

ST. MARY'S UNIVERSITY
BUSINESS FACULTY
DEPARTMENT OF MANAGEMENT

**THE NEED FOR EMPLOYEES' COMMITMENT AND
ENGAGEMENT TO IMPLEMENT KAIZEN MODEL IN
CASE OF MUGHER CEMENT ENTERPRISE**

BY
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JUNE 2014
ADDIS ABABA

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OF MUGHER CEMENT ENTERPRISE

A SENIOR ESSAY SUBMITTED TO
THE DEPARTMENT OF MANAGEMENT, BUSINESS
FACULTY
ST. MARY'S UNIVERSITY

IN PARTIAL FULFILLMENT FOR THE REQUIREMENT OF
THE BACHELOR OF ART IN MANAGEMENT

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Acknowledgements

First of all, I would like to thank the **almighty God** for helping me this far and giving me the courage to succeed in my study. Then, I would like to thank my advisor Ato Terefe Feyera for his valuable comment, material support and continuous guidance. Great thanks also to Muger cement Tatak site employees, who gave time to fill the questionnaire carefully and supported me by adding valuable ideas.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

People in the organization are one of the most crucial elements of an organization. Policy and strategy is set and implemented by people. Change primarily conceived and transformed by people. Organizational performance, efficiency and effectiveness rely primarily on people's effort and contribution. Their commitment and engagement in the work determines the success and failure of the organization. Hence organizations are demanded give more attention to their employees to the sake of their survivals.

Kaizen is a management philosophy that works on people's attitudes. Such types of change programs needs full involvement and engagement of employees. An "Engaged employee" is one who is fully involved in, and enthusiastic about their work, and thus will act in a way that furthers their organization's interests.

Kaizen means improvement, continuous improvement involving everyone in the organization from top management, to managers then to supervisors, and to workers. In Japan, the concept of Kaizen is so deeply engrained in the minds of both managers and workers that they often do not even realize they are thinking Kaizen as a customer-driven strategy for improvement. This philosophy assumes according to Imai that "our way of life- be it our working life, our social life or our home life- deserves to be constantly improved".

Kahn(1990) was the first to coin the term engagement as he described how people can" use varying degrees of their selves- physically, cognitively and emotionally in work role performance". **Employee engagement** was described in the academic literature by Schmidt et al. (1993). A modernised version of job satisfaction, Schmidt.'s influential definition of engagement was "an employee's involvement with, commitment to, and satisfaction with work." This integrates the classic constructs of job satisfaction (Smith et al., 1969), and organizational commitment (Meyer & Allen, 1991). In 1999, the book ' First Break all the Rules'(Buckingham & Coffman) helped the

term 'employee engagement' become popular in the corporate world. According to Scarlett Surveys, "Employee Engagement is a measurable degree of an employee's positive or negative emotional attachment to their job, colleagues and organization that profoundly influences their willingness to learn and perform at work". Thus engagement is distinctively different from employee satisfaction, motivation and organizational culture. Hey group also describes that, engagement is comprised of two components: Commitment- affective attachment to and intention to remain with an organization and Discretionary Effort- the willingness to go above and beyond formal job requirements.

Currently, Mughher Cement Enterprise has started to implement Kaizen to the organization. Training is given to almost all employees. Management is showing full commitment to the implementation of the program. However informal discussion with employees reveals that most employees are disappointed with the reform programs implemented in the previous times, as a result they feel the process of implementing kaizen may not be successful. Mughher Cement Enterprise practiced different reform programs in the organizations like Total quality Management (TQM) through ISO, Balanced Score Card (BSC) and Business Process Reengineering (BPR). Employees argue that rather than bringing change, these reform programs impedes the growth of the organization. Hence the organization will face the problem of getting the commitment and engagement of employees to the current reform program. Therefore it is required to work hard to change employee's mentality so that employee's commitment and engagement to the implementation of kaizen is obtained.

1.2 STATEMENT OF PROBLEM

Employee engagement is the level of commitment and involvement an employee has towards their 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 the organization. The organization must work to develop and nurture engagement, which requires a two-way relationship between employer and employee.'

Kaizen, as described by the trainers, works on the people attitudes. In order to successfully implement such types of change programs, full involvement and engagement of employees is

necessary. But preliminary survey and informal discussion with employees reveals that employees interest and motivation to engage in implementation practice is not satisfactory. According to some employees view, this is the impact of previous reform programs in the case company that creates stress, dissatisfaction and frustration to the employees. It lets them see the current reform programs indifferently. As a result, their attitude is going to be reflected in the current implementation practice. This is an indication of the problem of employee's commitment and engagement in the organization. Therefore it is necessary to study the commitment and engagement level of employees by comparing with the conceptual framework of commitment and engagement.

1.3 RESEARCH QUESTIONS

Hence, this paper raises and discusses the following research question

- What are the major factors that influence employee's commitment and engagement in the reform/change process?
- To what extent do employees commit themselves to implement Kaizen model?
- What do employees predict about the success rate of Kaizen model?
- What challenges will be faced to implement kaizen to the Organization?

1.4 OBJECTIVE

1.4.1 General Objective

The main objective of this research was to assess employees' commitment and engagement level to the implementation of kaizen to the case company.

1.4.2 Specific objective

- Identify the factors that influence employees commitment and engagement to the reform program
- Measure the degree of commitment of employees to implement Kaizen
- Predict employees expectation of success rate of Kaizen model
- Identify the challenges that will be faced to implement kaizen to the organization

1.5 SIGNIFICANCE OF STUDY

Kaizen philosophy was one of the tools Japan use to succeed in the international business. It is also implemented in other countries and proven it can bring change to the success of the organization. It

is also believed that kaizen can bring change to the case company, Mughher Cement Enterprise. One of the major factors that results in success to the change program is the presence of committed and engaged employee's. However there is observable problem of lack of commitment and engagement of employees to the change program in the case company. Therefore it is necessary to study the factors that affect the commitment and engagement of employees, and give the study to the organization for the benefit of improvement.

1.6 DELIMITATION

It is expected that a number of factors affect implementation of kaizen in factory. However, in this paper only one aspect of kaizen which is commitment and engagement of employees is considered. Hence the scope is limited to one aspect of the factors. The second delimitation is based on time. Kaizen is new concept to our country. Moreover, it is the way of creating new working culture to the organization. Hence it requires time to see its results. However the study period is short. Therefore the duration of the study is taken into consideration as the delimitation during the research.

1.7 RESEARCH DESIGN AND METHODOLOGY

The following methods were followed to bring the objectives of this project true. These are,

1.7.1 Research Design

To examine engagement of employees in Mughher cement enterprise, assessment of employee's perception to the change process was to be conducted. Based on the findings, factors were identified that contribute to the engagement of employees. Based on these factors questionnaire were to be prepared. Then it was distributed to employees. After collecting the questionnaire, statistical software, MINITAB, was applied to analyze and generate the results.

The nature of the study is based on the data obtained from employee concerning the attitude, opinions and suggestions. It verifies the reference that the researcher expects by means of incorporating selected research procedures. Hence descriptive research type is most suitable design to reach to desired result.

1.7.2 Population and Sampling Technique

According to the company report by the end of July 2013, Tatek site has 187 employees of which 156 are male. The distribution of employees to the department is shown as follows.

Table 1 employee distribution in each department

No	Department	Male	Female	Total
1	Production	79	7	86
3	Maintenance	28	2	30
4	Quality	10	7	17
5	Store	5	6	11
4	Finance	1	3	4
6	Workshop	7	0	7
7	Facility	5	1	5
	Human resource	4	1	5
8	Health	6	0	6
	Customer service	12	4	16
	Total	156	31	187

Table 1 employee distribution in each department

The sampling method used in this this research was simple random sampling. This technique was selected because it is assumed that all employees contribute equivalent data for this study. The sample size was obtained using equation-1. 10% precision level (e), confidence level of 95% and p=0.5 where used for the calculation.

$$n = \frac{N}{1+N(e^2)}$$

Equation 1 -Sample size calculation

For population size N=187, and precision level e=10% , it is obtained sample size n=65. Hence 65 sample size is enough for analysis. However 100 samples were distributed by taking into consideration the non- return questionnaires. Then data collection was followed by analyzing and evaluating the collected data using statistical tools.

1.7.3 Types of data collected

The research will depend on both qualitative and quantitative data in order to answer the research objective and there by arrive at valid and reliable conclusions. Concerning sources of data, both primary and secondary sources were used.

Primary source: -It was the main input for the study. The primary source data was collected directly from employees by distributing questionnaires and conducting interview. It helped to obtain information on employee's perception and attitude.

Secondary Source:- Since not all the required data for the research is obtained from primary source, it was necessary to use secondary data. Mainly previous research papers, factory records, kaizen progress reports, bulletins and magazines were used as a source data for the research.

1.7.4 Instruments of data collection

In the field, mainly the two data collection techniques namely questionnaire and interview were used to collect the required quantitative and qualitative data. The questionnaires were distributed to the employees where they engage to daily and routine activities. The questions were closed ended type. Here in these questionnaire Employees' level of commitment and engagement and their perception about the fate of the kaizen model was surveyed.

Interview was the second instrument conducted with work leaders. The questions were designed to be open ended type, hence the interviewee was free to discuss and add all the necessary information for the research. The third and the fourth research questions "Predict employees expectation of success rate of Kaizen model" and "Identify the challenges that will be faced to implement kaizen to the organization" were planned to be answered from interview data collected from work leaders.

1.7.5 Methods of data analysis

Since the main objective of the research was to study commitment and engagement levels of employees to the case company, identify the major factors that contribute for the commitment and engagement of employees are given more attention. The questionnaire was designed with likert scale for six demographic factors and twenty study variables , a total of twenty six variables. These 26 variables were analysed using minitab software and their correlation is obtained.

The qualitative data collected from interview has been used to strengthened and compare results obtained from quantitative data. Opinions and comments given by work leaders were analyzed based on personal judgment and conclusion of the interviwer.

1.8 ORGANIZATION OF THE STUDY

Generally, this research paper consists of four chapters. Chapter one includes : background of the study, statement of the problem, objectives of the study, significance of the study, scope of the study, research design and methodology of the study and organization of the paper. Chapter two is dedicated for review of related literature. The third chapter is designed for data presentation, analysis and interpretation. The final chapter consists of summary of findings, conclusions and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 EMPLOYEES' COMMITMENT AND ENGAGEMENT

When employees are committed to implement companies plan and strategy and engaged fully to their job, companies will become successful to achieve their objectives. Company's competitive advantage is also relied on employee's commitment and engagement. Hence the managers always seek ways to enhance their employee's commitment. They are more concerned to find strategic way that has a big influence toward commitment. Organizational commitment refers to an employee's belief in the organization's goals and values, desire to remain a member of the organization and loyalty to the organization (Mowday, et al., 1982; and Hackett, et al, 2001). This definition, reflecting an individual's affective commitment, represents a major approach to the study of organizational commitment (Meyer et al., 2002 in Boon and Arumugam, 2006), and appears to be the most desired form of commitment.

Definitions of the concept organizational commitment include the description by O'Reilly (1989, p 17), "an individual's psychological bond to the organization, including a sense of job involvement, loyalty and belief in the values of the organization". Organizational commitment from this point of view is characterized by employee's acceptance of organizational goals and their willingness to exert effort on behalf of the organization (Miller & Lee, 2001).

Cohen (2003, p xi) states that "commitment is a force that binds an individual to a course of action of relevance to one or more targets". This general description of commitment relates to the definition of organizational commitment by Arnold (2005, p 625) namely that it is "the relative strength of an individual's identification with and involvement in an organization".

Miller (2003, p 73) also states that organizational commitment is "a state in which an employee identifies with a particular organization and its goals, and wishes to maintain membership in the

organization”. Organizational commitment is therefore, the degree in which an employee is willing to maintain membership due to interest and association with the organization’s goals and values.

Morrow (1993) describes organizational commitment as characterized by attitude and behavior. Miller (2003, p 72) describes an attitude as “evaluative statements or judgments - either favorable or unfavorable - concerning a phenomenon”. Organizational commitment as an attitude reflects feelings such as attachment, identification and loyalty to the organization as an object of commitment (Morrow, 1993). Meyer, Allen and Gellantly (1990, p 711) also suggest that organizational commitment as an attitude is “characterized by a favorable positive cognitive and affective components about the organization”.

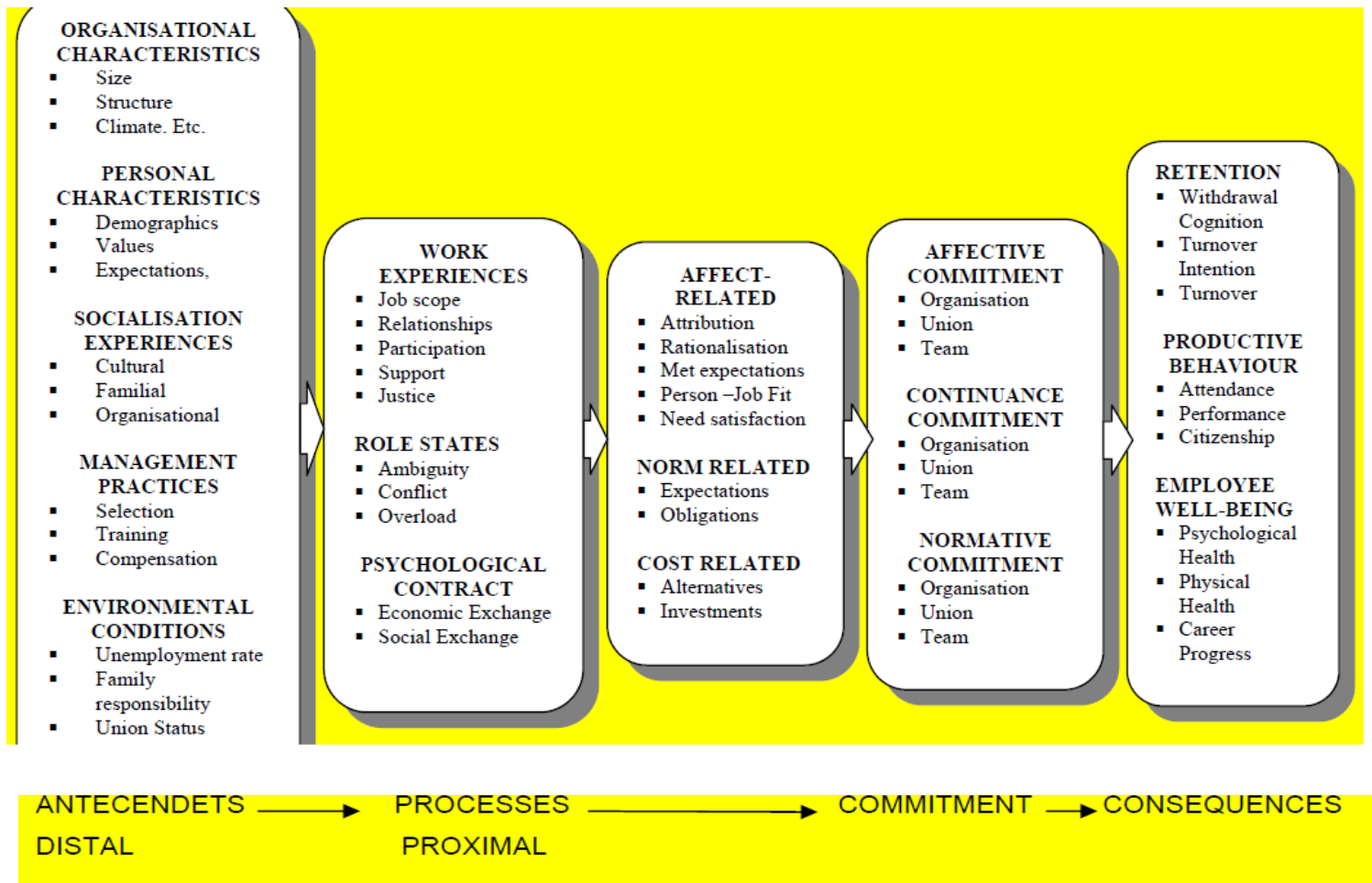
The second characteristic that is used to describe the concept organizational commitment is behavior (Morrow, 1993). Best (1994, p 69) maintains that “committed individuals enact specific behaviors due to the belief that it is morally correct rather than personally beneficial”. Reichers (1985, p 468) is of the opinion that “organizational commitment as behavior is visible when organizational members are committed to existing groups within the organization”. Therefore, organizational commitment is a state of being, in which organizational members are bound by their actions and beliefs that sustain their activities and their own involvement in the organization (Miller & Lee, 2001).

Meyer and Allen (1991, p 67) also defined organizational commitment “is a psychological state that characterizes the employee’s relationship with the organization, and has implications for the decision to continue membership in the organization”. Meyer and Allen (1997, p 106) use the tri-dimensional model to conceptualize organizational commitment in three dimensions namely, affective, continuance and normative commitments.

According to Meyer and Allen , affective commitment (AC) “refers to the employee’s emotional attachment to, identification with, and involvement in the organization” (employees stay with a firm because they want to); continuance commitment (CC) “refers to an awareness of the costs associated with leaving the organization” (employees stay with a firm because they need to); and

normative commitment “reflects a feeling of obligation to continue employment” (employees stay with a firm because they ought to)’. These dimensions describe the different ways of organizational commitment development and the implications for employees’ behavior.

Figure 1 Organizational commitment model (Meyer and Allen ,1997)



2.1.1. Affective commitment dimension

The first dimension of organizational commitment in the model is affective commitment, which represents the individual’s emotional attachment to the organization. According to Meyer and Allen (1997, p 11) affective commitment is “the employee’s emotional attachment to, identification with, and involvement in the organization”. Organizational members, who are committed to an organization on an affective basis, continue working for the organization because they want to (Meyer & Allen, 1991). Members who are committed on an affective level stay with the organization because they view their personal employment relationship as congruent to the goals and values of the organization (Beck & Wilson, 2000).

Affective commitment is a work related attitude with positive feelings towards the organization (Morrow, 1993). Sheldon (1971, p 148) also maintains that this type of attitude is “an orientation towards the organization, which links or attaches the identity of the person to the organization”. Affective commitment is the relative strength of an individual's identification with and involvement in a particular organization (Mowday et al, 1982).

The strength of affective organizational commitment is influenced by the extent to which the individual's needs and expectations about the organization are matched by their actual experience (Storey, 1995). Tetrick (1995, p 589) also describes affective commitment as “value rationality-based organizational commitment, which refers to the degree of value congruence between an organizational member and an organization”.

The organizational commitment model of Meyer and Allen (1997) indicates that affective commitment is influenced by factors such as job challenge, role clarity, goal clarity, and goal difficulty, receptiveness by management, peer cohesion, equity, personal importance, feedback, participation, and dependability. Affective commitment development involves identification and internalization (Beck & Wilson, 2000). Individuals' affective attachment to their organizations is firstly based on identification with the desire to establish a rewarding relationship with an organization. Secondly, through internalization, this refers to congruent goals and values held by individuals and the organization. In general, affective organizational commitment is concerned with the extent to which an individual identifies with the organization (Allen & Meyer, 1990).

2.1.2. Continuance commitment dimension

The second dimension of the tri-dimensional model of organizational commitment is continuance commitment. Meyer and Allen (1997, p 11) define continuance commitment as “awareness of the costs associated with leaving the organization”. It is calculative in nature because of the individual's perception or weighing of costs and risks associated with leaving the current organization (Meyer & Allen, 1997). Meyer and Allen (1991, p 67) further state that “employees whose primary link to the organization is based on continuance commitment remain because they need to do so”. This indicates the difference between continuance and affective commitment. The latter entails that individuals stay in the organization because they want to.

Continuance commitment can be regarded as an instrumental attachment to the organization, where the individual's association with the organization is based on an assessment of economic benefits gained (Beck & Wilson, 2000). Organizational members develop commitment to an organization because of the positive extrinsic rewards obtained through the effort-bargain without identifying with the organization's goals and values.

The strength of continuance commitment, which implies the need to stay, is determined by the perceived costs of leaving the organization (Meyer & Allen, 1984). Best (1994, p 71) indicates that “continuance organizational commitment will therefore be the strongest when availability of alternatives are few and the number of investments are high”. This argument supports the view that when given better alternatives, employees may leave the organization.

Meyer et al (1990, p 715) also maintain that "accrued investments and poor employment alternatives tend to force individuals to maintain their line of action and are responsible for these individuals being committed because they need to". This implies that individuals stay in the organization, because they are lured by other accumulated investments which they could lose, such as pension plans, seniority or organization specific skills.

The need to stay is “profit” associated with continued participation and termination of service is a “cost” associated with leaving. Tetrick (1995, p 590) support the profit notion by describing the concept continuance organizational commitment as “an exchange framework, whereby performance and loyalty are offered in return for material benefits and rewards”. Therefore, in order to retain employees who are continuance committed, the organization needs to give more attention and recognition to those elements that boost the employee’s morale to be affectively committed.

2.1.3. Normative commitment dimension

The last dimension of the organizational commitment model is normative commitment. Meyer and Allen (1997, p 11) define normative commitment as “a feeling of obligation to continue employment”. Internalized normative beliefs of duty and obligation make individuals obliged to sustain membership in the organization (Allen & Meyer, 1990). According to Meyer and Allen (1991, p 67) “employees with

normative commitment feel that they ought to remain with the organization”. In terms of the normative dimension, the employees stay because they should do so or it is the proper thing to do.

Wiener and Vardi (1980, p 86) describe normative commitment as “the work behavior of individuals, guided by a sense of duty, obligation and loyalty towards the organization”. Organizational members are committed to an organization based on moral reasons (Iverson & Buttigieg, 1999). The normative committed employee considers it morally right to stay in the organization, regardless of how much status enhancement or satisfaction the organization gives him or her over the years.

The strength of normative organizational commitment is influenced by accepted rules about reciprocal obligation between the organization and its members (Suliman & Iles, 2000). The reciprocal obligation is based on the social exchange theory, which suggests that a person receiving a benefit is under a strong normative obligation or rule to repay the benefit in some way (McDonald & Makin, 2000). This implies that individuals often feel an obligation to repay the organization for investing in them, for example through training and development. Meyer and Allen (1991, p 88) argue that “this moral obligation arises either through the process of socialization within the society or the organization”. In either case it is based on a norm of reciprocity, in other words if the employee receives a benefit, it places him or her, or the organization under the moral obligation to respond in kindness.

Organizational commitment can result in a stable and productive workforce (Morrow, 1993). It enables employees to release their creativity and to contribute towards organizational development initiatives (Walton, 1985). Employees who are highly committed do not leave the organization because they are dissatisfied and tend to take challenging work activities (Meyer & Allen, 1997). Committed members are normally achievement and innovative orientated with the ultimate aim of engaging in and improving performance (Morrow, 1993).

Other positive effects of organizational commitment include feelings of affiliation, attachment and citizenship behavior, which tend to improve organizational efficiency and effectiveness (Williams & Anderson, 1991). Affectively and normatively committed members are more likely to maintain organizational membership and contribute to the success of the organization than continuance-committed members (Meyer & Allen, 1997).

2.2 STAGES AND LEVELS OF ORGANIZATIONAL COMMITMENT

2.2.1 Stages of Organizational Commitment

Organizational commitment is a spontaneous process, which develops through the orientation of individuals to the organization. The development processes, which are outlined by O'Reilly (1989, p 12) as the following stages:

2.2.1.1 *Compliance stage*

The first stage, namely compliance centralizes around the employee accepting the influence of others mainly to benefit from them, through remuneration or promotion (O'Reilly, 1989). At this stage, attitudes and behaviors are adopted not because of shared beliefs but simply to gain specific rewards. The nature of organizational commitment in the compliance stage is associated with the continuance dimension commitment, where the employee is calculative with the need to stay in the organization when evaluating the rewards (Beck & Wilson, 2000). This implies that at this stage employees stay in the organization because of what they receive (Meyer & Allen, 1997).

2.2.1.2 *Identification stage*

The second stage, namely identification occurs when employees accept the influence of others in order to maintain a satisfying self-defining relationship with the organization (O'Reilly, 1989). Employees feel proud to be part of the organization; they may regard the roles they have in the organization as part their self-identity (Best, 1994). Organizational commitment at this stage is based on the normative dimension (Meyer & Allen, 1997). The individual stays because he or she should and is guided by a sense of duty and loyalty towards the organization.

2.2.1.3 *Internalization stage*

The last stage, namely internalization takes place when the employee finds the values of the organization to be intrinsically rewarding and congruent with his or her personal values (O'Reilly, 1989). Organizational commitment at this level is based on the affective dimension (Meyer & Allen, 1997). The employee at this stage develops not only the sense of belonging but passion to belong to the organization hence the commitment is based on a "want to stay" basis. The values of the individual are therefore congruent with those of the group and the organization (Suliman & Iles, 2000).

2.2.2 Levels of Organizational Commitment

There are different levels of organizational commitment which are related to the individual's development of the individual's organizational commitment (Reichers, 1985). Figure 3.2 depicts the levels of commitment when it is increasing and when it is decreasing. Employee's level of commitment may move from a low level to a moderate level and continue to develop to a higher level of commitment (Reichers, 1985).

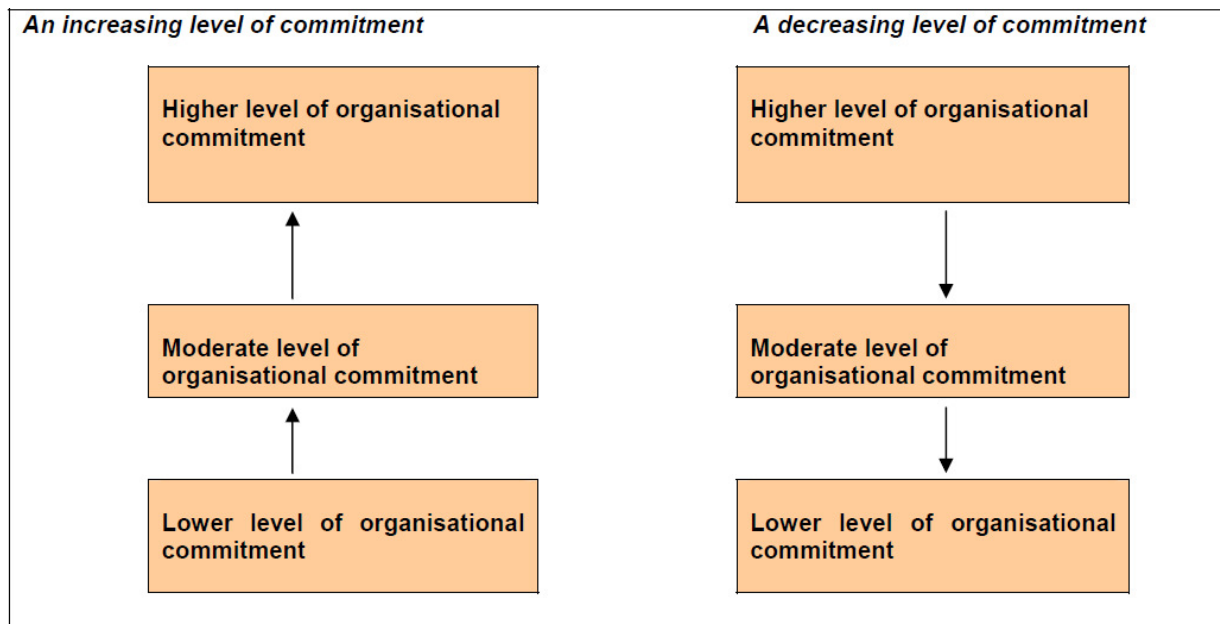


Figure 2 Levels of organizational commitment development (Reichers,1985)

The following is a description of the levels of organizational commitment:

2.2.2.1 Higher level of organizational commitment

A high level of organizational commitment is characterized by a strong acceptance of the organization's values and willingness to exert efforts to remain with the organization (Reichers, 1985). Miller (2003, p 73) states that "high organizational commitment means identifying with one's employing organization". The "will to stay" suggests that the behavioral tendencies at this level relate closely with affective dimension of commitment, where individuals stay because they want to.

2.2.2.2 Moderate level of organizational commitment

The moderate level of organizational commitment is characterized by a reasonable acceptance of organizational goals and values as well as the willingness to exert effort to remain in the organization (Reichers, 1985). This level can be viewed as a reasonable or average commitment, which implies partial commitment. The willingness to stay is an attribution of a moral commitment associated with the normative dimension of commitment (Meyer & Allen, 1997). The individuals stay in the organization because they should do so.

2.2.2.3 Lower level of organizational commitment

The low level of organizational commitment is characterized by a lack of neither acceptance of organizational goals and values nor the willingness to exert effort to remain with the organization (Reichers, 1985). The employee who operates on this level must be disillusioned about the organization; such an employee may stay because he or she needs to stay as associated with the continuance dimension (Meyer & Allen, 1997). Given an option they will leave the organization.

2.3 ELEMENTS AND FACTORS AFFECTING ORGANIZATIONAL COMMITMENT

2.3.1 Elements that Link Corporate Culture and Commitment

According to Crawford and Lok (2001), organizational culture plays an important role in generating commitment and enhancing performance, it was also stated by other researchers (Deal and Kennedy, 1982; Peters and Waterman, 1982 in Yiing and Zaman (2009). “A strong organizational culture is seen by researchers such as Scott (1987) as being a belief system that sustains the commitment of individual members to the good of the organization” (Wilson, 1997).

Boon and Arumugam’s paper(2006) work identified four core dimensions of corporate culture. These are communication, training and development, rewards, and teamwork.

2.3.1.1 Training and Development

Training and development can be defined as the process of providing employees with specific skills or helping the employee correct deficiencies in their performance (Poh, 2001 in Boon and Arumugam, 2006). From management’s view point, training can be regarded as a means of engaging the commitment of employees to organization (Heyes and Stuart (1996) in Soltani and

Liao (2010); Bartlett, 2001). In the Harvard map of HRM, Beer *et al.* (1984); in Soltani and Liao (2010) talk about “training as one of the several human resource flows which altogether lead to achieving the ‘four Cs’ of HR outcomes: commitment, congruence, competence and cost effectiveness”.

Bartlett (2001), McCabe and Garavan (2008) were studied the relationship of training and development among nurses toward commitment, they found that perceived access to training, social impact of training, motivation to learn, and perceived benefits of training are positively related to organizational commitment. Moreover, Deming (1986) in Boon and Arumugam (2006) stressed the importance of education and training for continual updating and improvement, identifying one source of human motivation at work as intrinsic motivation: the desire to grow; learn, and to develop oneself. Training is provide for generating new knowledge, and new knowledge is attained through learning, based on research conducted by Savolainen (2000), suggest that managerial commitment to change is a complex construct and that it is linked with perceptions of quality and with learning.

2.3.1.2 Reward and Recognition

Reward and recognition can be defined as benefits-such as increased salary, bonuses, and promotion- which are conferred as public acknowledgement of superior performance with respect to goals (Juran and Gryna, 1993; in Boon and Arumugam (2006). According to Chew and Chan (2008), remuneration and recognition positively predicted organizational commitment and intention to stay. Based on Liu (2007), training satisfaction and perceived reward equity were the only antecedent factors that showed significant positive relationship with organizational commitment. Rewards for quality efforts appear to have a significantly positive relation to employee morale (Kassiech and Yourstone, 1998 in Boon and Arumugam (2006). The study was conducted by Williamson, et al. (2009) showed a significant two-way interaction between the cultural dimension of collectivism and organizational rewards on employees’ commitment.

According to Herzberg’s (1996) in Boon and Arumugam (2006) hygiene/ motivator theory, recognition is one of the four motivators, which can contribute to employee commitment when it is

present. Participation in decision making is a part of recognition activities, and the study was conducted by Ladd, et al, (2006) revealed that participation in decision making positively influences work effort, autonomy and commitment, practitioners need to be mindful of keeping a balance between employee and employer needs.

2.3.1.3 Organizational Communication

A dynamic inter-relationship between culture and communication must be acknowledged. Corporate cultures will generally be communicated to stakeholders in some form, particularly through employee behavior and therefore one method of reducing the occurrence of negative uncontrolled communication is by gaining employee commitment of core corporate values (Melewar and Karaosmanoglu, 2006). So, there is an interdependence relationship between communication and employee commitment. Robbins (2001) also stated that there is a relationship between the employee communication and employee motivation and commitment. Organizational communication is all forms of communication with stakeholders with all parties that an organization has an interdependence relationship (Van Riel, 1995). Organizational communication refers to the process whereby individuals and groups transact in a variety of ways and within different areas with the aim of carrying out organizational goals (Smidts et al., 2001; Brunetto and Farr-Wharton (2004) in Boon and Arumugam (2006). Several authors note that communication is important for improving employees' commitment and for positive outcomes (Goris et al., 2000; Pettitt et al., 1997; Guimaraes, 1996; Guimaraes, 1997; in Boon and Arumugam (2006). Study was conducted by Vakola and Bouradas (2005). indicated that silence behavior can be responsible for low commitment and satisfaction. The results of the study indicated that the strongest predictor of organizational commitment is communication opportunities. Past research supports this finding indicating that communication satisfaction among other organizational processes is a determinant of organizational commitment (Putti and Aryee, 1990; and Carriere and Bourque, 2009). According to Hooff and Ridder (2004), communication climate is found to be a key variable , a constructive communication climate was found positively influence knowledge donating, knowledge collecting, and affective commitment. Farrelly, *et al.* (2003) suggested that market orientation and collaborative communication are both important determinants of sponsorship commitment, defined as a sponsor's preparedness to leverage the association. Walker, *et al.* (2009) also stated that

positive communication has the association with affective and normative commitment. Therefore, I propose the similar hypothesis with the original paper:

2.3.1.4 Teamwork

The teamwork is very important thing to make the organization more effective in providing quality of service toward the customers, especially for government organization which has the citizen as the customers. In order to adopt specific organizational values to facilitate the service quality and effectiveness of a professional service firm with successfully, the company should provide training, communication, rewards and resources (Burke, R.J., 1995; in Boon and Arumugam, 2006).

A team may be viewed as a group of individuals who work interdependently to solve problems or accomplish tasks (Gibson and Kirkman, 1999; Manz and Sims, 1993 in Park, et al., 2005). Teamwork facilitates the meeting of affiliate needs within the workplace and has been directly connected to organizational commitment (Karia and Ahmad, 2000; Karia and Asaari, 2006; in Boon and Arumugam, 2006). Typologies of teams in contemporary organizations include work teams, parallel teams, project teams, and management teams (Cohen and Bailey, 1997 in Park, et al., 2005). Teamwork was found to be a significant predictor of teacher team commitment. Respondents showing higher levels of teamwork skills perceived higher levels of team commitment (Park, et al., 2005). According to McCabe and Garavan (2008), teamwork has positively influence toward commitment in the context of nurses. The study was conducted by Powell, et al., (2006), show that how much more important perceptions of member efforts and team work processes are to the creation of trust, and ultimately commitment, in different team types.

2.3.2 Factors affecting Organizational Commitment

There are a variety of factors that shape organizational commitment. Such factors include the following: job-related factors; employment opportunities; personal characteristics; positive relationships; organizational structure; and management style.

2.3.2.1 Job-related factors

Organizational commitment is an important job-related outcome at the individual level, which may have an impact on other job-related outcomes such as turnover, absenteeism, job effort, job role and performance or visa versa (Randall, 1990). The job role that is ambiguous may lead to lack of commitment to the organization and promotional opportunities can also enhance or diminish organizational commitment (Curry, Wakefield, Price & Mueller, 1996).

Other job factors that could have an impact on commitment are the level of responsibility and autonomy. Baron and Greenberg (1990, p 174) state that "the higher the level of responsibility and autonomy connected with a given job, the lesser repetitive and more interesting it is, and the higher the level of commitment expressed by the person who fill it".

2.3.2.2. Employment opportunities

The existence of employment opportunities can affect organizational commitment (Curry et. al., 1996). Individuals who have a strong perception that they stand a chance of finding another job may become less committed to the organization as they ponder on such desirable alternatives. Where there is lack of other employment opportunities, there is a tendency of high level of organizational commitment (Vandenberghe, 1996). As a result, membership in the organization is based on continuance commitment, where employees are continuously calculating the risks of remaining and leaving (Meyer & Allen, 1997).

2.3.2.3. Personal characteristics

Organizational commitment can also be affected by the employee's personal characteristics such as age, years of service and gender (Meyer & Allen, 1997). Baron and Greenberg (1990, p 174) state that "older employees, those with tenure or seniority, and those who are satisfied with their own levels of work performance tend to report higher levels of organizational commitment than others". This implies that older people are seen to be more committed to the organization than other age groups. Another personal characteristic that may affect organizational commitment is associated with gender (Meyer & Allen, 1997). However, it is argued that gender differences in commitment are due to different work characteristics and experiences that are linked to gender (Mathieu & Zajac, 1990).

2.3.2.4. *Work environment*

The working environment is also identified as another factor that affects organizational commitment. One of the common working environmental conditions that may affect organizational commitment positively is partial ownership of a company. Ownership of any kind gives employees a sense of importance and they feel part of the decision-making process (Klein, 1987). This concept of ownership which includes participation in decision-making on new developments and changes in the working practices creates a sense of belonging (Armstrong, 1995). A study conducted by Subramaniam and Mia (2001) also indicates that managers who participate in budget decision-making tend to have a high level of organizational commitment.

Another factor within the work environment that may affect organizational commitment is work practices in relation to recruitment and selection, performance appraisal, promotions and management style (Meyer & Allen, 1997). Metcalfe and Dick (2001, p 412) in their study conclude that “the low level of organizational commitment of constables could be attributed to inappropriate selection and promotion which lead to the perpetuation of managerial style and behaviour that has a negative effect on organizational commitment of subordinates”.

2.4.2.5 *Positive relationships*

The organization as a workplace environment is built up of working relationships; one of which is the supervisory relationship. According to Randall (1990, p 370) “the supervisory relationship can affect organizational commitment either positively or negatively”. A positive supervisory relationship depends on how work-related practises such as performance management are being implemented in the organization (Randall, 1990). When individuals find the supervisory relationship to be fair in its practices, they tend to be more committed to the organization (Benkhoff, 1997).

Other work relationships, such as teams or groups, which exist in the workplace, can affect organizational commitment. Organizational members can demonstrate commitment when they are able to find value through work relationships (Mathieu & Zajac, 1990). Brooke, Russell and Price (1988, p 141) state that “employee commitment and attachment to the organization can be increased

through efforts made to improve the organizations social atmosphere and sense of purpose”. In essence, when work relationships reflect mutual respect to individuals, they are able to commit themselves to the organization.

2.3.2.6 Organizational structure

Organizational structure plays an important role in organizational commitment. Bureaucratic structures tend to have a negative effect on organizational commitment. Zeffanne (1994, p 991) indicates that "the removal of bureaucratic barriers and the creation of more flexible structure are more likely to contribute to the enhancement of employee commitment both in terms of their loyalty and attachment to the organization". The management can increase the level of commitment by providing the employees with greater direction and influence (Storey, 1995).

2.3.2.7 Management style

It is stated by Zeffanne (1994, p1001) that "the answer to the question of employee commitment, morale, loyalty and attachment may consist not only in providing motivators, but also to remove demotivators such as styles of management not suited to their context and to contemporary employee aspirations". A management style that encourages employee involvement can help to satisfy employee's desire for empowerment and demand for a commitment to organizational goals. Gaertner (1999, p 482) argues that “more flexible and participatory management styles can strongly and positively enhance organizational commitment”. Organizations need to ensure that their management strategies are aimed at improving employee commitment rather than compliance (William & Anderson, 1991).

2.4 KAIZEN AS A NEW WAY OF CULTURE

2.4.1 An Overview of Kaizen

Masaki Emai (1980's) defined kaizen in his famous book KY'ZEN : The key to Japan's competitive success as “ The overriding concept behind good management ..the unifying thread running through the philosophy , the systems and the problem solving tools developed in Japan. Japanese kaizen is Philosophy or practices that focus upon continuous improvement, and business management. It has

been applied in healthcare, government, banking, and other industries. When used in the business sense and applied to the workplace, Kaizen refers to activities that continually improve all functions, and involve all employees from the CEO to the assembly line workers. It also applies to processes, such as purchasing and logistics that cross organizational boundaries into the supply chain. By improving standardized activities and processes, Kaizen aims to eliminate waste. Kaizen was first implemented in several Japanese businesses after the Second World War, influenced in part by American business and quality management teachers who visited the country. It has since spread throughout the world and is now being implemented in many other venues besides just business and productivity. Instead of focusing on large, capital intensive improvements, Kaizen focuses on creative investments that continually solve large numbers of small problems. Large, capital projects and major changes will still be needed, and kaizen will also improve the capital projects process, but the real power of kaizen is in the on-going process of continually making small improvements that improve processes and reduce waste. **Kaizen Reduces Waste** in areas such as inventory, waiting times, transportation, worker motion, employee skills, over production, excess quality and in processes; **Kaizen Improves** space utilization, product quality, use of capital, communications, production capacity and employee retention.

The major core values of Kaizen could be summarized as follows:

- process oriented way of thinking
- continuous improvement
- improvement by all levels of management and workers always
- participatory
- Quantitative approach to defining problem, generating solution and confirming results.

According to M. Imai, a guru in these management philosophies and practices , the three pillars of kaizen are summarized as follows:

1. housekeeping
2. waste elimination
3. standardization

and as he states , the management and employees must work together to fulfill the requirements for each category.

Housekeeping

This is a process of managing the work place ,known as ‘‘Gemba’’ (workplace) in Japanese, for improvement purposes .Imai introduced the word ’’Gemba ‘’, which means ‘‘real place’’, where value is added to the products or services before passing them to next process where they are formed . For proper housekeeping a valuable tool or methodology is used , the 5S methodology.

- seiri-(selection) ; proper (suitable) preparation of a workplace, manner and instrument of work; with the elimination of everything useless,
- seito-order (systemic); tidiness in a workplace and preparation of every required tools in the manner enabling simple and quickly utilization,
- seiso-clearness (cleaning); order in a workplace allowing on increase of safety of workplace, control of equipment and responsibility for the means of production,
- seiketsu-consolidation (standardisation); reminding employees about their duties in the aspect of care of used tools and equipment and about keeping the workplace order,
- shitsuke-discipline (self-discipline); adaptation of employees to the principles accepted by the organisation, independent elimination of bad custom, training.

Waste (Muda) elimination.

Muda in Japanese means waste. The resources at each process — people and machines — either add value or do not add value and therefore ,any non-value adding activity is classified as muda in Japan. Work is a series of value-adding activities, from raw materials ,ending to a final product. Muda is any non-value-added task.

Kaizen study 7 kind of productive loss (Muda) or simply wastes –excessive inventories, over-production, waiting for next operation (raw materials, employee), transport, inappropriate way of processing, unnecessary unergonomic motion, internal and external incompatibilities,

Standardization

Standards are set by management, but they must be able to change when the environment changes. Companies can achieve dramatic improvement as reviewing the standards periodically, collecting and analysing data on defects, and encouraging teams to conduct problem-solving activities. Once

the standards are in place and are being followed then if there are deviations, the workers know that there is a problem. Then employees will review the standards and either correct the deviation or advise management on changing and improving the standard. It is a never-ending process and is better explained and presented by the PDCA cycle(plan-do-check-act), known as Demming cycle.

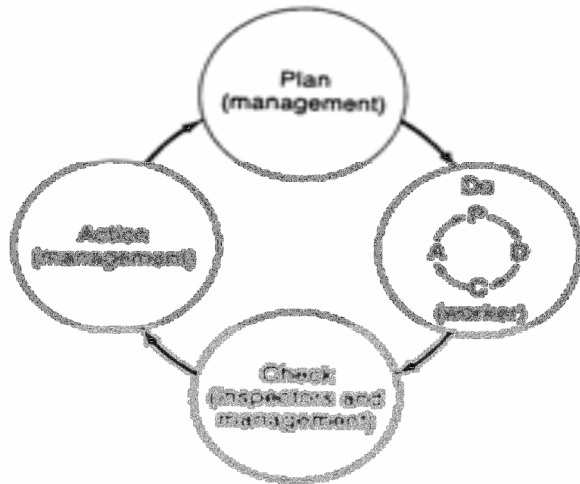


Figure 3 PDCA CYCLE

There are 7 instruments of the quality control – practical methods of registration and analyses of data; the most popular are: check list, Pareto diagram, reasons and results diagram (so called Ishikawa diagram), histogram, scheme, punctual diagram, check card most often with x-R diagram.

2.4.2 Kaizen in Ethiopia

The japons manufacturing philosophy kaizen, even though it is originated in Japan it propagates throughout the world. Asian, America and European contents already implement the philosophy and became successful. After the success full kaizen dissemination in different Asian countries some African countries like Ghana, Libya and Egypt also tries to adapt the philosophy. In spite of the fact that kaizen success in different countries the let Prime Minister Ato Meles Zenawi requested, the Government of Japan, and Japan International Cooperation Agency (JICA) to introduce KAIZEN to Ethiopia. As a response KAIZEN Guidance was examined through conducting the pilot project that was implemented in the 30 selected companies within a framework of a project entitled ‘the Study on Quality and Productivity Improvement in Ethiopia’ during the period from October 2009 to May 2011. The project was implemented under the bilateral agreement between Ministry of Industry (MoI; the former Ministry of Trade and Industry) representing the Government of Ethiopia and

Japan International Cooperation Agency (JICA) representing the Government of Japan. Then selected 30 companies (list of companies are attached to annex) from industry sector were categorized into the five sub-sectors; namely, (i) basic metal and engineering sub-sector; (ii) agro-processing sub-sector; (iii) chemical sub-sector; (iv) leather sub-sector; and (v) textile sub-sector. The study shows the possibility of implementing the japans kaizen philosophy effectively.

CHAPTER THREE

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

3.1 EMPLOYEES' DISTRIBUTION WITHIN THE DEPARTMENTS

There are 187 permanent employees in Tatek milling and packing plant. Among these employees 31 are females and the rest, 156, are males. As per the activities in each department, employees are categorized into 10 sections.

Table 2 Employees distribution in each department

No.	Item	Male	Female	Total
1	Production	79	7	86
2	Maintenance	28	2	30
3	Quality assurance	10	7	17
4	Store	5	6	11
5	Finance	1	3	4
6	Workshop	7	0	7
7	Facility	5	1	5
8	Human resource	4	1	5
9	Health	6	0	6
10	Customer service	12	4	16
	Total	156	31	187

3.2 DATA COLLECTION AND ANALYSIS FOR DEMOGRAPHIC FACTORS

Questionnaire and interview were the two instruments used to collect data for this research. It is planned to distribute questionnaire so that minimum of 30% of employees' response is collected. 100 questionnaires were distributed randomly and 85 of which can be collected. From these 85

questionnaires, 9 of them are incomplete. Finally 76 questionnaires, which is 40% of employees, are found suitable and enough for analysis.

3.2.1. Respondents personal data

There was a section in the questionnaire that requires the respondent to fill personal data like age , service year, gender, marital status, educational level, and their level of responsibility in the organizations . The following table summarizes this data

Table 3 Respondents' data

S/N	Item	No of respondent	%age of respondent
1.	Age		
	18-24	6	7.89%
	25-31	16	21.05%
	32-38	10	13.16%
	39-44	19	25%
	45 and above	25	32.89%
2.	Service year		
	5 and below	22	28.95%
	5-10	11	14.47%
	11-16	10	13.16%
	17-22	7	9.21%
	23 and above	26	34.21%
3.	Gender		
	Male	61	80.26%
	Female	15	19.74%
4.	Marital status		
	Married	50	65.79%
	Single	23	30.26%
	Separated	3	3.95%
5.	Educational level		
	Grade 8 and below	9	11.84%
	8-12	26	34.21%
	Diploma	32	42.1%
	Degree	9	11.84%
	Master	0	0%
	PHD	0	0%
6.	Rank in organization		
	7 and below	27	35.53%
	8-11	40	52.63%
	12-13	9	11.84%
	14-15	0	0%

3.2.2 Demographic data analysis

In Tatek Cement Milling and Packing Plant, there are 178 employees. From these employees, males are 156 in number, and the rest, 31, are female. In this research 61 males and 15 female employees, a total of 76 employees, response were taken for analysis. Therefore 39.1% male and 48.4% female employees were participated by providing necessary data for this research.

The result indicated that out of the total respondents surveyed, 7.9% of them were within the age range of 18-24 years. Within the age category of 25-31 years. 21.1% employees were found and 13.15% were within the ages of 32-38 years. One fourth of respondent, i.e 25%, were within the age range of 39-44 years and the remains 32.9% were found within the age categories of 45 and above. The majority of the participants serve the organization for more than 5 years. This is evidenced in the fact that 28.94% fall within the category of year 5 and below work experience, 14.47% falls within the category of 5-10 years of work experience, 13.15% are in the range of 11-16 years, 9.21% fall into 17-22 years and the rest 34.2% fall into the range of 23 and above service years.

The marital status and educational level of respondents were taken as the important demographic factors for the study. It is revealed that 65.78% of respondents are married, 30.26% are unmarried and the rest 3.95% are separated. Their educational level also varies from lower grade to first degree. Grade 8 and below respondent count 11.84%, 34.21% fall between grade 8 -12, the majority fall into diploma level which is 42.1% and the rest 11.84% are degree holders.

The educational level and service years of employees are the two important factors that results in assigning employees to different positions in the organization. The higher position in the plant is the team leader position which is grade 14. There are three team leaders in the plant, production team leader, maintenance team leader and customer service team leader. The lower position next to production team leader is shift leader and its position is grade 13. The lower position next to maintenance team leader is supervisor and positioned to grade 13. Similar to production team, customer service team leader is followed by shift leader but it is given grade 11. Most of senior technicians and operators fall into grade 12. The lowest grade is occupied by low service year and

educational level. This study divides respondents based on their grade in the organizations. Accordingly 35.52% are grade 7 and below, 52.63% fall into grade 8-11, 11.84 % fall into grade 12-13.

3.3 DATA COLLECTION AND ANALYSIS OF STUDY VARIABLES

3.3.1 Variables for research questions

20 questions were prepared to collect the response of employees feeling about the organizations, their relationship with their work mates and immediate bosses. Each question is prepared in such a way that a 5 point likert scale is taken as the measure of the response of the respondent that ranges from strongly agree to strongly disagree. The following table summarizes the variables selected for study of employees' engagement.

Table 4 Variables for research question

Variable	Description of variable	QUESTION
X1	Carrier development – opportunity for personal development	I know what is expected of me at work.
X2	Available of Tools and equipment	I have the materials and equipment I need to do my work right.
X3	Empowerment	At work, I have the opportunity to do what I do best every day.
X4	Reward and recognition	In the last seven days, I have received recognition or praise for doing good work.
X5	Communication	My supervisor, or someone at work, seems to care about me as a person.
X6	Work environment	The work environment motivate employees to work
X7	Respect from coworkers	At work, my opinions seem to count.
X8	Performance appraisal	Individual and team performance evaluation system is good.
X9	Social life in work place	I have a best friend at work.
X10	Training and development	This last year, I have had opportunities at work to learn and grow.
X11	Feedback	In the last six months, someone at work has talked to me about my progress.
X12	Leadership-clarity of company value	The mission or purpose of my company makes me feel my job is important.
X13	Pay and benefits	If I am given the opportunity of better salary in any other organization , I will go to that organization
X14	Participation in decision	Employees have the opportunity to correct works by his decision
X15	Training on kaizen	I get enough training on kaizen that allow me to implement in work place
X16	Participation in kaizen	I am fully engaged in kaizen implementation
X17	Equal opportunity	Workers are not treated equally by management
X18	Complaint handling	The complaint handling system of the organization is good
X19	Organizational structure	Organizational structure facilitates the relationship between mgt and employees
X20	fair treatment	The relationship between bosses and subordinates is good

3.3.2 Analysis of study variables

The respondents were expected to give their consent to the statements ranging from very agree to very disagree in likert 5 scale. The response is analyzed in as the following ways

Table 5 analysis of study variables

No	Question	Likert scale									
		5		4		3		2		1	
		No	%age	No	%age	No	%age	No	%age	No	%age
1	I know what is expected of me at work	59	77.63%	10	13.16%	4	5.26%	1	1.32%	2	2.63%
2	I have the materials and equipment I need to do my work right	9	11.84%	15	19.74%	20	26.32%	15	19.74%	17	22.37%
3	At work, I have the opportunity to do what I do best every day	29	38.16%	19	25%	9	11.84%	5	6.58%	14	18.42%
4	In the last seven days, I have received recognition or praise for doing good work	7	9.21%	5	6.58%	17	22.37%	9	11.84%	38	50%
5	My supervisor, or someone at work seems to care about me as a person	45	59.21%	16	21.05%	7	9.21%	3	3.95%	5	6.58%
6	The work environment motivate employees to work	14	18.42%	15	19.74%	18	23.68%	9	11.84%	20	26.31%
7	At work my opinion seems to count	26	34.21%	20	26.31%	13	17.1%	5	6.58%	12	15.79%
8	Individual and team performance evaluation system is good	16	21.05%	9	11.84%	17	22.37%	11	14.47%	23	30.26%
9	I have a best friend at work	43	56.58%	14	18.42%	12	15.79%	2	2.63%	5	6.58%
10	This last year, I have had opportunities at work to learn and grow	12	15.79%	7	9.21%	17	22.37%	9	11.84%	31	40.79%
11	In the last six months, someone at work has talked to me about my progress	13	17.1%	11	14.47%	19	25%	9	11.84%	24	31.58%
12	The mission or purpose of my company makes me feel my job is important	57	75%	10	13.16%	7	9.21%	1	1.13%	1	1.13%
13	If I am given the opportunity of better salary in any organization , I will left this organization	50	65.79%	6	7.89%	9	11.84%	1	1.31%	10	13.16%
14	Employees have the opportunity to correct works by their decision	16	21.05%	17	22.37%	12	15.79%	7	9.21%	24	31.58%
15	I get enough training on kaizen that allows me to implement in work place	30	39.47%	18	23.68%	13	17.1%	3	3.95%	12	15.79%
16	I am fully engaged in kaizen implementation	36	47.37%	12	15.79%	12	15.79%	7	9.21%	9	11.84%
17	Workers are not treated equally	25	32.89%	6	7.89%	10	13.16%	10	13.16%	25	32.89%

	by management										
18	The complaint handling system of the organization is good	5	6.58%	9	11.84%	11	14.47%	12	15.79%	39	51.31%
19	Organizational structure facilitates the good work relationship between management and employees	7	9.21%	4	5.26%	13	17.1%	12	15.79%	40	52.63%
20	The relationship between boss/supervisor and subordinates is good	10	13.16%	4	5.26%	21	27.63%	10	13.16%	31	40.79%

The correlation between these 26 study variables are seen in appendix 4. What is observed in this table is that In the first row age, service year and rank in the organization are correlated. The higher the age and service year results in better position in the organization . The second row also indicates that they are correlated with empowerment.

Row three and row four indicates that gender and marital status are correlated with performance appraisal and organizational structure.

Row 7 indicates that carrier development is correlated with pay and benefit

Row 8 indicates that the availability of tools and equipment’s is correlated with communication and performance appraisal.

Row 9 indicates that empowerment is correlated with availability of tools and equipment, work environment, participation in decision and fair treatment

Row 10 indicates that reward and recognition is correlated with work environment , communication , feedback and organizational structure.

Row 11 indicates that leadership-respect for subordinates is correlated with availability of tools and equipment , work environment , communication ,social life in workplace.

Row 12 indicates that work environment is correlated with availability of tools and equipment’s, empowerment ,reward and recognition, respect for subordinates, communication, performance appraisal, feedback and fair treatment .

Row 13 indicates that communication is correlated with availability of tools and equipment's, empowerment , respect for subordinates, work environment , performance appraisal, social life in workplace and feedback.

Row 14 indicates that performance appraisal is correlated with availability of tools and equipment's, complaint handling, organizational structure, fair treatment

Row 15 indicates that social life in work place is correlated with respect for subordinates and communication

Row 17 indicates that feedback is correlated with work environment and communication

Row 21 indicates that training in kaizen is correlated with participation in kaizen

Row 24 indicates that complaint handling is correlated with work environment , performance appraisal, organizational structure and fair treatment

Row 25 indicates that organizational structure is correlated with performance appraisal, complaint handling , fair treatment and gender.

Row 26 indicates that fair treatment is correlated with performance appraisal and organizational structure.

2.4 DATA COLLECTION FROM INTERVIEW

Interview was targeted to be conducted with team leaders and supervisors where they play important role in managing and leading the plant. The following team leaders and supervisors were willing to give their words for the interview.

- Production team leader
- Maintenance team leader
- Workshop team leader
- Laboratory supervisor
- Store team leader
- Customer service shift leader

The questions were designed in such a way that they can extract the respondents understanding, expectations and challenges faced during kaizen implementation. Their responses are summarized as follows

- Primarily they admit the necessity of kaizen implementation for competition and survival in cement industry. It is believed that unnecessary cost can be reduced by properly utilizing resources and by eliminating waste.
- They admit that the progress is hindered due to lack of continuous top management support and follow up.
- They agree that the training is given sufficiently to almost all employees.
- It is believed that 40-60 % of the plan is performed during the last half year.
- They admit that employees don't understand kaizen equally; hence there it is seen lack of commitment and engagement to some of employees.
- They strongly believe that kaizen implementation process should be integrated with incentives plan and performance appraisal..

CHAPTER FOUR

SUMMARY, CONCLUSION AND RECOMMENDATION

4.1 SUMMARY

The implementation of Kaizen principles has been viewed as one of the key factors to Japanese competitive success. Kaizen then has emerged in the U.S. as a methodology leading to dramatic increases in productivity by manufacturing companies. In Ethiopia also a number of companies has involved to the implementation of kaizen and some of them are going to record successful results.

In Tatek cement plant, implementation of kaizen is in the infant stage. Training is given to almost all employees, kaizen team is formed and guidelines to implementation are designed. However the progress is not as expected. According to this study, it is observed that the involvement and engagement of employees to the implementation of kaizen is low.

Kaizen mainly works on people's attitude. Hence it demands the commitment and engagement of employees, as a result it comes to be the work culture of that organization. In this study it is tried to identify factors that can affect the commitment and engagement of employees in tatek cement plant. The factors identified for study are carrier development, availability of tools and equipments , empowerment, reward and recognition, leadership-clarity of company value, work environment, communication, performance appraisal, social life in work place , training and development , feedback, leadership- clarity of company value, pay and benefit, participation in decision, training on kaizen , participation in kaizen, equal opportunity, complaint handling , organizational structure and fair treatment.

The result indicates that commitment and engagement of employees are affected by the following factors.

- Only 30% of employees admit that they are provided the necessary tools and equipment's to do their work.

- Only 15% of employees respond that they get recognition and reward for their effort hence the recognition and reward system is poor.
- Less than 40% of employees respond that the work environment is conducive.
- Less than 35% of employees response implies that the performance appraisal system is good.
- Only 25% of employees have the opportunity to learn and grow for the last year.
- Only 31% of employees get feedback for their work from their immediate bosses for the last six months.
- 73% of employees are willing to leave their organization and join any company that pay a little higher.
- 40% of employees feel that workers are not treated equally by management.
- Only 18% of employees agree that complaint handling of the organization is good.
- Only 15 % employees agree that the organizational structure facilitates the good work relationship between management and employees.
- Only 18% of employees are happy with the relationship with their bosses.

Though there are factors that affect the commitment and engagement of employees in the organization, there are also good opportunity for the organization that help to develop a good working culture that attract employees to be productive and committed.

- 90% of employees know what is expected of them.
- 80% of employees feel they are respected.
- 88% of employees clearly understand the mission of the organization.

4.2 CONCLUSION

For the organization to be successful in its operation and implementing change programs, it is necessary to insure that the employees are committed and engaged to their job. Disengaged employees diminish the effort of any type of change program. Hence organizations should identify the factors that affects employees commitment and engagement and should work on that to reduce and if possible to remove the causes.

Kaizen is going to be implemented in Tatak site. It is believed by the organization that it is necessary to implement kaizen to eliminate waste, to reduce production cost, to be competitive in cement industry cost-wise and creating new working culture and attitude. This research mainly tried to identify what

factors are constraining the effort of achieving these objectives. It is found from this research that a number of factors affect the commitment and engagement level of employees in order to implement change programs. Some of them are observed that they are the series issues that greatly affect employees perception towards their organization. It is found that 73% of employees are searching for another job, it implies that “a feeling of obligation to continue employment “, as Meyer and Allen (1997, p11) define normative commitment, is hard to get in practice. Only 18% of employees are happy with the relationship of their bosses. Only 31% of employees get feedback for their work from their immediate bosses. Including all the rest of findings listed in the summary section of 4.1 indicates that the management has a lot of assignment that needs immediate decision in order to get back the engagement of employees to their job.

Interview from team leaders also reveals that employees consider Kaizen like a previous change programs that flourish for short time and disappear meanwhile. They also think that management lacks support and continuous follow up, and as evidence they mention there is no responsible person who is assigned and follow up the progress. Here we can conclude that there is a sustainability problem to the kaizen program. In order to make the kaizen to be the culture of the organization, it is necessary to persuade employees that the program will sustain forever in the organization and it needs to show evidence to employees.

Interview with team leader also indicates that the challenges to implement kaizen in the organization is that not all employees understand kaizen concepts equally. As a result some of them are committed to kaizen activities and some of them are not seen involved in such activities. Hence we can conclude that the understanding levels of employees should be assured so that all employees are contributing to the success of implementation of kaizen.

4.3 RECOMMENDATION

In order to implement the kaizen model successfully to the organizations, there are assignments to be done by the management. Some of the recommendations are:

- Employees should be provided the necessary tools and equipment’s for their work
- There should be the reward and recognition system to the organization

- The management should identify why the employees feel the work environment is not conducive.
- The performance appraisal system should be clear and trustworthy
- There should be competitive salary system as that of similar companies to retain the employees.
- If there is any discrimination in the management decision, it should be resolved so that employees should be comfortable to the management decision.
- Revise the organization structure or convince the employee that the existing organization structure is workable.
- There should be continuous discussion between employees and management so that any misunderstanding should be resolved.
- Any achievement to kaizen activity should be reveals to all employees
- Not only wait employees do the implementation but rather the management also should generate, identify and coordinate improvement ideas , and motivate employees work on that area.
- Show evidence to employees that kaizen will be the working culture of the organization.

BIBLIOGRAPHY

David M.Flynn & Scott I.Tannenbaum(1993), correlates of organizational commitment ; differences in the public and private sector. Journal of Business and psychology . Vol.8 No 1, pp 103-116

Grant, M. (2008). Giving commitment : Employee support programs and the pro-social sense-making process. Academy of Management Journal. Vol. 51(5): 898–918.

Hooijberg, R. (2000), Which leadership roles matter to whom ? An examination of rater effects on perceptions of effectiveness. Leadership Quarterly Vol.11No. 3, pp 341-364

Huselid, A. (1995). The impact of human resource management practices on turnover, productivity, and corporate performance. Rutgers University.

Jounson, J. (2003). What leadership behaviors are required to engage employees in change. Unpublished Master's thesis.

Lee, J.(2012). Antecedents and consequences of employee engagement: empirical study of hotel employees and managers. Kansas State University: Unpublished Dissertation.

Kahn , A. (2011) , Kaizen :The Japanese strategy for continuous improvement, VSRD international journal of business and management research , Vol 1, No 3 pp. 177-184

McCroskey, D. (2007), The relationship between leadership practices and the three component model of organizational commitment : an empirical analysis, Capella university: Unpublished dissertation

Wilson, K. (2009). A survey of employee engagement. University of Missouri, Columbia: Unpublished Dissertation.

Shore, M & Barksdale, K.& Shore, H. (1995), Managerial perception of employee commitment to the organization. Academy of management journal Vol.38 (6):1593-1615.

Yousef, A. (1999). Organizational commitment; a mediator of the relationship of leadership behavior with job satisfaction and performance in a non-western country. Journal of managerial psychology Vol. 15 No. 1,pp 6-28

APPENDIX 1 - questionnaire

**ቅድስት ማርያም ዩኒቨርሲቲ
ቢዝነስ ፋካሊቲ
የማኔጅመንት ትምህርት ክፍል**

ይህ መጠይቅ የተዘጋጀው በቅድስት ማርያም ዩኒቨርሲቲ ኮሌጅ በማኔጅመንት ትምህርት ክፍል ተማሪ ሲሆን አላማውም በሙገር ሲሚንቶ ኢንተርፕራይዝ ፤ በታጠቀ ላይት ላይ ያለውን የሰራተኞች ካይዘንን የመተግበር ተነሳሽነት ለማጥናትና በዚህ ላይ ተመርኩዞ የመመረቁያ ጽሁፍ ለማዘጋጀት ነው። የርሶ መልስ ከዚህ ጥናት ውጭ ለማንኛውም ተግባር የማይውልና ሚስጥራዊነቱም የተጠበቀ ነው። ለጥናቱ ወጪትም ወሳኝ ስለሆነ እባክዎ መጠይቁን በጥንቃቄ ይሙሉ።

ሀ. የመላሽ ግላዊ መረጃ

1. እድሜ
ሀ. ከ18 - 24 ለ. ከ25 - 31 ሐ. ከ 32 - 38
መ. ከ 39-44 ሠ. 45 እና ከዚያ በላይ
2. በድርጅቱ ውስጥ ያሉት የአገልግሎት ዘመን
ሀ. ከ5 አመት በታች ለ. ከ5 እስከ 10
ሐ. ከ11 እስከ 16 መ. ከ 17 እስከ 22 ሠ. 23 እና ከዛ በላይ
3. ጾታ
ሀ. ወንድ ለ. ሴት
4. የትዳር ሁኔታ
ሀ. ያገባ ለ. ያላገባ ሐ. ከትዳር በኋላ የተለያየ
5. የትምህርት ደረጃ
ሀ. ከ8ኛ ክፍል በታች ለ. ከ8 እስከ 12 ሐ. ዲፕሎማ
መ.አንደኛ ዲግሪ ሰ.ሁለተኛ ዲግሪ ረ. ከሁለተኛ ዲግሪ በላይ
6. የስራ ደረጃ
G. 7 እና ከ7 በታች ለ. ከ 8 እስከ 11 ሐ.ከ 12 እስከ 13
መ. ከ 14 እስከ 15

ለ. ከጥናቱ ጋር ቀጥተኛ ግንኙነት ያላቸው ጥያቄዎች

ተ.ቁ	ዝርዝር	የተስማሚነት ደረጃ (5=በጣም እስማማለሁ- 1=በጣም አልስማማም)				
		5	4	3	2	1
1.	በስራ ቦታ ላይ ከኔ የሚጠበቀውን በሚገባ አውቃለሁ					
2.	ለስራ የሚያስፈልጉ ቁሳቁስና መሳሪያዎች በበቂ ሁኔታ አሉኝ					
3.	በስራ ቦታ ለኔ በሚመች መልኩ ለመስራት ነጻነቱ አለኝ					

4.	ላለፉት ጥቂት ሳምንታት ለሰራሁት ጥሩ ስራ ምስጋናና እዉቅና ተሰጥቶኛል					
5.	ከስራ ባልደረቦቼና ከቅርብ አለቆቼ ጋር ጥሩ ግንኙነት አለኝ					
6.	የድርጅቱ ስራ አካባቢ ለስራ ተነሳሽነት ይፈጥራል					
7.	የስራ ባልደረቦቼና የቅርብ አለቆቼ ስለስራ ለምሰጠዉ አስተያየት ጥሩ ግምትና ዋጋ ይሰጣሉ					
8.	በግለሰብና በቡድን ደረጃ የሰራተኞችን ብቃት ለመመዘን የሚያስችል አሰራር አለ					
9.	በስራ ቦታ የማምናቸዉና የምተማመንባቸዉ ጥሩ ጥሩ ጓደኞች አሉኝ					
10.	ባለፉት ሁለት አመታቶች በድርጅቱ ዉስጥ ለመማርና ለማደግ እድል አግኝቻለሁ					
11.	ባለፉት ስድስት ወራቶች ከቅርብ አለቆቼና ባልደረቦቼ ስለስራዬ ግብረመልስ (feedback) አግኝቻለሁ					
12.	የምሰራዉ የድርጅቱን አላማና ግብ ለማሳካት ነዉ					
13.	የተሻለ የስራ አካባቢ ወይም ደሞዝ ባገኝ ስራ እለቃለሁ					
14.	ሰራተኛ በስራዉ ላይ የሚከሰቱ ችግሮችን በራሱ ዉሳኔ የማስተካከል ነፃነት አለዉ					
15.	የካይዘንን የአሰራር ፍልስፍና ለመተግበር የሚያስችል በቂ ስልጠና አግኝቻለሁ					
16.	ድርጅቱ በሚተገበረዉ የካይዘን አሰራር ዉስጥ ለዉጥ ለማምጣት በሙሉ አቅሜ ተሳትፎ እያደረኩ እገኛለሁ					
17.	የድርጅቱ አስተዳደር ሰራተኞችን በእኩል አይመለከትም (አድልዎ ይፈፀማል)					
18.	ድርጅቱ ፍትሀዊ የሆነ የቅሬታ አቀራረብና አፈታት ስርአት አለዉ					
19.	የድርጅቱ መዋቅር ለሰራተኛና አሰሪ ጥሩ የሆነ ግንኙነትን ፈጥሯል።					
20.	በአሰሪና ሰራተኛ ፣ በአለቃና በበታች ሰራተኛ መሀከል ያለዉ ግንኙነት መልካም ነዉ					

ቅድስት ማርያም ዩኒቨርሲቲ
ቢዝነስ ፋካሊቲ
የማኔጅመንት ትምህርት ክፍል

የስራ ሀላፊዎችን ቃለ መጠይቅ ለማድረግ የተዘጋጁ ጥያቄዎች

1. ስምዎንና የስራ ድርሻዎን ቢገልጹልን ?
2. የካይዘን አሰራር ሙገር ላይ እየተተገበረ እንዳለ ይታወቃል፤ ሂደቱ ምን ይመስላል? አሁንስ ምን ደረጃ ላይ ይገኛል?
3. ሰራተኞች ስለካይዘን አሰራር በቂ ስልጠናና እውቀት አግኝተዋል ብለው ያምናሉ ?
4. በአተገባበር ሂደት ላይ ያጋጠመ ችግር አለ ወይ፤ የሰራተኞችን ካይዘንን ለመተግበር ያላቸው ተነሳሽነት እንዴት ይገልጹታል?
5. የሰራተኞችን ሙሉ ተሳትፎና ተነሳሽነትን ለማግኘት የተደረገ ቅድመ ዝግጅት ነበር ወይ?
6. አሁን ያለበትን ደረጃ ከእቅዱ ጋር ሲያስተያየት ምን ያህል ፕሮሰንት ተሳክቷል ይላሉ?
7. ካይዘንን ለመተግበር ያነሳሳችሁ ምክንያት ምን ነበር?
8. ካይዘንን በመተግበራችሁ ያገኛችሁት ጥቅም ወይም ለውጥ ምንድነው?

ለሰጡኝ ቃለመጠይቅ አመሰግናለሁ።

Questionnaire (English version)

I. demographic data

1. Age
 - a. from 18 - 24
 - b. from 25 - 31
 - c. from 32 - 38
 - d. from 39-44
 - e. 45 and above
2. Service year
 - a. 5 years and below
 - b. 5 - 10
 - c. 11- 16
 - d. 17 - 22
 - e. 23 and above
3. Gender
 - a. Male
 - b. Female
4. Marital status
 - a. Married
 - b. Not married
 - c. separated
5. Educational level
 - a. grade 8 and below
 - b. 8-12
 - c. diploma
 - d. first Degree
 - e. Second degree
 - f. above second degree
6. Level in organizational structure
 - a. 7 and below
 - b. 8-11
 - c. 12-13
 - d. 14-15

II. Study variables

No	Question	Likert scale				
		5	4	3	2	1
1	I know what is expected of me at work					
2	I have the materials and equipment I need to do my work right					
3	At work, I have the opportunity to do what I do best every day					
4	In the last seven days, I have received recognition or praise for doing good work					
5	My supervisor, or someone at work seems to care about me as a person					
6	The work environment motivate employees to work					
7	At work my opinion seems to count					
8	Individual and team performance evaluation system is good					
9	I have a best friend at work					
10	This last year, I have had opportunities at work to learn and grow					
11	In the last six months, someone at work has talked to me about my progress					

12	The mission or purpose of my company makes me feel my job is important					
13	If I am given the opportunity of better salary in any organization , I will left this organization					
14	Employees have the opportunity to correct works by their decision					
15	I get enough training on kaizen that allows me to implement in work place					
16	I am fully engaged in kaizen implementation					
17	Workers are not treated equally by management					
18	The complaint handling system of the organization is good					
19	Organizational structure facilitates the good work relationship between management and employees					
20	The relationship between boss/supervisor and subordinates is good					

Interview questions

1. Would you introduce us your name and position in the organization ?
2. It is known that kaizen is implemented in tatek. How is its progress?
3. Do you think employees get enough training on kaizen?
4. What problem do you face in the implantation process? How do you describe the motivation of employees to implement kaizen?
5. What strategy did you design to get employees commitment to implementation process ?
6. How do you rate your performance compared with the plan?
7. What was the reason initiate you plan to implement kaizen to your organization?
8. What benefit do you get from implementation of this program?

APPENDIX 2 – response of respondent

	Question number																									
R	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12	x13	x14	x15	x16	x17	x18	x19	x20	x21	x22	x23	x24	x25	x26
R1	4	5	1	1	4	3	5	3	4	3	4	4	5	4	4	2	4	5	5	4	4	4	3	2	1	1
R2	5	5	1	1	3	3	3	3	5	2	3	2	4	2	3	3	2	5	1	4	5	2	2	1	1	2
R3	4	4	1	1	2	2	5	2	5	1	4	1	1	1	5	1	1	5	5	4	4	5	5	1	2	1
R4	5	5	1	1	4	3	5	2	3	1	4	2	3	3	4	3	3	4	5	4	3	3	2	2	1	2
R5	4	1	1	1	3	2	5	1	1	1	1	1	1	1	1	1	1	5	5	1	1	1	1	1	1	1
R6	5	5	1	1	3	3	5	3	4	1	4	2	4	3	4	1	1	3	5	4	3	2	2	4	3	2
R7	4	4	1	2	3	2	4	3	4	3	4	3	4	3	4	2	5	5	5	4	4	5	4	1	1	3
R8	5	5	1	1	3	2	5	3	4	2	4	3	4	3	3	1	2	4	2	1	3	4	4	1	2	3
R9	4	5	1	1	2	2	5	2	5	3	5	1	1	1	5	1	1	5	5	5	3	4	1	1	1	1
R10	4	5	2	1	2	2	5	5	5	1	3	3	5	5	5	4	4	4	3	5	5	5	3	3	3	2
R11	4	2	1	1	2	2	5	1	3	1	1	1	1	1	1	1	1	4	1	1	5	1	5	1	1	1
R12	4	2	2	3	4	2	5	5	1	1	1	1	1	5	5	1	1	5	5	1	5	1	1	1	1	1
R13	5	5	1	1	3	2	5	3	4	1	4	3	3	2	4	3	3	5	5	3	4	4	3	3	2	3
R14	3	4	2	1	2	2	5	1	3	1	1	1	1	1	5	5	1	5	1	5	5	3	1	1	1	1
R15	2	1	1	2	2	1	5	3	3	2	3	2	4	2	3	2	3	5	5	4	4	2	3	1	2	2
R16	2	1	1	1	2	1	1	1	1	5	5	1	5	1	5	1	5	5	1	1	5	5	1	1	1	1
R17	2	1	1	1	2	1	5	1	1	1	5	1	5	1	5	5	5	5	5	1	5	5	3	1	1	1
R18	3	1	1	1	2	1	5	1	1	1	2	1	1	2	2	1	2	5	3	1	1	2	1	1	1	1
R19	3	1	1	2	3	2	5	5	5	5	5	4	5	3	5	1	5	5	5	1	5	5	1	1	1	1
R20	5	5	1	2	3	2	5	5	5	5	5	5	5	5	5	1	1	5	5	1	1	5	1	1	5	5
R21	5	5	1	1	2	2	5	5	5	5	5	5	5	5	5	1	5	5	5	1	5	5	1	1	5	5
R22	5	5	1	1	3	3	4	4	4	3	5	4	4	4	4	1	3	5	4	4	4	3	4	4	3	3
R23	2	1	1	2	3	2	3	4	5	1	5	4	4	3	5	3	3	3	5	2	3	5	2	3	2	2
R24	5	5	1	1	3	2	5	4	5	4	5	3	5	5	5	3	3	5	5	4	5	5	2	2	2	2
R25	5	5	1	1	4	2	5	5	5	1	5	4	4	4	5	1	1	5	5	1	5	5	5	1	1	3
R26	4	4	1	1	3	2	5	3	3	2	5	2	5	1	5	1	1	5	5	4	4	3	3	1	1	3
R27	5	5	2	1	2	2	5	1	3	3	5	5	4	5	5	4	3	5	4	3	5	3	2	2	2	3
R28	4	3	1	1	2	2	3	4	5	3	5	5	5	5	5	3	5	5	5	5	3	5	5	5	3	5
R29	2	1	1	1	3	2	5	2	4	2	4	3	2	1	3	5	1	5	5	3	5	3	2	1	1	3
R30	4	5	1	1	3	3	5	4	4	1	4	3	4	1	3	1	3	5	5	4	1	1	5	3	1	3
R31	4	5	1	3	2	2	5	4	5	3	5	5	5	5	5	5	5	5	1	5	5	5	1	5	5	5
R32	4	3	1	1	2	2	5	3	4	1	4	2	3	3	5	1	1	5	5	1	5	4	5	1	1	1
R33	4	4	2	1	3	2	5	4	5	3	5	4	5	5	4	5	3	5	5	3	1	4	5	4	3	5
R34	1	1	2	2	3	1	4	3	5	3	4	4	4	4	5	1	2	4	4	3	3	4	3	4	4	4
R35	1	1	2	2	4	2	4	4	5	2	5	4	4	3	5	5	4	5	5	4	3	5	5	4	4	4
R36	3	2	2	2	2	2	3	2	2	2	3	2	2	2	2	1	2	5	5	1	1	1	1	2	2	3
R37	4	5	2	1	3	3	4	3	4	2	4	3	3	2	3	4	1	5	5	1	3	1	3	2	2	3
R38	3	3	1	1	2	1	5	1	1	1	5	1	5	1	5	1	5	5	5	1	5	5	5	1	1	1

	Question number																									
R	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12	x13	x14	x15	x16	x17	x18	x19	x20	x21	x22	x23	x24	x25	x26
R39	5	5	1	1	2	2	5	4	5	1	5	2	5	1	5	3	4	5	3	2	5	5	1	1	1	1
R40	3	3	1	1	3	2	5	2	2	3	5	2	4	1	5	2	3	5	5	5	1	5	1	1	3	3
R41	3	3	2	2	3	2	5	3	4	3	5	1	5	4	5	2	2	5	5	5	4	5	5	5	5	5
R42	5	2	1	1	2	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	1	1
R43	3	3	1	2	2	2	5	3	4	3	5	3	4	3	4	2	4	5	5	3	3	3	4	3	3	3
R44	2	3	1	1	3	2	5	3	3	3	5	4	5	3	5	3	5	5	5	1	3	5	5	1	3	1
R45	5	4	1	1	4	2	4	2	3	1	4	1	3	2	3	4	4	4	4	2	2	3	3	3	3	3
R46	5	5	1	1	3	2	4	2	4	3	4	3	3	2	3	3	3	4	3	2	2	2	2	2	2	1
R47	5	4	1	1	4	2	5	1	1	1	3	1	3	3	4	4	1	4	5	3	4	5	5	1	1	2
R48	5	5	1	1	4	2	4	1	2	4	2	1	2	2	4	4	2	4	5	3	4	2	2	1	1	1
R49	2	1	2	2	3	1	5	2	1	1	4	3	3	3	5	3	3	5	5	1	3	5	5	1	3	1
R50	1	1	1	2	2	1	5	5	5	1	5	1	1	5	5	5	1	5	5	5	1	5	5	1	1	5
R51	2	1	2	1	2	2	5	3	3	1	4	5	5	3	3	1	3	3	3	3	5	5	3	2	1	1
R52	3	3	1	1	4	3	5	1	1	1	3	1	2	1	1	2	2	1	5	1	3	5	5	2	1	3
R53	4	1	1	1	3	2	5	1	1	1	5	1	1	1	5	5	1	5	5	1	1	1	1	1	1	1
R54	5	5	1	1	3	2	5	2	5	1	5	1	1	1	4	1	3	5	5	2	4	5	1	1	1	1
R55	5	5	1	1	3	2	5	3	4	4	5	3	3	1	3	1	2	4	5	3	4	4	5	1	1	1
R56	5	5	2	3	3	3	5	5	5	1	5	5	5	5	5	5	1	5	1	1	5	3	1	3	3	3
R57	5	5	1	1	1	1	5	4	5	1	5	5	5	1	5	1	3	5	5	4	5	5	1	1	1	1
R58	5	5	1	1	1	1	5	4	5	1	5	5	5	1	5	1	3	5	5	4	5	5	1	1	1	1
R59	5	3	1	1	1	1	5	4	5	1	5	5	5	1	5	3	5	5	4	5	5	5	1	1	1	1
R60	2	2	1	1	1	1	5	3	5	1	5	3	3	3	5	1	1	5	5	5	5	5	5	2	1	1
R61	4	2	1	2	1	1	5	3	5	1	5	3	3	3	5	1	1	5	5	1	5	5	5	2	1	1
R62	4	1	1	1	3	1	5	1	4	1	5	4	4	3	4	2	4	5	5	1	4	5	5	3	1	4
R63	2	2	1	2	3	1	5	2	1	1	5	3	3	3	5	1	1	5	1	1	5	5	1	1	1	3
R64	3	3	1	2	1	1	5	2	2	5	5	5	4	4	5	3	5	2	1	2	1	1	1	1	2	2
R65	5	2	1	1	1	1	1	1	2	1	5	1	5	1	5	1	1	5	1	1	2	2	1	1	1	1
R66	2	1	1	2	2	1	5	4	5	1	5	4	4	4	4	3	4	5	5	4	4	4	4	3	3	3
R67	1	1	1	2	4	1	4	3	4	4	5	4	4	4	4	3	4	5	5	4	4	4	1	4	3	3
R68	2	1	1	2	3	1	5	2	1	1	5	3	3	1	5	2	3	3	1	2	4	3	2	1	1	2
R69	2	1	1	2	2	1	5	2	1	1	5	1	1	5	1	3	1	5	3	5	5	1	5	2	5	1
R70	2	1	1	2	3	1	5	1	5	5	1	3	1	2	3	5	1	3	3	5	1	3	1	3	5	5
R71	1	1	1	2	2	1	5	4	4	4	5	4	4	1	5	1	1	5	3	5	1	5	5	1	2	1
R72	2	2	2	2	2	1	5	4	5	3	5	5	4	4	1	3	4	5	5	3	5	5	1	4	5	5
R73	1	1	1	2	2	1	2	1	1	1	2	3	2	2	3	3	3	3	3	3	4	3	4	4	4	4
R74	4	2	1	1	1	1	5	2	4	2	3	5	5	5	5	5	5	3	4	4	5	4	5	3	1	3
R75	2	2	2	1	3	2	5	3	4	3	5	4	5	5	5	4	4	5	5	5	4	4	5	5	4	5
R76	5	5	1	1	1	1	4	1	5	3	5	4	5	5	5	1	3	5	5	5	5	5	5	4	1	3

Note:- R= respodant , x = study variable

APPENDIX 3: the first 30 companies selected for pilot project in kaizen implementation

R. No	Company name	Sector	Project group		Remark
1	Alem International Steels P.L.C	Metal	1 st Group		
2	Gelan Metal Industry PLC				
3	Sintec Ethiopia PLC				
4	Techtra Engineering PLC				
5	Walia Steel Industry PLC				
6	Akaki Spare Part and Hand Tools Share company			2 nd Group	Terminated
7	Gatepro PLC				
8	Maru Metal Industry				
9	Mesfin Industrial Engineering PLC				
10	Nehemia Engineering				
11	Addis Mojo Edible Oil	Agro	1 st group		
12	Sebeta agro				
13	Universal food				
14	Kaliti Food S.Co		2 nd group		
15	Nas Foods PLC				
16	SEKA Business Group Pvt. Ltd. Co				
17	Matador Addis tyre Factory	Chemical	1 st group		
18	Oromia Pipe Factory PLC				
19	Ethiopian Pulp & Paper SC				
20	East Africa Group (Ethiopia) PLC		2 nd group		
21	Zenith Gebs Eshet Eth.Ltd				
22	Kadisco chemical Industries PLC				
23	Dire Industries PVT Ltd Co	Leather	1 st group		
24	Ramsay Shoes				
25	Ethio Leather Industries PLC (ELICO)		2 nd group		
26	Wallia Industries LTD				
27	Ediget Yarn & Sewing Thread	Textile	1 st group		Terminated
28	G Seven Trade & Industry PLC				
29	Adama Spinning Factory		2 nd group		
30	Ethio-Japan Synthetic Textile S.c				

Appendix 4: Correlation of study variables

z1	z2	z3	z4	z5	z6	z7	z8	z9	z10	z11	z12	z13	z14	z15	z16	z17	z18	z19	z20	z21	z22	z23	z24	z25	z26
1	0.79	-0.2	-0.43	0.03	0.47	0.09	0.1	0.23	-0.02	0.01	0.02	0.14	0.02	0.06	-0.1	-0.05	0.11	0.05	-0.1	0.13	-0.1	-0.14	-0.12	-0.26	-0.16
0.79	1	-0.06	-0.35	0.12	0.58	0.14	0.22	0.36	0.07	0.11	0.1	0.22	0.07	0.13	-0.1	-0.02	0.08	0.04	0.13	0.13	0.04	-0.1	-0.03	-0.04	0.02
-0.2	-0.06	1	0.25	0.1	0.13	0.03	0.16	0.03	-0.05	-0.12	0.14	0.06	0.31	0.02	0.24	-0.07	0.09	-0	0	0.04	0.06	-0	0.3	0.316	0.25
-0.43	-0.35	0.25	1	0.05	-0.2	0	0.31	0	0.11	0.01	0.18	-0.06	0.34	0.07	0.1	-0.04	-0	-0.2	-0	-0	0.04	-0.15	0.2	0.431	0.29
0.027	0.12	0.1	0.05	1	0.54	0.07	0.02	-0.16	0.05	-0.17	-0.21	-0.17	0.04	-0.18	0.13	-0.15	-0.11	0.22	-0.2	-0.2	-0.1	0.02	0.06	0.091	0.18
0.466	0.58	0.13	-0.22	0.54	1	0.07	0.21	0.16	0.01	-0.12	-0.08	0	0.04	-0.16	0.06	-0.14	-0.06	0.12	-0	-0.1	0.23	0	0.11	-0.02	0.05
0.087	0.14	0.03	0	0.07	0.07	1	0.21	0.15	-0.11	0.03	0.11	-0.09	0.12	0.02	0.07	-0.09	0.04	0.28	0.12	0.09	0.14	0.12	-0.13	-0.01	-0.04
0.102	0.22	0.16	0.31	0.02	0.21	0.21	1	0.64	0.18	0.36	0.53	0.44	0.48	0.31	-0	0.16	0.26	0.2	0.19	0.14	0.31	0.02	0.21	0.247	0.24
0.231	0.36	0.03	0	-0.16	0.16	0.15	0.64	1	0.24	0.34	0.53	0.34	0.32	0.26	0.06	0.12	0.23	0.21	0.41	0.16	0.39	0.07	0.35	0.206	0.31
-0.02	0.07	-0.05	0.11	0.05	0.01	-0.11	0.18	0.24	1	0.19	0.36	0.31	0.3	0.14	0.04	0.32	0.03	0.03	0.16	-0.1	0.13	-0.14	0.17	0.348	0.27
0.007	0.11	-0.12	0.01	-0.17	-0.1	0.03	0.36	0.34	0.19	1	0.4	0.56	0.2	0.49	-0.1	0.32	0.3	0.18	0.08	0.11	0.49	0.1	0.14	0.115	0.13
0.022	0.1	0.14	0.18	-0.21	-0.1	0.11	0.53	0.53	0.36	0.4	1	0.61	0.49	0.26	0.11	0.44	-0	0.03	0.17	0.17	0.34	-0	0.39	0.297	0.35
0.144	0.22	0.06	-0.06	-0.17	0	-0.09	0.44	0.34	0.31	0.56	0.61	1	0.33	0.45	-0	0.59	0.13	0.03	0.11	0.27	0.46	0.07	0.3	0.154	0.2
0.017	0.07	0.31	0.34	0.04	0.04	0.12	0.48	0.32	0.3	0.2	0.49	0.33	1	0.21	0.26	0.21	0.07	0.09	0.19	0.16	0.17	0.2	0.53	0.467	0.49
0.062	0.13	0.02	0.07	-0.18	-0.2	0.02	0.31	0.26	0.14	0.49	0.26	0.45	0.21	1	0.08	0.21	0.26	0.05	0.15	0.19	0.48	-0.03	-0.01	-0.07	-0.02
-0.12	-0.08	0.24	0.1	0.13	0.06	0.07	-0	0.06	0.04	-0.06	0.11	-0.01	0.26	0.08	1	0.2	-0.07	-0.1	0.25	-0	0.03	0.02	0.32	0.223	0.28
-0.05	-0.02	-0.07	-0.04	-0.15	-0.1	-0.09	0.16	0.12	0.32	0.32	0.44	0.59	0.21	0.21	0.2	1	-0	0.07	0.09	0.2	0.36	0.01	0.29	0.133	0.12
0.105	0.08	0.09	-0	-0.11	-0.1	0.04	0.26	0.23	0.03	0.3	-0	0.13	0.07	0.26	-0.1	-0	1	0.22	0.08	0.16	0.13	-0.03	-0.07	-0	-0.03
0.05	0.04	-0.02	-0.19	0.22	0.12	0.28	0.2	0.21	0.03	0.18	0.03	0.03	0.09	0.05	-0.1	0.07	0.22	1	0.11	-0.1	0.24	0.3	0.12	-0	0.1
-0.09	0.13	0	-0.03	-0.17	-0	0.12	0.19	0.41	0.16	0.08	0.17	0.11	0.19	0.15	0.25	0.09	0.08	0.11	1	0.07	0.17	0.16	0.42	0.213	0.2
0.134	0.13	0.04	-0.04	-0.19	-0.1	0.09	0.14	0.16	-0.13	0.11	0.17	0.27	0.16	0.19	-0	0.2	0.16	-0.1	0.07	1	0.34	0.06	0.02	-0.16	-0.2
-0.1	0.04	-0.06	-0.04	-0.1	-0.2	0.14	0.31	0.39	0.13	0.49	0.34	0.46	0.17	0.48	-0	0.36	0.13	0.24	0.17	0.34	1	0.23	0.11	0.066	0.15
-0.14	-0.1	-0	-0.15	0.02	0	0.12	0.02	0.07	-0.14	0.1	-0	0.07	0.2	-0.03	0.02	0.01	-0.03	0.3	0.16	0.06	0.23	1	0.27	6E-04	0.11
-0.12	-0.03	0.3	0.2	0.06	0.11	-0.13	0.21	0.35	0.17	0.14	0.39	0.3	0.53	-0.01	0.32	0.29	-0.07	0.12	0.42	0.02	0.11	0.27	1	0.555	0.58
-0.26	-0.04	0.32	0.43	0.09	-0	-0.01	0.25	0.21	0.35	0.12	0.3	0.15	0.47	-0.07	0.22	0.13	-0	-0	0.21	-0.2	0.07	0	0.55	1	0.65
-0.16	0.02	0.25	0.29	0.18	0.05	-0.04	0.24	0.31	0.27	0.13	0.35	0.2	0.49	-0.02	0.28	0.12	-0.03	0.1	0.2	-0.2	0.15	0.11	0.58	0.647	1

DECLARATION

Candidate's declaration

I , the undersigned , declare that this senior essay is my original work, prepared under the guidance of Ato Terefe Feyera. All resources of materials used in the manuscript have been duly acknowledged.

Name Daniel Ashagrie

Signature _____

Place of submission St. Mary's University

Date of Submission June 2014

Advisor's Approval

This senior research has been submitted for examination with my approval as an advisor.

Name Terefe Feyera

Signature _____

Date _____