of globalization or integration with the world at large. But perhaps more significant is the trend toward regionalization, a market-driven process that has seen trade, finance and innovation accelerating within East Asia at the same time that globalization has taken hold. (R.Harris, T.Moran, V.Moran, 2004)

Thailand is one of the most economically successful countries in Southeast Asia that is benefitting from the economic momentum of decades of growth as stated previously.

Garment and other textile product shares from 1995, 2000, and 2006 are reduced from 8.5 to 5.6 and 3.5 respectively. But it doesn't mean that the export value is reduced. Garment and other textile products had a growth rate of 3.3% in year 2006 with a total export value of US\$ 3,551.35 according to data from the Bank of Thailand and the Ministry of Commerce.

Other sources of information from the Ministry of Industry show that garment industries have declined from 2005 to the present. There were 2,531 companies in year 2003. In 2007 there are 431 garment companies remaining in this field.

OG Co., Ltd. is a made-to-order garment company. It has earned great trust from various customers as the authorized clothing manufacturing agent for some worldwide known brands, such as Adidas, Next, Decathlon, Asic, Polo, Converse, and Swiss Army, etc. The main product lines include jackets, coats, padding jackets, sporting sets, pants, shorts, T-Shirts, and Polo-shirts.,

In keeping with international demands, designs and patterns are well prepared by the customers. Materials used can be separated into 3 parts: fabric, accessories, and packaging and packing materials. Fabric is chosen by the customers who develop the fabric with textile suppliers from Taiwan, Indonesia, China and Thailand. This fabric cost is settled and fixed between customers and textile suppliers with large demand quantities for all garment factories. Not all kinds of accessories are chosen by customers. Some are specialties developed by customers which are chosen by the supplier with the best price. Others are managed by the factory to source suppliers but they need to send samples to customers for quality approval.

Packaging and packing materials are managed by the factory to source suppliers with the exception of the bar code. It must be selected by suppliers and the quantity of bar codes for each product is controlled by the customers. Details of order, descriptions of products, delivery and the destination of customers are all supported by the customers.

Due to rapid changes in globalization affecting economics and trade, it became imperative management to at OG to continuously seek ways develop to the organization. In response to the increased demands for partnerships with the customers, OG Management deemed it necessary to visualize and articulate its vision, mission and goal statements which are stated below.

Vision: "We will be the super gold-class manufacturer of International Brand globally"

Mission: "We are the professional experts in the Garment Industries"

Goals: 1) Increase customer satisfaction in quality of product and service; 2) Expand and establish two manufacturing plants in another province to increase capacity in 2007; 3)Increase efficiency and cost effectiveness; and 4) Improve leadership management, cross functional team work, and job satisfaction in order to increase productivity and enhance organization performance

The performance of OG as of 2002 has been declining due to the fierce competition in the global market. The economics of qualityproduction, trade and finance have shifted toward China and Northeast Asia. Customers are now able to handle the complexities of the marketplace in a more realistic fashion. Scale economies refer to the tendency for production cost to fall as volume of production rises or for product development cost to fall as new varieties are introduced. The decline in performance in year 2003 was the worst. The company then focused on improving its management strategies. In the years 2004 and 2005, performance improved. Unfortunately the last quarter of 2005 saw the strength of the Baht value worsen into 2006. That is one factor which caused organization performance to decline.

At the end of 2003, OG's top management established a policy to expand with a factory in Chaiyaphum in order to reduce labor costs and improve labor turnover. During that same period the government also promoted Chaiyaphum Province to be a Garment City seeking to change Chaiyaphum from an agricultural area to a garment industrial area. Because high temperatures and the rainy season are rare, it is less suitable for agriculture. The population in Chaiyaphum province is high because the original inhabitants were farmers. The people prefer to work near their homes rather than moving to work in a big city

A SWOT analysis was conducted of the company resulting in the generation of a series of strategic alternatives, or choices of future strategies to pursue, given the company's internal strength and weakness and its external opportunities and threats. The central purpose was to identify the strategies that would create a firm-specific business model that would best align, fit, and match the company's resources and capabilities to the demands of the environments in which it operates. (Hill et al., 2004: 16-17). This model helped managers and

top management at OG to craft a business model that would allow the company to gain a competitive advantage in its industry. In addition, this model helped management design a strategic change plan.

Theoretical Framework

The broad themes that guided the direction of this study on leadership management, crossfunctional team work, job satisfaction, organizational performance and productivity are considered and discussed in the following sections.

Teams and Organizational Change

Teams have proven to contribute a great deal to organizational change. An active, wellfunctioning team tends to be very clear about it own goals and values and also has good contact with the rest of the organization Such teams are involved in exploring issues, members are more likely to understand the characteristics of the organization, and they clearly identify the factors which underlie or influence managerial policy. Teams which operate in this way also provide valuable input into the formulation of policy in the first place, especially if they are consulted by senior management.

Teams are important for shaping the vision of organizational change but they are equally important for spreading that change and carrying it out. Katzenbach and Smith believe that an organization which is based on effective working teams is one which is far more open to change, and which can respond better to its challenges than an organization which is based on traditional hierarchical authority. Because people are actively involved in their teams and because the team structure allows them to have a real say in how their work is carried out, they are more likely to make suggestions to improve their work and to listen thoughtfully to suggestions which come from other people.

Much organizational change is really about changing the culture of the organization as a whole. Davis (1985) showed that changing organizational culture is something which also has to be done at the lower levels of a hierarchy. It simply isn't enough to develop new approaches at higher levels of management and expect them to filter downwards. No amount of rousing management talk is going to make any difference to a department which has dug in it heels and is doggedly resisting any change. But involving some of those same people in cross departmental project teams might just make a difference, if only by reducing their fear of the unknown. An organization based on teamworking simply doesn't have the same type of inertia as an organization based primarily on hierarchical authority because everyone, from the bottom upwards, has a much more direct involvement in the organization goals and more interest in seeing that they are achieved

According to Katzenbach and Smith, major organizational change requires three types of initiative which have to be implemented together, not one after the other. Top-down culture-shaping initiatives, emanating from senior management, need to occur at the same time as bottom-up goal achievement and problem showing initiatives, and at the same time as cross functional redesign and integration initiatives across the organization as a whole. Teams can be invaluable in establishing both the bottom-up initiatives and cross-cultural ones.

Leadership Management and

Effective Teams

Teams are usually organized with both leaders and members understanding their roles as such. No team exists without a leader and members as well. Thus, it is important to consider in this discourse the relationship between leadership management and effective teams.

Team Work Framework

The structure of teams includes the purpose of the team and the role of team members and team leaders. An organizational system depends upon team work; therefore, a focus on reward systems, training and development and industrial relations is helpful when developing a sense of team work. The team process must also include the normative or cultural aspects of team working where values and norms are established and institutionalized.

Structure, Roles and Responsibilities

The organizational implication of

team work includes the relationship with organization structure. Buchanan (1994 b, .p.86) said that it has become increasingly unrealistic to distinguish between work designs on the one hand and organization designs on the other. For organizations might example. take the opportunity offered to them to delegate to work teams some decision-making responsibility in order to reduce the numbers of levels in the organizational hierarchy. Teams become organization units. Jenkins (1994, Pg851) said that organization designs are built around and not just including autonomous teams. As a part of this, team working is likely to involve an element of organizational re-design (Thompson and Wallance, 1996). This in turn links team work with issues of the production system or company technologies.

In this research, team working in the OG organization was redesigned into four types:

1. A production team involved in manufacturing with the following members: production foreman, quality controller, line engineer, mechanic, and workers. This team was largely self managing and met daily. The leader of this team was the foreman.

2. A development team focused on the sewing processes: concerned with determining the steps of sewing; providing attachments, needle types, and machine types; and determining the quantities of each type of machine in production lay-out for the production line. The members of this team were Technique IE, R&D Mechanic and Sewing Technician. The leader of this team was Technique IE.

3. An advice team focused on advising the production team and made up of the production

supervisor, the quality supervisor, the technique engineer and the marketing manager. The activities of this team included advising the production team when they had problems with the sewing process, defective garment problems, production efficiency or had to push production back to meet delivery time. Daily meetings were necessary for this team to meet high performance. The leader of this team was the production supervisor.

4. A negotiation team consisted of the production planning director, the production director, the marketing director, the quality director, and the purchasing director. This team focused on problem solving in the areas of raw material, such as delayed shipment of raw material, quality of raw materials, delivery time of finished products, and the quality of finished products. The members of this team met once a week. Team decision making was final and every member was expected to effectively communicate clearly to his/her subordinates, customers, suppliers and the rest of the organization. The leader of this team was the production planning director.

Role of the Team Leader

Manz and Sims's (1986) "paradox' said the essential characteristic of teams is their selfmanagement. He suggested that a legitimate role exists in getting the team to manage itself, and they identified member "leader behaviors', such as encouraging self-observations and selfevaluation which form a part of this. At their own admission, they provided no evidence of a link between their role and team performance, and a Cohen, et al. (1996) study was also unable to provide evidence of it effectiveness.

The transition from supervisor to team leader involves a change of style-from "cop' to "coach' as it is sometimes expressed. In practice this can be challenging because of the difficulty in finding people to fill the team leader role (Procter et al., 1995). If operations are organized along team-based lines, the obvious people to fill the new roles are those who were previously working as supervisors. While it is difficult to develop a team leader from a member of the team, bringing in team leaders from outside can be the cause of resentment.

The Components of Leadership

The fundamental starting point of leadership is having a good understanding of human nature in such areas as needs, emotions and motivation. Leaders should be aware of their employee's needs and try to satisfy them.

Followers are an important part of the leadership process, and leaders' are sometimes followers. The issue of intention or will means that leaders and followers are actively involved in the pursuit of change toward a desired future. Each person takes personal responsibility to achieve the desired future. Influencing is a process used by leaders to communicate ideas, gain acceptance of them, and motivate followers to support and implement the ideas through change. While managers may force subordinates to influence their behavior, leaders must be willing to be influenced.

The Efficiency leadership for 21st century

The individual capable of leading in this time of globalization should be a mixture of a leader both "born" and "made." Leaders are much like athletes. Some have more natural talent than others. But without practice, athlete or leader will fail. If you don't have a contingency of leaders on staff and others primed to step up into leadership roles, you will undoubtedly find yourself way behind the pack. Nurturing leaders takes more than luck or intuition. All of the great leaders, whether they are social or business leaders, have natural talent and have spent many years of hard work developing their leadership skills. It takes many years of practice--trial and error--to hone these skills to a fine edge. A leader's job is to help the budding leader via mentoring or coaching relationships. (J.Marquardt & O. Berger, 2000)

Mentoring is somewhat passive. It's characterized by showing concern, responding to

questions giving advice when sought, providing encouragement and of course acting as a role model.

Coaching, on the other hand is more proactive. Coaches focus on helping individuals analyze their performance, suggest ways to improve performance; demonstrate patience, support, and encouragement; and even hold practice sessions prior to demanding tasks. Effective coaching can support leaders in achieving their highest potential just as a sports coach can help athletes achieve success. And like athletes, leaders at all levels need to enhance their natural talent with practice. Mentoring and coaching time for individuals is an investment beneficial for the company, the leaders, and for succession planning.

Effective leadership is a very important aspect to ensure organizational success in the global environment. For example, the criteria used for the Baldrige award considers leadership and strategic planning as key to the long term success of an organization. The very first requirement of organizations which try to incorporate the concept of Total Quality Management (TQM) is the commitment and vision of the leader.

Job Satisfaction and Performance

According to Scheremerhorn, Hunt, and Osborn (2006, p.143), job satisfaction identifies the degree to which individuals feel positive or negative about their jobs. It is an attitude or emotional response to one's tasks as well as to the physical and social conditions of the workplace.

The importance of job satisfaction can be viewed in the context of two decisions people make about their work. First is the decision to belong or to join and remain a member of an organization. Second is the decision to perform or to work hard in pursuit of high levels of task performance.

The decision to belong refers to an individual's attendance and longevity at work. In general, workers who are satisfied with the job

itself have a more regular attendance record and are less likely to be absent for unexplained reasons as is found with dissatisfied workers. Job satisfaction can also affect turnover and termination rates in an organization.

Conceptual and Research Frameworks

This research study conceptualized the current problems and the potential challenges for change at OG Company. Based on a situational analysis using various models of assessment (Porter, McKenzie and SWOT analysis) and the theoretical frameworks of team development, leadership management, motivation, and job satisfaction, the researcher considered four critical issues confronting the current functioning of OG. These issues became the basis for the choice of the variables selected for organization development intervention the (ODI). They are leadership management, crossfunctional team work, and job satisfaction and their impact on productivity and organizational performance. This study posits that effective leadership management, cross-functional team work and job satisfaction have a positive impact on organization performance which in turn positively impacts productivity. Thus the conceptual framework of the study was visualized as follows:

Figure 2.15 Conceptual Framework



The ODI was expected to improve the organization in terms of increasing leadership skill management, teamwork effectiveness, job satisfaction and therefore greater productivity

efficiency and enhanced organizational performance.

Research design

An action research design model was employed in this study. The phases of this model are outlined, detailed and illustrated in the following: Phase I Diagnosis (Pre ODI), Phase II Development Change (ODI

Phase), and Phase III Evaluation (Post ODI).

Phase I: On the basis of the identified issues from the SWOT analysis of the organization, this study focused on developing three dimensions: Leadership, cross-functional team work and job satisfaction. To measure the perception of respondents for each dimension, a survey questionnaire was administered to collect more information from a sample group through a random sampling that represented the total population of Worker and Head groups. From a total of 308, 51 Heads were included in the sampling as well as 103 workers from a total of 753.

Phase II: The appropriate ODIs were designed based on the findings of the diagnosis in Phase I. The top leadership of the organization believed in and supported a change initiative to implement a program of education and professional development for the head and worker groups. Short seminars and workshops were used to improve staff knowledge as well as support the organization's sustainability and continuity in improving those three dimensions. OG was organized into small working units in order to more efficiently implement the ODIs which were designed to provide an opportunity for the leadership of each unit to learn and grow, thereby effectively impacting the whole unit. The ODIs were implemented over a three month period from May till July 2008, incorporating 15 seminar topics as reference points for learning, development, personal and reflection: 1) Corporate culture. 2) Positive thinking, 3)Leadership for organizational effectiveness, 4) Team work, 5) Motivation and bonus systems, 6) Performance management, 7) Improvement and

restructuring of the organization to compete in the global marketplace, 8) Manager and information technology, 9) Total quality management, 10) Production planning, 11) Supply chain management, 12) Resource production utilization management, 13) management, 14) standard time, and 15) ISO and future development.

Discussion of the Relationship of ODIs to Leadership, Team work and Job satisfaction

Leadership- Four topics were directly related to the leadership dimension of the organization. The researcher developed these topics in order to improve leadership skills among the head group related to the objectives and strategies the organization would like to incorporate into its leadership training: *Being a positive thinking leader*: By bringing positive thinking into the organization, leaders could help raise their team's level of morale. Also they would have a tool to use to better face problems and find solutions. It was expected that the quality of production overall would increase.

Being an effective leader: An aware and well informed leader of the organization was expected to be highly effective in achieving success and making fewer management errors. Leaders would improve their skills in leading and managing and thereby positively improve employee morale in their working units. Learning to be an IT leader: The organization would like every leader to have knowledge about using IT to improve their area. Knowing how to access key knowledge bases leads to more effectively skilled leaders. The intranet in the organization provides important information around the level of productivity and the means for monitoring productivity in their area which in turn would improve their quality of work.

Developing into a vision leader: Leaders who have a future vision are able to provide a direction for the organization which is very important in this era of increasing competitiveness. Sustainability and continuity of development of the organization must come from those Vision Leaders.

Teamwork – Teamwork is one of the important skills for leadership in large organizations with many units that must interact together in the production process. It was clear from the research data that the current leaders of the organization lacked a high level of proficiency in this skill. The study emphasized improvement of this dimension for the Head groups to help overall improvement of their teamwork skills. The seminars included: Corporate culture: Every working unit needed to realize that the organization was a system comprised of many units that must work together in the production process. To be highly productive, everybody in the organization needs to be aligned around corporate vision, thinking and culture based on principles of how to work together effectively. Effective leaders: The best organizations have effective and informed leaders. They bring to their leadership teams an understanding and modeling of positive thinking, strategy around IT, visioning, and a value for teamwork

Job Satisfaction - The research analysis showed that some of the problems in the organization were the result of not properly implementing the existing incentive system, which contributed to lower job satisfaction. The research data indicated that the incentive system was appropriate, but that leaders and managers were uninformed about how the system was set up and therefore not making proper use of it. In the ODIs, there was a seminar dedicated to discussing the incentive system including the underlying theories and practices. It was expected that better educating leaders about this incentive system would contribute to improving overall job satisfaction with the Worker Group. Higher job satisfaction would then lead to higher efficiency and greater quality of production.

Phase III Evaluation: After implementation of the ODI activities in the organization, the same questionnaire was re-administered to the same sample group. Statistical analysis was used to compare the difference by using t-statistical mean difference testing. Ninety percent CI was selected as indicating significant change. The analysis of mean difference was done for each individual question in the questionnaire and also done for the whole in each dimension. This analysis showed changes in the dimensions of leadership, cross-functional teamwork and job satisfaction.

Performance - Using the summary of production status and performance of the organization recorded monthly, the data from October to December, 2007 was compared with the data from October to December, 2008. Reasons for choosing this period were: 1) To eliminate the business cycle which assumed that the last quarter of each year (October to December) had not much variation. Normally, the last quarter of each year was expected to be the highest season of the factory; and 2) The interventions were ended in July, leaving the time from July to October, 2008 for changes through the transitional stage and incorporating the real productivity value which had been impacted by the interventions.

Interviews – A cognitive interview technique was used in order to retrieve the liability and validity of a retrospective interview. Semistructured interview questions were designed and a content analysis was applied to analyze the qualitative data technique. The emotions and behaviors of the interviewees were also observed and recorded. The objective of these interviews was to collect more qualitative information to either support the evaluation findings or explore some of the qualitatively important information which could support either the pros or cons for further development of the organization in the next cycle.

Ten interviewees were randomly selected from the Head Group and individually interviewed. The interviews were set up as an informal session. The reasons the interviewees were drawn from only the Head group were because: 1) The researcher had already asked for some informal information from both the Worker Group and the Head Group to analyze the liability and validity of their information in terms of their definition of leadership, crossfunctional teamwork, job satisfaction and productivity; to better understand their stories about the four dimensions in the organization pre- and post-ODIs; and to better comprehend how their opinions might have changed between the pre- and post-ODIs.

2) From the analysis it was found that additional information from interviewees in the Worker Group was inconsistent. It seemed to be because the Worker Group's interviewees had a lower level of education and didn't really understand what the meaning of those dimensions were.

Through observation, the researcher found that the Head Group staff had high interaction with their staff in the Worker Group. Also, in the actual interviewing, the selected Head Group interviewees could express both their own opinions as well as reflect the perceptions as a representative of the Worker Group.

Research Methodology

Subjects of the study and sources of Data. For the completion of this study, subjects were composed of two main groups: 1) Head Group of 51 persons made up of foremen, supervisors, staff, Assistant Managers and Managers, and Assistant Directors and Directors; and 2) Worker Group consisting of a random sampling of 103 workers involved in teams.

This research was to apply both a qualitative and a quantitative approach in the action research model (qualitative - interviews; quantitative - statistical analysis, financial analysis, and performance data). Both qualitative and quantitative aspects were studied by using: questionnaires, statistical analysis, financial analysis, performance records and interviews.

The questionnaires addressed leadership management, cross-functional team work, and Job satisfaction.

Statistical Analysis: From the questionnaire results in the pre-ODI phase, arithmetic mean was used to calculate each individual question to determine which questions had low scores. The researcher set the average score of three for the lower boundary. Lower than this score indicated there was a problem. The ODI was designed to match those problems identified from the questionnaire to some interventions designed as a result of the findings from the SWOT analysis and strategic plan.

The questionnaire results from the pre- and post-ODI phases were analyzed statistically again by using t-stat mean difference testing between the pre- and post-ODI scores. This time, each individual question was analyzed and also the sum of each dimension was compared without applying a weighting technique. According to the assumption of the law of large numbers and central limit theorem, the researcher deduced that the observations were significant enough to have those values asymptotically converge to the real population value. At this step, changes between the pre- and post-ODI phases were compared statistically.

Financial Analysis: The data were collected from October to December of years 2007 and 2008 (considered as pre- and post-ODI phases, respectively). Financial Ratios and EBITDAR, as mentioned in Phase III, were used to determine the productivity of the organization as representative of the final outcome of the organization. The level of productivity in the pre- and post-ODI phases were compared by using this method.

Performance Records: Two KPIs for efficiency and quality of the organization were drawn directly from the monthly summary of performance as mentioned before. These KPIs were representative of an intermediate outcome. Comparing performance between the pre- and post-ODI phases showed changes in the intermediate outcome.

Summary of Findings

Quantitative Findings Phase I Diagnosis (Pre-ODI) Results for Worker Group:

Leadership dimension: The findings seemed to indicate that respondents perceived no problems. This result can be explained by the perspective that workers whose training, mindset and culture is to follow or comply with company instructions or directions does not feel entitled or empowered to question authority (leadership). Teamwork dimension: The workers did not see this as a problem seemingly for the same reasons – their mindset being one of compliance and not on teamwork as a critical issue for performance.

Job satisfaction dimension: Six problems were found: 1) Staff in the Worker Group could not monitor their performance and reward by using the IT system. 2) Staff did not receive incentives every month. 3) Staff felt dissatisfied with the incentive system. One explanation is that the staff did not know how to use either the IT System to monitor their performance nor the reward system by themselves. This is understandable as most of those in the Worker Group had less than a high school education. Supervisors might not have informed them about the reasons for the incentives so they could not improve their work to participate in the incentives. 4) The allocation of workers in each line process was inefficient which resulted in less output and they could not participate in the incentive because the output was not enough. 5) Workers might not know about the incentive system, such as level of reward related to level of performance, how to calculate the reward, etc. Perhaps supervisors did not explain or understand the incentive systems well themselves. 6) The incentive target level might be too high so workers could not reach the expected level and felt dissatisfied.

- Phase I Diagnosis (Pre-ODI) Results for

Head Group: Leadership dimension: The Head Group also did not perceive this as a problem, which to the researcher was a reflection of the same training, mindset and culture as that of the Worker Group. It is not unusual to have this kind of mindset at different levels of the company.

Teamwork dimension: Likewise the Head Group perceived this as a non-problem. It could be similarly inferred that the mindset of the Head Group did not perceive teamwork as a needed skill for effective leadership performance.

Job satisfaction dimension: One problem was found. Staff in the Head Group felt that the organization did not have a systemic and fair promotion system. There are a number of possible explanations the researcher could infer regarding the level of awareness of the staff: they didn't know how to get promoted; they didn't know how the promotion system was set up; they didn't know about human resource management and development; and they felt dissatisfied with the promotion system because they didn't get promoted as they had expected.

The reasons behind this issue of "not knowing" might include the fact that the organization did not communicate well about the promotion system to the staff in this group and that the organization did not do an effective job of informing the staff about the criteria for promotion.

- *Phase II ODI ChangeResults:* The second phase of the action research process was developmental. The researcher determined the choice, design and development of appropriate activities and processes to address the improvement needs in the three dimensions. As mentioned before, 15 seminar topics were presented over a three-month period from May to July, 2008 to the Head Group. Professionals in leadership management and teamwork were invited to train the Head Group. There were also teamwork activities between the Head Group in manufacturing and office staff. Experts (in house and out) were invited to be the guest speakers for the seminar topics.

- Phase III Evaluation (Post-ODI) Results:

The ODIs impacted improvement with the Worker Group by: improving their leadership ability through better management skills; improving their attitude and knowledge of the incentive system to motivate them to work more efficiently; and improving their teamwork skills even though statistics showed significant change in only one question. The improvement in providing information for any changes and decisions, which was a statistically significant difference, might reflect on better management skills of their leaders.

The ODIs impacted improvement with the Head Group by: increasing their confidence level in leading their units

(similar result to the Worker group), and motivating them to work with greater efficiency and satisfaction. The ODIs tended to have no significant effect on satisfaction in any dimension of the Head Group.

Qualitative Findings

Leadership

Pre-ODI phase results showed that most interviewees were concerned about two leadership characteristics: open-mindedness and responsibility. As consequences of this, the interviewees stated that their leaders often used impolite words and manner to command them which negatively impacted on their feelings.

In the post-ODI phase, it became evident that most of the leadership characteristics were ranked as having been improved. One characteristic in particular, teamwork, which had been ranked low in the pre-ODI phase, was identified by interviewees as showing up more in working both within and among teams.

Cross-Functional Teamwork

In the pre-ODI phase, a lack of crossfunctional teamwork was mentioned 13 times by interviewees. They told stories about teams working independently of each other with occasional conflicts among teams and a low level of sharing information and discussion because of teams lacking open-mindedness. They also related these cross-functional teamwork problems to a low level of leadership demonstrated by their managers. Moreover, some interviewees claimed that these crossfunctional teamwork problems also affected their level of job satisfaction and productivity.

In the post-ODI phase, interviewees identified fewer conflicts among teams and improved team relationships. There was more coordination in the work both within and among teams, especially sharing information, discussions and suggestions. There were also more meetings, both formal and informal, around production planning, problem solving discussions and other activities. All teams worked in the same direction and felt more unity within the organization.

Job Satisfaction

The most significant change identified was around promotion. The interviewees said that they could not see their job paths because they didn't know the promotion system and how to be promoted. Some interviewees indicated the promotion system was unfair due to some biased elections and the fact that the KPIs related to being promoted were not clear. Post-ODIs, interviewees indicated that they had been educated about HRM and HRD and also about how the organization's promotion system functioned, resulting in them knowing more about their job paths both in theory and practice. This resulted in them feeling more satisfied with the organization. The topic of revenue also saw some improvement. The interviewees claimed they used to work over time to earn higher revenue as they had experienced in other firms and they felt dissatisfied. After they learned about the incentive system from the ODIs, they understood that the incentive system was better. They could earn higher revenue without working over time resulting in more leisure time with

friends and family. Some interviewees also indicated that the lower turnover rate came from higher satisfaction levels which resulted in the organization having more skilled workers. All of these reasons, including the incentive system and the lower turnover rate, could have contributed to higher productivity according to one of the interviewees.

Productivity

In the pre-ODI phase, the organization's productivity slipped to 60 percent. The opinion of the interviewees was that teamwork was a major problem (8 responses mentioned) followed by problems with the production process (5 responses mentioned) mainly due to gaps in supply chain management. Some other minor problems expressed were low skilled workers, low level of leadership skills and conflicts within and among teams (1-2 responses).

In the post-ODI phase, all of the interviewees knew that, after the ODIs, the KPI for productivity was raised to more than 70% which they were all satisfied with.

From the results of the content analysis above, all the interviewees expressed directly that the ODIs helped in correcting and improving the organization.

Conclusion and Recommendations

Based on the findings and results of the action research project, the researcher arrived at the following conclusions:

1) On the basis of the SWOT analysis, organization performance and productivity records were used to assess the functioning of the OG organization. At that time, the organization was found to be lacking in leadership management, cross-function teamwork and job satisfaction which negatively impacted on productivity and organization performance. To a certain extent, some details of these deficiencies were captured in the survey questionnaire confirming there were problems with job satisfaction. Although leadership and teamwork were perceived in the quantitative data as non-issues, the qualitative indicators from the informal interviews indicated that this was an area for development. The productivity level and the financial status of the fourth quarter of 2007 were used as a base line before the ODIs were implemented. The current functioning of the organization, captured in the questionnaires, showed that the organization had some possible problems around job satisfaction in both the Worker and Head Groups.

2) The design and implementation of appropriate ODI activities on the four variables generated a level of disposition among the Head and Work groups that showed significant differences in the ratings of the three variables of leadership management, cross-functional teamwork and job satisfaction. The organization and the researcher believed that providing an education program to the staff of the organization would contribute to an improved performance in teams and consequently positively affect productivity and performance company-wide. The results showed statistically significant improvement in the leadership and job satisfaction dimensions. Some issues in the teamwork dimension showed individual statistically significant improvement, but not for the whole.

3) Financial status, compared between the fourth quarters of 2007and 2008, showed from the EBITDAR that overall productivity was improved. Other financial ratios and the decrease of factory overhead expenses, selling and administrative expenses, and the average electric unit used per piece of finished product, showed further organization improvement. In terms of organization performance, %RFT (referred to as KPI for quality of production) and C/U (referred to as KPI for efficient resource consumption) were used to show improved organization performance. The two periods which were considered as pre and post-ODIs were compared and the result showed significant improvement.

4) In terms of the quality indicators in the interview results, the study elicited qualitative

information from the selected interviewees that supported the impact of the ODIs on improving the organization and creating a diagnosis base line for the next cycle of improvements. The interviewees showed, both by wording and emotion, that the ODIs had very high impact on organization improvement in every dimension – leadership, cross-functional teamwork, job satisfaction and productivity.

5) The improvement of leadership, crossfunctional teamwork and job satisfaction were related to improvement of the organization,,s productivity via the improvement of the organization's performance. Productivity was also positively related to organization performance.

In this study, there were some limitations and challenges during the research period which impacted the results of the study. Some of those limitations and challenges were found and corrected while some could not be, such as the world economic crisis, political conflicts, etc. Suggestions for further studies are listed below:

• Questions in the questionnaire should be easier to understand for the ordinary worker. Technical wording should not be used or the wording must be explained clearly, especially for participants with a lower level of education. In the study with the Worker Group, for example, the researcher should have explained each question to the participants.

• Respondents completing the questionnaire may vary in gender, age, past experience, education, etc. Subgroup analysis should be done in the future so that ODI activities could be tailored according to the different needs of the subgroups.

• Some external factors such as the political and economic situation may distort questionnaire results. The financial crisis in the U.S.A had wiped out a lot of business firms causing unemployment in most countries around the world.

• In this study, ODIs provided education primary to the Head Group. Other interventions

should be studied as well and could be applied to the Worker Group.

• Some KPIs may be developed to monitor the intervention impacts such as, Belbin Team Role Self-Perception Inventory, the 16 PE and the OPQ.

• Statistical hypothesis testing to confirm the impact of interventions should be done in the future as the quantities of data collected for this action research were not enough to analyze statistical hypothesis testing.

References

Buchanan, D.A., (1994).Cellular Manufacture and the Role of Teams in

Storey. J. (ed). New Wave Manufacturing Strategies: Organization and Human Resource Management Dimensions, London: Paul Chapman, p 204-225

Caluve, and Vermark. (2002). Learning to Change A Guide for Organization Change Agents. SAGE Publication, International Education and Professional Publisher, p1-5

Cohen, S,. Ledford, G., and Spreitzer, G. (1996). A Practice Model of Self-Managing Work Teams Effectiveness. Human Relation, 49(5), p643-676

Davis. (1985). Managing Culture at the Bottom in Gaining Control of the Corporate Culture (eds.killman et al). Jossey-Bass, Sanfrancisco.

Harris, R., Moran, T., and Moran, V. (2004) Managing, Culture, Differences Global Leadership Strategies For the 21st Century. Massachusette: Butterworth-Heineman publication, p352-418.

Hill, C. W. L., and Gareth, J. R. (2004).

Strategic Management An Integrated Approach, Massachusette: Houghton Miffin Company, p 16-17. Jenkin. (1994). Teams, From "Ideology" To Analysis. Organization in Studies, 15(6), p849-860.

Katzenbach, J.R., and Smith, D.K. (1993). The Discipline of Teams. Noston: Mackinsey.

Kotter, P. J. (1996). Leading Change. Harvard Business School Press, p3-4, 18-20.

Katzenbach, J. R., and Smith, D.K. (1993). The Discipline of Teams. Boston:Mackinsey.

Manz, C., and Sims, S. (1986). –Managed Groups: A Conceptual Analysis of Paradox. Economic and Industrial Democracy, 7, p141-165.

Marquarrdt, J. M., and Berger, O.N. (2000). Global Leaders for the 21 st Century. University of New York.

Schermerhorn, J. R. Jr., Hunt, J. G., and Osborn, R. N. (2006). Organization Behavior. 9 th edition. New Jersy: John Wiley & Sons Inc., p143,362

Thomson, P., and Wallance, T. (1996). Redesigning Production through team working: Case studies from The Volvo Truck Corporation. International Journal of Operations and Production management, 16(2), p13-18.