

**THE IMPACT OF ORGANIZATIONAL LEARNING AND  
CHANGE MANAGEMENT**

- THE ASSESSMENT OF KAIZEN PROJECTS IN ETHIOPIA -

By

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## **List of Abbreviations**

**CM:** Change Management

**OL:** Organizational Learning

**KM:** Knowledge Management

**OC:** Organizational Culture

**SU:** Sense of Urgency

**CT:** Coalition of Team

**CV:** Clear Vision

**TICAD:** Tokyo International Conference on African Development

**JICA:** Japan International Cooperation Agency

**EKI:** Ethiopian Kaizen Institute

**GTP:** Growth Transformation Plan

**KPT:** Kaizen Promotional Team

## **Certification**

I, ASFAW Netsanet Megerssa (Student ID 52117622) with this declare that the contents of this Master's Thesis are original and authentic, not submitted at any other university or educational institution for the award of a degree or diploma. All the information derived from other published or unpublished sources has cited and acknowledged appropriately.

ASFAW Netsanet Megerssa

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## **ABSTRACT**

Today, under continually developing and competitive business environment, managing changes is essential for organizations to realize achieving bargaining power. Sustainability of organizations depends on their competency to respond to market and social changes and this competency derives from learning. This research aims to determine what extent of organizational learning and change management affect the success of change implementation in Kaizen projects.

This study examines the impact of organizational learning by analyzing organizational culture & knowledge management. And it is guided by the Kotter change model that contains eight steps for successfully managing change. Data were collected from manufacturing companies operating in Ethiopia and currently implementing the Kaizen change project. The outcome of the analysis indicated that organizational learning and change management were critical for continuously and consistently enhancing corporate performances of manufacturing companies in Ethiopia.

*Keywords:* Organizational Learning, Change Management, Organizational Success

## **CHAPTER I: INTRODUCTION**

This part of the study discusses the introduction, the purpose of research, a research problem, objectives, significance, and scope of research covered.

### **1.1 Background for the Study**

In the history of the whole world, changes have always taken part. These universal changes are happening naturally or artificially, voluntarily or forcibly, at an individual, group, or organizational level. In simple terms, the change is just an inevitable phenomenon. Mainly, pieces of the literature indicated that the change is not a stand along with the event that merely takes place. It is a result of diversified factors that directly or indirectly are interacting with each other, such as culture, history, belief, attitude, communication, structure, politics, and leadership. Also, change doesn't happen overnight. It always occurs over a certain period with or without prior phenomena.

Everyday companies cannot lose contact with their current customers and should remain competitive in the present market. They need to strategize, communicate, and implement organizational changes while continuing their daily business. Accomplishing the successful changes in management needs to adopt key performance factors include teamwork, commitment, and capability of workers in an organization (Kotter, 1996, p. 35). In this highly volatile and shifting environment, they are being forced to change their organizations either internally or externally. Competitors, technological advancement, customers' interest, globalization, and other related factors are influencing them for the need to change. Organizational change examines the present situations of internal performance and external surroundings and how the associations between them react together. Organizational learning is a process of how organizations analyze, interpret and

perceive their situation to adapt to their environment. This study focused on the impact of organizational learning and change management along with their associated factors in successful change implementation.

## **1.2 Problem Description**

Numbers of manufacturing companies in Ethiopia are currently practicing Kaizen, as one of the change initiatives, but they are facing the following challenges during the Kaizen implementation (Ōtsuka, Jin, & Sonobe, 2018, pp. 188-191).

1. Lacking the willingness to stay put on endless support from owners and managers
2. Lack of capacity to learn new knowledge and sharing with others.
3. Information management
4. A high turnover rate of top staff members and Kaizen team leaders
5. Sustainability of Kaizen activities/ slide back

There is a lack of literature, a knowledge gap and a pressing need to study how to manage change initiatives successfully. This wisdom contributed to sustainable Kaizen implementation in Ethiopian manufacturing, and the companies could be competitive continually.

## **1.3 Research Objectives**

The primary purpose of the study is to investigate to what extent the Organizational Learning and Change Management impacts on the success of change implementation. Second, it provides a framework for the sustainable implementation of the Kaizen change program. Third, the study will contribute to the literature on how to foster organizational success in the situation of organizational learning & change

management. Correspondingly, factors for organizational learning and change management are taken into consideration for this analysis. The primary focus of this study will be on those companies implementing the Kaizen project. The data used to perform the research come from Kaizen Institute primary consulting industry in Ethiopia, located in northeast Africa.

#### **1.4 Significance of the Research**

The outcome of the study will add further understanding of factors for organizational success. It will have a significant contribution to the academic literature, which is a resource for other researchers who are interested in investigating change management challenges and practices.

It will inform the management of the organization concerning the existing challenges of change management in their organization. Also, it will alarm them to take appropriate actions when they try to use other change management theories and methods. It will also serve as a source document for those who want to pursue further study. Lastly, it will also inform top management in manufacturing industries to which stage of change management needs more attention and help to take action and decision to minimize the challenge.

#### **1.5 Scope of Research**

To examine to what extent the Organizational Learning and Change Management impacts on change implementation success. A broader concept that needs to devote considerable resources and influence with a large population, but to set the particular scope focus would be committed to the execution of the Kaizen change program in

manufacturing companies and Ethiopian Kaizen consultants since they are a central participant in the change initiatives.

### **Overview of the Research**

This study structured in such a way: the second chapter presents the empirical study in Ethiopia Kaizen Institute; the third chapter presents a literature review where first, Kaizen Philosophy, Change Management, and Organizational Learning, are explained; the fourth chapter sets out the theoretical framework by comparisons of theories, concepts, and models; the fifth chapter provides the methodology of the survey applied; the six chapter presents analysis and findings, and the seventh chapter presents discussions and conclusions of the study.

## **CHAPTER II: EMPIRICAL STUDY**

In this part of the study discusses a review of the area being researched and the introduction of the Kaizen Institute primary consulting industry in Ethiopia.

### **2.1 Overview of Ethiopia**

Ethiopia is a country located in the northeastern part of Africa. The country's economy is concentrated in the services and agriculture sectors. In 2017, World Bank Group statics show that the contributions of services accounted for 36.12% and agriculture 34.12% value added to the GDP. The corresponding input of the industrial sector accounted for 22.9%, and out of this, the manufacturing industry value added only 5.587% of the GDP. These statistics prove that much has to be worked out in this sector.

Ethiopia's manufacturing companies were ineffective in utilizing AGOA (Africa Growth and Opportunity Act), which provides access to the USA market in the GTP. The common reason for underperformance is the low productivity of the firms. From a practical observation of some manufacturing companies in Ethiopia are characterized by low productivity, much wastage, and high manufacturing cost, problem-related to safety, and customer complaints.

These problems led to the less competitiveness of the manufacturing sector. The Ethiopian government has unveiled an industrial Policy to create favorable conditions for the growth of the manufacturing industry sector. The policy was introduced different transformational programs to increase productivity, to improve quality, to reduce cost, improving the work culture, and strengthen competitiveness. Kaizen was one of a transformational program to enhance the competitiveness of the manufacturing sectors. In 2011, the Ethiopian government introduced and adopting a Kaizen management

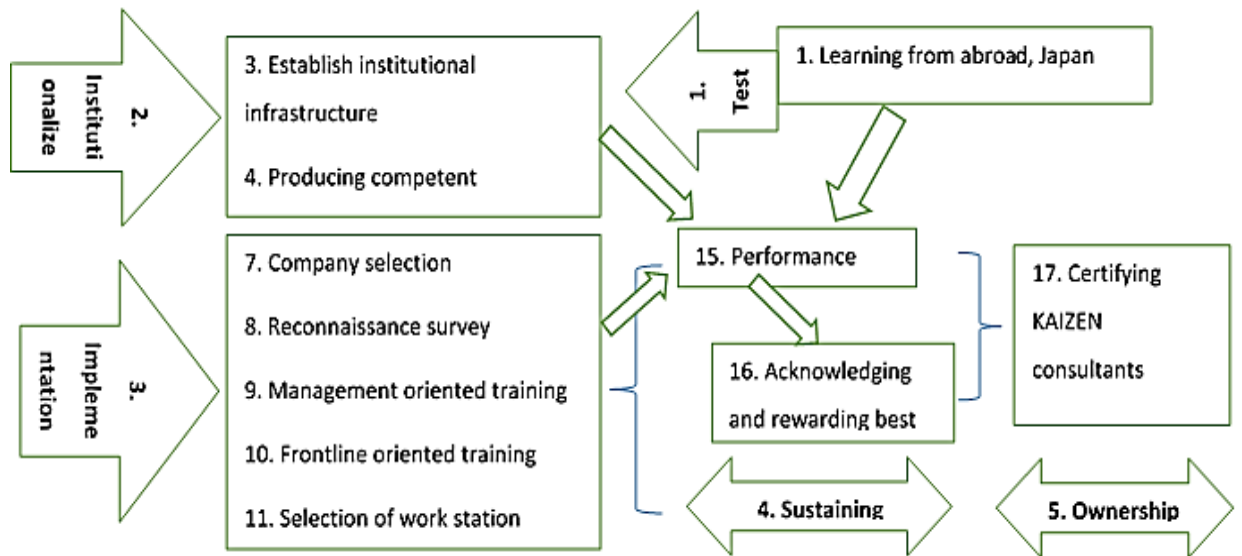
philosophy from Japan as a national level to improve productivity and quality of manufacturing industries.

## **2.2 Introduction of Kaizen in Ethiopia**

At the TICAD V conference, held in Japan in 2008, it was a landmark to come across Kaizen by late Prime Minister who has participated in the meeting and requested Japan Government for support. After getting a positive response, a capacity building program was designed to prove its transferability and sharing know how — the pilot project held from 2009-2011 with assistance of the Japan International Cooperation Agency (JICA). After testing its transferability, it took quick actions to establish the Ethiopian Kaizen Institute as a public organization.

The Ethiopian Kaizen institute was founded in 2011 to disseminate Kaizen philosophy. The Ethiopian Kaizen Institute (EKI), designed a strategy for the implementation of Kaizen, called the TIISO model, which linked to the national development plan of the country to disseminate the Kaizen philosophy from 2012 to 2020. In support of the Ethiopian Kaizen Institute, 473 companies were taking Kaizen training, 68,954 employees trained, 9,658 quality control circle groups formulated. Around 105 million US dollar saved as a result of productivity and waste reduction process (Ōtsuka, Jin, & Sonobe, 2018, p. 11). The following model shows the Ethiopian Kaizen Institute (EKI) approach in transferring and customizing Kaizen.

Figure 2. TIISO Model—5 steps and 20 activities.



(Source: (Ōtsuka, Jin, & Sonobe, 2018, p. 11).

The TIISO model emphasizes a strategy of implementing Kaizen based on the absorptive capability of the companies and aiding the companies by enhancing their capability step by step. Starting from simple and moving to a sophisticated — measures designated as «Kaizen Implementation Levels, » which is divided into four phases. The first level is an overview of Kaizen, which consists of introducing Kaizen philosophy, organizing Kaizen Promotion Teams (KPT), and simple technical tools of quality and productivity improvement. The primary outcome expected at this level is creating a changing environment by bringing attitudinal change through the total participation of all management and workers. At this stage, the customization of Kaizen is starting.

The second level is the Kaizen systems such as TPM, SOP, 7QC Tools, and advanced reporting system (QC Story Line). This level requires mathematical and technical knowledge and could not efficiently be handled by supervisors and front-line workers. The third level is Kaizen knowledge, the use of advanced Industrial Engineering



tools, knowledge of more sophisticated analytical tools and skills. Such as Process capability, Total quality management, Value engineering, and Value stream mapping. The Fourth stage is the highest level of Kaizen, the target of developing an Ethiopian management system and aiming at completing the three steps successfully. The components envision at this level are developing Ethiopia Business Excellence Model (EBEM) and transforming KPTs to Innovative Kaizen Teams (IKT), Innovation Management, and Global Networking.

## **CHAPTER III: LITERATURE REVIEW**

This part of the study discusses primary, the concept of Kaizen Philosophy. The second concept of Change Management examines theories and models; third, it reviews Organizational Learning in terms of Knowledge Management and Organizational Culture broadly.

What is the concept of change? What is organizational learning? When, why, and how changes started taking place? When and how the learning begins? What components of an organization get affected when changes implemented? What circumstances affect a change process for success or failure? These and possibly many other questions have always been raised. In search of their answers, countless books were written, many journals and reviews have been conducted.

Furthermore, they are still ever growing issues under numerous researches. At present, this literature review attempted to cover the concept of Kaizen philosophy, change management, and organizational learning. Analyze their relationship and how they affect organizational success; different literature briefly present as follows:

### **3.1 Kaizen Philosophy**

Imai (1997) stated that “Kaizen philosophy assumes that our way of life—be it our working life, our social life, or our home life—should focus on constant-improvement efforts..... In my opinion, Kaizen has contributed greatly to Japan’s competitive success” (as cited in Ōtsuka, Jin, & Sonobe, 2018). The term Kaizen has known as “The Japanese art of continuous improvement” and the most dominated management practices in Japanese companies. Kaizen is a philosophy and approach (mindset) to change the way

of working with thinking continuous incremental improvement (Radharamanan, Godoy, & Watanabe, 1996). Kaizen is a philosophy of continually undertaking by an organization to improve processes. To consistently improve quality and productivity so that the organization can meet expected customer satisfaction (Glover, Farris, Aken, & Doolen, 2011, p. 197).

Kaizen philosophy concerned with on the accumulation of small scale improvement rather than radical changes and also relied on group work performances (Ali & Rana, 2017, p. 23). Kaizen systems provide an opportunity for employees to work together and to share knowledge and experience (Imai, 2012). Quality circles are a means of quality management in Japanese firms; they support employees in contributing their ideas. “Genchi Genbutsu” references to examine to ground the workers in the workshop. In doing this, Japanese corporate culture provides personnel to figure out problems at the root-cause it happened (Haghirian, 2010, p. 12). Kaizen is a never-ending activity revolving on the Deming cycle plan, do, check, and act. The three actors Commitment, genuine participation, and motivation are vital components of Kaizen.

Kaizen practices had brought in the Japanese manufacturing system on a three-phase, the first phase started just after completion of the post-war time. In the 1950s, Japan perceived low cost and low-quality products from the world market perspectives. These driven Japan to catch-up different quality management techniques, “Japan learned American style quality management from Drs. W.E.Deming and J.M.Juran” (Ōtsuka, Jin, & Sonobe, 2018, p. 11). The second phase was in the 1970s, and 1980s spread quality control circles (QCCs) throughout the Japanese manufacturing companies including in small and medium. The third phase was in the mid-1980 spread regional Kaizen, including the globalization of Japanese business activities. (Ohno, Uesu & Ohno, 2009).

### **3.2 Reviews on Change Management**

In the 21st century global context, a substantial number of companies that is spread out at a high rate are making dynamic changes in controlling of functions and cope up with the corporate environment (Cummings & Worley, 2009). An increased global competition, the diversity of market needs, deregulations, rapid changes in technology, the development of e-business face organizations to rethink /reshape their operation. Companies applied organizational changes to challenge this unpredictable world (Burnes, 2004, p886). Corporate survival, the external environment, and internal factors in the organizations' results a change to happen (Myers, Hulks, & Wiggins, 2015).

To keep competitiveness in the dynamic global marketplace. Organizations make fundamental changes under different efforts like quality improvement process, six-sigma, lean, Kaizen, and reorganizing. Very nearly, all change programs they're mainly concerned about to create necessary changes that faced obstacles from the external environment. (Kotter, 1996, p. 59). Organizational change is never ending action of trying out new activities and transformation to pursue the ability and capacity of an organization to meet customer demand. Also, organizational change is the accumulation of small improvement through gradual changes, a prolonged period, which contributes to remodeling the system and the completed transformation of an organization (Bamford & Forrester, 2003, p. 557). For any organization, managing change approach was crucial to gain sustainable growth and achieving bargaining power, especially in today's competitive and continually evolving business environment (Rune, 2005, p. 369). 70% of change programs failed to achieve the desired or stated outcome due to unsuccessful change management (Beer & Nohria, 1999, p. 133).

The journal titled "Leading Organizational Change" defined "Change management is the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers" (Moran & Brightman, 2000, p. 66).

In the book of *Managing Change*, it is stated as "a change can exist in three forms an individual, as a group and as a system". These multidisciplinary views led to foundations to build change management theory. The first change theory focuses on Individual change, also known as the behaviorist views. Which persistence the organizational change through examining human behavior associations with the surrounding. Later, the group form of change theory developed points out organizational change through examining as teams rather than through individuals. Recent changes theory views organizational change as the entire aggregate elements of organizations besides concerned many groups (Burnes, 2017).

Change is not something that merely happens, to occupy in a compressive concern about change management, predominantly, there existed four perspectives; emotional, psychological, emergent, and planned change models (Myers, Hulks, & Wiggins, 2015). In contrast, according to (Luecke, R., 2003) stated that primary types of change program categories as dimensions of changes observed in the organizations these are "structure, cost cutting, process, and cultural change." There exist lots of scholarly books on change management models; the study reviews three fundamental change models and processes.

### **3.3.1 Kurt Lewin's Change Model**

Lewis models and theory influenced over 40 years in the management field of change. The Lewis model had a more significant contribution to modern change theory

and accepted as beyond doubt. His works helped to develop the foundation for organizational change and change implementation. Broadly, the Lewis concepts on change theory and practices can examine as the three most important points.

The first Lewis initial or primary ideas we're interested in discovering a productive means to figure out the difference of beliefs that existed in groups, organizational or societal. His concept deals to find a solution to these problems by examining changing behaviors. In the second point, Lewin gives higher concentration to moral principles and devotion to the humanities point of view to change. That concluded acquiring new knowledge through study or experiences and participation are crucial for attaining behavioral change. The last point raised out Lewin views focused on managing change through the perspective of the planned approach. Beside Lewin an enormous contribution to organizational change and managing the implementation process, but there existed a severe criticism mainly connected to the 3-step model (unfreeze, change, and refreeze). These include Lewin premised that organization function in a constant environment; his 3-steps model more worthy applicable for exclusive small in size and limited in extent companies (Burnes, 2004, pp. 977-996).

### **3.3.2 ADKAR Change Model**

The ADKAR model promoted in the scheme of five elements in managing, change process at an individual level. According to (Hiatt, 2006) as stated ADKAR Model as follows. **Awareness** describes a person being aware of any changes that happened in one or more components of the organization, what are the reasons for the change and what happened if not changing. **Desire** is the next component of the ADKAR model that describes the motives and select options by the organizations, which provides to give

assistance and be involved in a change. **Knowledge** is the next component of the ADKAR model, which centered on learning for “how to implement change.” **Ability** expresses the potential of implementing the change and successfully bring the required results — lastly, **Reinforcement** concentrate on identifying the inside and outside influences that contributed to sustainable change implementation.

### **3.3.3 Kotter Change Model**

Kotter developed straightforward steps for the successful transformation of organizations. In the book, “Leading Change” (Kotter, 1996) presented eight steps on how change can facilitate success. No proof discovered to pass sound judgment that his change model has doubt (Appelbaum, Habashy, Malo, & Shafiq, 2012, p. 764).

#### **Kotter 1:- Create a Sense of Urgency**

The initial phase stated that gaining the assurance of abundant organizational member’s is essential to make change effort. This commitment has allowed us to begin to change initiatives with full urgency and got enough support from many employees (Kotter, 1996, p. 60). In this stage, organizations should assist employees in visualizing; aware and agree to the current actual situation. Then employees lay hold of owning “emotionally charged” thought into practice. The urgency percentage should be high enough, around 75% of organizational management in a truthful argument that current operations routines in an organization are undesirable. Whereas below, 75% may cause significant trouble later on other phases (Kotter, 1996, p. 62).

## **Kotter 2:- Forming a Powerful Guiding Coalition**

Once a 75% higher rate scale of urgency was found, the next phase started by building powerful coalitions of the guiding team (Kotter & Cohen, 2002). Leading of change would be carried by forming a coalition team. The top managers or division head additionally another 5 or 15 or 50 employees depending on the scale size of an organization, take part of the responsibility to provide an outstanding implementation of change. The guide coalition team engaged together with integrity, competence, interrelation, standing, and legal power to lead change initiatives. An organization is facing difficulty at this phase either by the cause of undervaluing of challenges of changes or organizations' experiences a weak culture of teamwork. (Kotter, 1996, p. 62).

## **Kotter 3:- Creating a Vision**

After forming a powerful guiding coalition team, the next phase describes the coalition team developed the straight forward, easy to understand, and realistic vision. (Kotter & Cohen, 2002). A vision clarifies the pathways that a company desires to accomplish. Most unsuccessful change programs provide, a lot of change attempts, including sufficient documents on the policy, strategy plan, the target, routines, but there existed a lack of clear vision (Kotter, 1996, p. 63).

## **Kotter 4:- Communicating for Buy-In**

After formulating adequate transformation vision thus go on to the next phase, which describes the exchanging of information that focuses on the new concept and business problems. The communication comes in both words, and deed information should be clear, accurate, artless information through uncrowded modes. Organizations



should avoid declaring on convection or formal communication mode (Kotter, 1996, p. 64).

### **Kotter 5:-Empower Action**

On the previous phase, the guiding team provides a certain extent on empowering individuals other than senior managers to take action on dealing with problems through effective communication of a new direction — however, these are not enough to make a successful implementation of change efforts. The next phase deals empowering others were aiming to remove any barriers that cause to stop people from acting on the new vision. The aims not giving power instead take action for any restrictions to change (Kotter, 1996, p. 64).

### **Kotter 6:-Generate Short-Term Wins**

Generate short-term wins helps to continue to motivate the momentum. Guiding a coalition team and top leaders committed to seeking ways to acquire clear-cut achievement and make a target along with the annual planning system. Furthermore, evaluate attainable goals and construct a reinforcement system for those employees to participate in change initiatives where necessary activities. (Kotter, 1996, p. 64).

### **Kotter 7: -Don't Let Up**

After celebrating short-term wins, this phase emphasizing the coalition guiding teams should provide, integrating results, evaluate further improvement on the process and strategy to cope up with the new vision. Change implementation fails at this phase rise due to fundamental reasons. When the organizations announced success shortly, the compliance level was high enough than urgency, less authority is given to the coalition team and lack of clear vision. (Kotter, 1996, p. 66).

### **Kotter 8:-Make Change Stick**

At this phase, organizations make a change to stick by nurturing a new practice. This last phase emphasis two essential features that led to developing change as a well-established system in organizational culture. At first, creating full awareness that permits employees to understand where with the new system, operation, and outlook aids enhance the performance of an organization. Next, spending enough time to confirm that the future successor of an organization, especially senior managers, are indeed leading the new practice (Kotter, 1996, p. 67).

**Table 3. 1 Summary of Change Management Review**

In summary, several authors argue about change management concepts and models. For this study, we selected the John Kotter change management model, presented eight steps on how change can be facilitated successfully, which developed from empirical studies.

<b>Definitions</b>	<b>The Force to change</b>	<b>Models</b>
"Change management is the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers."	An increased global competition, the diversity of market needs, deregulations, rapid changes in technology, the development of e-business	The Kotter change model developed straight steps on the successful transformation of organizations.  The ADKAR model promoted in the scheme of five elements for providing change process from the perspective of on a personal level.  The Lewin Planned approach

## **3.2 Reviews on Organizational Learning**

Even though the rapid evolution of the word “Organizational learning” publications of scholarly books, there existed slightly general agreement with regard to interpretation, viewpoints, theory, and routine. Under this review, from different literature sources, basic concepts, and available instruments for measuring organization learning were reviewed.

### **3.2.1 Perspectives of Organizational Learning**

During the last decade, the term organizational learning spread out. The main reason was the sustainability of organizations depends on their competency to respond to market and social changes. This competency derives from learning (Barrette, Lemyre, et al. 2007, p. 334). An organization’s acquiring essential skills through collective learning and the potential to synchronize and merge many capabilities and automation (Prahalad & Hamel, 1990). In the Process of Learning, individual, group, or organizational point is critical for corporate survival and secure relevance as a result of consistent changes in everyday life corresponding to proliferation, the maturity of society, and the enhancement of sophisticated technologies (Casey, 2005, p. 131). The learning process at an individual level, enhancing the capacity of individuals to acquire knowledge, but not sufficient to help organizations to cope with changing environments. Instead, collective learning is vital to building organizational learning. (Shani & Docherty, 2003).

On the whole, the notable difference between scholarly on the term organizational learning could be reviewed either point non-theoretical based on consulting experiences of the authors or from a social process as building a learning organization (Tsang, 1997, p. 73). On the classical view, organizational learning theories developed based on two-

way perspectives. The first perspective, considering learning by individuals in an overall organizational basis. Whereas, the second perspective attentions on individual learning as a representation of corporate performances (Cook & Yanow, 2011, p. 362). Based on the assumptions of how organizations, functions, there are two learning approaches — the first approach behavioral or adaptive learning, also known as first-order organizational learning. The second approach, cognitive or knowledge development, learning approach, also called a second order, organizational learning. (Shani & Docherty, 2003).

### **3.2.2 Behavioral Approach**

According to (Huber, 1991, p. 88) explore full insight of organizational learning as an approach of an information processing perspective. According to (Dierkes, 2003) defines organizational learning based on the two essential criteria. The first one gives attention to how existing information transferred, processed, and recorded on and the other on how new knowledge created. (Nonaka, et al., 1994, p. 338) Stated organizational learning as an innovative approach. In this dynamic, global economy interaction, whichever firms need to cope with it is surrounded. Not only by handling the existing information, preferably by designing relevant data and knowledge. Examine firms, regardless of creativity and ability to operate information that drives with the force of external surroundings, provides opportunities to clarify specific characteristics of the firm's value-adding tasks.

### **3.2.3 Cognitive Approach**

There two routines of how organizations learn “single-loop and double-loop learning.” “Single-loop learning describes as error “detection and correction,” that inessential altering action strategies and organizational defensive routines. Double-loop

learning describes an error detection and correction, needing altering both action strategies and corporate culture. This point of view allows the organizations to unrevealed obstacles, which causes decline organizational performances (Argyris, 2006). All acquisitions of knowledge or skills occur in the internal brain in a particular person. Firms learn merely two ways, firstly, through the learning of their employees. The second way through intake new employees, which retain the skill and ability the firm did not get formerly. Further, it describes individual learning within the context of an organization is very much social (Simon, 1991, p. 125).

### **3.2.4 Organizational Learning Measurements**

According to (Garvin, 1993) States five activities to build organizational learning. These are systematic problem solving, perform a scientific procedure, learning through experiences, learn from others, and share or distribute knowledge. To sustain in the dynamic market organization should consistently improve their system of doing operations. Even though lots of system enhancing programs are unsuccessful, due to leaders fail to notice that consistent enhancement needs dedication to learning. In the absence of knowledge, organizations keep performing former operations.

According to Peter Senge's states, five disciplines to how an organization improves its members' ability; "personal mastery, mental models, shared vision, team learning, and systems thinking." Personal mastery describes in pursuance of growing a learning process as an organizational level. Mental models describe mental concepts kept in each person's consciousness of the globe and how they take action on the outcomes. Shared vision introduced a sustainable commitment to share skills; motivation to accomplish goals; certainly, reciprocity of engagement. Team learning, intentions were

coordinating organizational members force to manage their strength and construct cooperativeness. Systemic thinking emphasis integrates other disciplines. It makes members of organizations strong and confident by allowing them to recognize their full worth instead of confused by the essence of a complex and dynamic system. (Flood, 1998, pp. 259-267).

Further empirical studies stated four dimensions of organizational learning “managerial commitment, systems perspective, openness and experimentation, and knowledge transfer and integration” (Jerez-Gómez, et, al, 2005, pp. 717-719).

In summary, from different literature sources, basic concepts, and available instruments for measuring organization learning were reviewed. Commonly, theories of organizational learning foreground as knowledge management process: culture; and leadership and management systems.

Table 3. 2 Summary of Organizational Learning reviews

	Process	Perspectives	Measurements
<b>Organizational Learning</b>	Identifying and collecting useful information Analyzing information Learning by practical applying of information Detecting and correcting errors	Behavioral or adaptive learning, Cognitive or knowledge development,	Peter Senge’s five disciplines “personal mastery, mental models, shared vision, team learning, and systems thinking.”

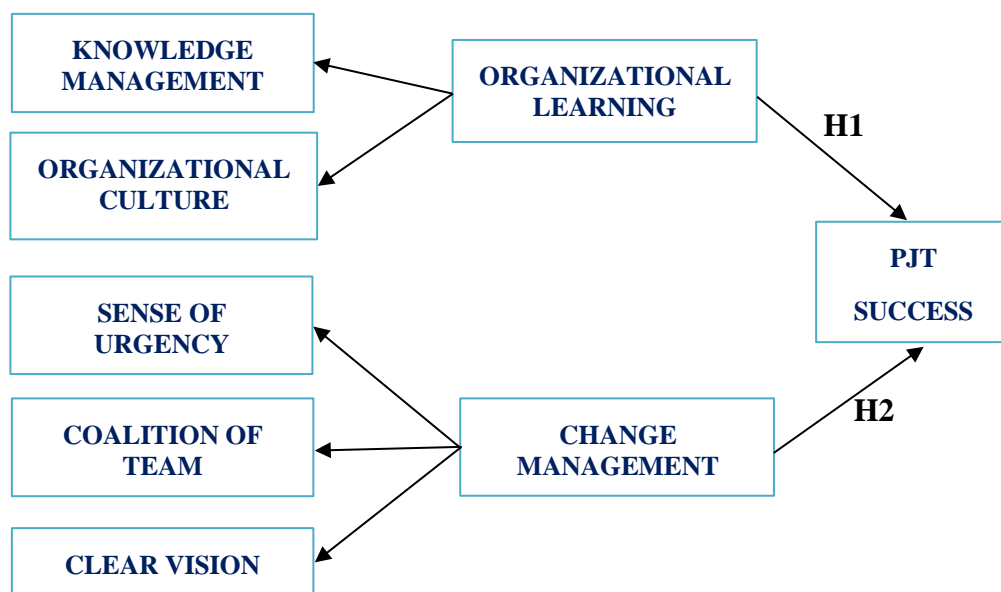
## **CHAPTER IV: THEORETICAL FRAMEWORK AND HYPOTHESES**

This section of the study presents, how relevant theories and empirical, experimental evidence integrated to formulate a model that helps to explain the research problem.

### **4.1 Theoretical Framework**

Why aren't change implementation efforts producing expected results? The reasons may be hundreds of hundreds. By this research, the impact of organizational learning and change management on the success of change implementations discussed. The study constructed a conceptual model (figure 4.1) demonstrated the extent effects of organizational learning and change management on corporate performance.

Figure 4. 1 Research Framework.



The first two variables, knowledge management, and organizational culture are considered as basic determinants of organizational learning. The other three variables (Kotter 1-3) sense of urgency, a coalition of a team, and clear vision are a straight step of change management. These latter variables organizational learning and change management will then have an impact on project success or corporate performances.

#### **4.1.1 Research Hypotheses**

Coming across literature reviews and the conceptualization of a research model simplifies the hypothesis development effort. Therefore; based on the above models, the following hypothesis is drawn — the research framework, conducted with the main two premises.

**Hypothesis 1:** Organizational Learning has a statistically significant effect on Organizational Success.

**Hypothesis 2:** Change Management has a statistically significant effect on Organizational Success.

#### **4.1.2 Research Questions**

**RQ1.** To what extent does OL (Organizational Culture and Knowledge Management) impact the Organizational Success (OS) at the Kaizen project in Ethiopia?

**RQ2.** To what extent does CM (Sense of Urgency, Coalition of Team, and Clear Vision) impact the Organizational Success (OS) at the Kaizen project in Ethiopia?

This study seeks to resolve these questions through a case study of the Kaizen Institute in Ethiopia. We were taking into account the review of previous studies towards organizational learning. The literature showed the organization's acquiring key



competencies through organizational learning (Pralhad & Hamel, 1990). The sustainability of the organization relied on their skill to respond to change this competency derived from knowledge (Barrette, Lemyre, et al. 2007). Organizational learning is vital for corporate survival and secure relevance as a result of the enhancement of sophisticated technologies (Casey, 2005). Organizational learning plays a significant role in innovation by handling the existing information, preferably by designing relevant data and knowledge (Nonaka et al., 1994). In light of the discussion of previous studies towards Change management, the literature showed for any organization managing change approach was crucial to gain sustainable growth and to achieve bargaining power, especially in today's competitive and continually evolving business environment. (Rune, 2005, p. 369).

## **4.2 Measurement and Research Variables**

### **4.2.1 Change Management**

“Leading Change” (Kotter, 1996) presented eight steps on how change can facilitate successfully. For this study, we apply the first three steps Kotter 1, Kotter2 as a preparation stage, and Kotter 3 helps to decide what to do. Kotter 1: Create a Sense of Urgency. The initial phase stated that the assurance of abundant organizational members takes action by adequate importance to change. (Kotter, 1996, p. 62). Kotter 2: Forming a Powerful Guiding Coalition. Once a 75% higher rate scale of urgency was found, the next phase started by building powerful coalitions of the guiding team (Kotter & Cohen, 2002). Kotter 3: Creating a Vision, Afterwards, forming a powerful guiding coalition team developed the straight forward, easy to understand, realistic, affecting visions and settle the master plan (Kotter & Cohen, 2002).

#### **4.2.2 Organizational Learning**

In light of the review of previous studies on organizational learning, most models emphasize management and leadership; culture; knowledge information, and communication systems. For our research, we focus on two fundamental determinants of organizational learning, knowledge management, and organizational culture based on how organizations learn. According to (Lawson, 2003) proposed “Knowledge Management Assessment Instrument” with 25 items. The study used four knowledge management processes; these are **Sharing, Creation, Transferring, and Storage**.

Organizational learning associated with shared meaning which performs through cultural entity, also perceived as corporate practices as a group level rather than an individual (Cook & Yanow, 1993, p. 365). The study used three critical dimensions of organizational culture stated on “Organizational Culture Assessment Instrument.” These are “**Dominant Characteristics, Organizational Leadership, and Organization Glue**” (Cameron & Quinn, 2006).

#### **4.2.3 Organization Performance/Success**

The potential to explain, determine, and asses’ performances are crucial for foresight improvements. Organizational performance “defined as the ability of an organization to use its resources efficiently and to produce outputs that are consistent with its objectives and relevant for its users.” (Peterson, Gijbers, Wilks, & Markham, 2003). Despite, the challenge of measuring organizational success commonly, there are five main success dimensions applied to different organizations. These are finance, people, process, market, and future. Finance often a convenient method to measure success, involves a measure of income and expense. People measurement refers to acknowledging the existence and significant roles of shareholders and investors. Process measures show an

organizational ability to implement its plan and enhancement views. Market/Customer measures express the association among firms and their customers. Future actions explicitly clarify needs in the future. (Maltz, Shenhar, & Merino, 2003, pp. 191). For this study, organizational success as a dependent variable measured based on process measure, which are **Productivity, Quality, Cost, Delivery, and Workplace Standardization**. These measurements derived from Kaizen project evaluation sheets (EKI, 2011).

## **CHAPTER V: METHODOLOGY**

This section of the study discussed what kind of methodology the study applied, comprises the research design, data resources, and data gathering method, population and sampling, and data analysis techniques. The research was used as a quantitative research method and follow a descriptive approach.

### **5.1 Design of the Study**

After developing dimensions for organizational learning and change management, the questionnaires are developed based on previous empirical studies (Cameron and Quinn, 2006) for Organizational Culture; (Lawson, 2003) for Knowledge Management; for the Sense of Urgency, Coalition of Team and Clear Vision (Kotter, 1996) chosen as primary sources of designing the questions and made minor modifications to fit with the study. Likewise, organizational success as a dependent variable measured by six indicators (Productivity, Quality, and cost, Delivery, and Workplace standardization) selected from the result of Kaizen project evaluation sheets (EKI, 2018).

### **5.2 Population and Sample**

The target populations of the study are manufacturing companies that implemented Kaizen change initiatives in Ethiopia. The research specifically focuses on companies that consulted and supported under the Ethiopian Kaizen Institute. Since the scope of the study targeted Kaizen philosophy taken as one of the change initiatives.

### **5.2.1 Sampling and Target Respondents**

A purposive sampling technique was chosen, regardless of the feature data type and the target of the research. The study utilized the self-administered survey design filled out by manufacturing companies in Ethiopia that implemented the Kaizen project as a change initiative. The information about companies gets through under the Ethiopian Kaizen Institute as the primary consultancy industry. The proposed questionnaires filled out by hundreds of Ethiopian manufacturing and service companies and sample data gathered through the mode mail questionnaire. The study collected 82 answers out of 100 measurement instruments that were sent out through mailings.

### **5.3 Questionnaire Measurement**

The questionnaire designed through in pairs of questions formats first, closed-ended, for the general information about the respondents the researcher provides options from which to choose a response and second, 5-point Likert or questions to measure organizational learning as a sum of two dimensions and change management into three-dimensional concepts. At the start of the questionnaire got 5 multiple-choice questions and the rest questions includes 8 questions about knowledge management (6 to 14), 8 questions about organizational culture (15 to 23), 6 questions about the Sense of urgency (24 to 30), 6 questions about a coalition of a team (31 to 37), 6 questions about clear vision (38 to 44) were asked in five category areas — a survey questionnaire and summary of survey responses provided in an appendix at the end of this paper.

## **5.4 Data Analysis Methods and Techniques**

Afterward, choosing an appropriate data collection method, the next steps were presented data analysis methods and techniques used to transforming collected raw data into useful information.

### **5.4.1 Descriptive Statistics Analysis**

This analysis method allows describing the basic features of the collected data type. Compiled raw data organized with the necessary process of editing, coding, and classification, then the data summarized and presented in a meaningful way. Descriptive statistics provide measures of the central tendency of data; distribution of variables; variability of data using mean, median and mode; the desparation of data; percentile and quartile (McHugh, 2003, p. 111). The mean provides the average and mean values of a distinct set of numbers and computed by the summation of the values divided by their amount of numbers.

### **5.4.2 Correlation Analysis**

In most research activities, correlation analysis well-known explore the association among variables usually referred to as variable x and variable y or var1 and var2. The study covers a correlation and cross-correlation coefficients (to measure the correlation between two or more variables), and scatter plot or diagram. The calculation of the association ( $r$ ) shows the strength and direction between variables, either positive or negative.

The possible values of R represented as; if the value is nearly 0 shows, no correlation existed between variables. If the value is  $0 < 0.5$  indicates weak associations

and if the value is  $0.5 > 1.0$  shows a strong correlation between variables. The correlation coefficient has three possible values where  $r \pm 1.00$  points to perfect positive and negative correlation, respectively. Similarly, value 0.00 indicates absolutely no association or relationship between variables. For the present study, Pearson correlations, which extensively applied to measure the degree interconnections (Nicewander, 1988, pp. 61-62).

#### **5.4.3 T-tests, Analysis**

An independent sample t-test was applied to test for a statistically significant relationship and difference existing between two independent sample groups. The purpose of this analysis helped to examine if there existed “a statistically significant difference” among different groups on their average result or not. Samples for the groups are taken from diverse populations (Gerald, 2018, p. 51). The dataset of this study is parametric, which tests for scale data that normally distributed. After the initial demographic and correlation analysis, two sample T-test was conducted to test the hypothesis.

#### **5.5 Validity and Reliability**

To make sure that this research is acceptable research, going through reliability and validity test is an essential requirement that needs to test. Validity helped to determine the designed research method assessed what expected to measure and also results from the developed way regarded as likely to happen to be. The items for measuring organizational learning and change management came from (Cameron and Quinn, 2006) for Organizational Culture; (Lawson, 2002) for Knowledge Management; and (Kotter, 1996) for Change Management. Therefore, it's more reliable than constructing a new

scale for examining organizational learning and change management. Further, for the proposed questions, the instruments were used Cronbach Alpha for testing the reliability and consistency in overall and each item.

Table 5. 1 Summary of Chapter

Type of Research	Deductive approach
Purpose of a study	Descriptive
Research method	Survey
Data collection technique	Quantitative
Data collecting type	Questionnaire
Questionnaire type	Mailing questionnaire
Type of Sampling	Purposive sampling
Designing questionnaire	Adapting
Type of questions	5-point Likert scale – closed-ended questions
Validity and Reliability	Alpha Cronbach



## CHAPTER VI: ANALYSIS AND FINDINGS

This part of the study discussed the statistical analysis and results that were made out to validate the hypotheses underlying research models. It provides firstly descriptive analysis, secondly correlation analysis, and lastly independent sample T-test analysis for testing hypotheses were presenting the results.

### 6.1 Demographic Profiles of the Respondents

The survey collected 83 replies through mail questionnaires that disseminated to the Ethiopian manufacturing companies who implemented the Kaizen project under the assistance of the Kaizen Institute. At the initial stages of the data cleansing process out of 83 recorded responses, three replies data identified inaccurate records from a data set. After cleaning the data, 80 recorded response left out, then excel dataset imported to SPSS statistical software version 25 for more advanced statistical analysis. The tabulated data format shown below provides generalized information about respondents, regardless of control variables. Table 6. 1: Summary of descriptive analysis

	Variable	Frequency	Percent
Gender	Female	32	40.0
	Male	48	60.0
	Total	80	100.0
Age	Below 25	1	1.3
	25 - 34	50	62.5
	35-44	28	35.0
	over 55	1	1.3
	Total	80	100.0
Work experiences	1-2 years	4	5.0
	3-5 years	41	51.2
	6-9 years	24	30.0
	10 plus	11	13.8
	Total	80	100.0
Educational level	Diploma of High School	2	2.5
	Bachelor Degree	44	55.0

	Master Degree	27	33.8
	professional Degree	7	8.8
	Total	80	100.0
Job Level	Top Manager	6	7.5
	Division and Department head	16	20.0
	General manager	4	5.0
	Unit Head	8	10.0
	company supervisor, non-manager/worker	1	1.3
		45	56.3
	Total	80	100.0

### 6.1.1 Profile of Respondents

The summary result of the profile of respondents compiled on the above data set1 based on five control variables that are appropriate to the study. The primary variable was the **Gender**, which considered as a reference to social and cultural divergences from recorded data males accounted for 60% than female. The following variable was **Age**, which used to determine knowledge of respondents from the recorded data set more than half the respondents to belong to middle-aged the Age 25-34 years old represented 62.5%. The third demographic variables asked respondents about their **Work Experiences**. That serves to identify the skills and ability of respondents from the registered data set half of the respondents, 51.2% were between 3-5 years of experience. The fourth demographic variables asked the respondents their **Educational Background**, which helps to define differences in the opinion of respondents among 80 replies, 55% have a tertiary educational background. Last described **Job Level** that allows determining employee engagements, out of the 80 respondents, 56.3% were not managers.

### 6.1.2 Survey Respondents

In this table (appendix), **Knowledge Management** as the first variable, according to sharing experiences with 3.80 average and mode 4 = agree; accessibility of documented

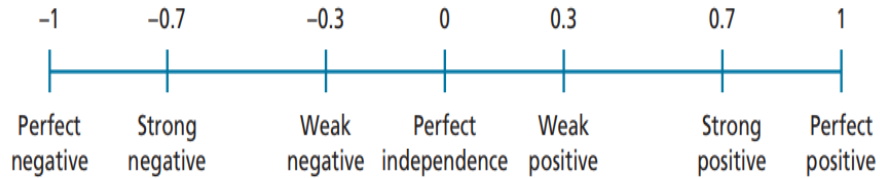
procedure with 3.34 average and mode four =agree. The figure indicates that companies have experiences of sharing information, however low practical activities linked to the availability of stored data. Second, variable **Organizational Culture**; based on existences of formal procedures 3.60 average, mode 4 = agree; willing to take risks with 3.13 average and mode 3= neutral. The result shows companies have low experience in creating a culture of risk-taking. The third variable a **Sense of Urgency**, Employee's belief in the need of change 3.88 average, mode = agree: clearly defined need for change with 3.40 average and mode 3= neutral. The outcome display that there existed a lack of clarity determining the need for change in the companies. Fourth variable a **Coalition of the Team**, the team formation, 3.53 average, mode 4= agree; skills of managers-leading change with 3.31 average and mode 3= neutral. The response shows that companies have fewer leadership skills for driving change throughout the whole company. Fifth variable, the **Clear Vision**, an establishment of clear vision 3.70 average, mode 4= agree; the linked of vision to daily job tasks with 3.06 average and mode 3= neutral. The result shows low practices align employees with companies' vision.

## 6.2 Correlation Analysis

On this analysis part, the relationship between different variables introduced. These analyses provide a summary table for control and predictor variables. Since the study applied the Pearson correlation analysis, the result showed the variables significantly correlated at the Pearson value below 0.01. If the correlation value is greater than 0 and so correlation strengths ranging from no correlations to weak and strong correlations, the convergent validity will be significant or valid. As it is in the table below, all the correlations of 0.01 and 0.05 are significant. The Pearson correlation analysis

serves to examine if there are linear relationships existed among variables; strength of relationships and fitting out the reliability.

Figure 6. 1 Correlation Analysis.



Source: (Saunders, Lewis, & Thornhill, 2019)

Table 6. 2: Correlation Analysis

Correlations											
		Job	Gender	Age	Edu.	Exp.	KM	OC	SU	CT	CV
<b>Job</b>	Pearson	1									
<b>Gender</b>	Pearson	<b>-.421**</b>	1								
	Sig. (2-t)	.000									
<b>Age</b>	Pearson	<b>.454**</b>	.114	1							
	Sig. (2-t)	.000	.001								
<b>Edu.</b>	Pearson	<b>.442**</b>	.096	<b>.337**</b>	1						
	Sig. (2-t)	.000	.396	.002							
<b>Exp.</b>	Pearson	<b>.673**</b>	<b>-.349**</b>	<b>.560**</b>	<b>-.333**</b>	1					
	Sig. (2-t)	.000	.002	.000	.003						
<b>KM</b>	Pearson	-.081	.055	.163	.151	.069	1				
	Sig. (2-t)	.478	.630	.149	.182	.540					
<b>OC</b>	Pearson	-.198	.053	.179	<b>.225*</b>	.127	<b>.884**</b>	1			
	Sig. (2-t)	.078	.643	.113	.045	.262	.000				
<b>SU</b>	Pearson	-.178	.144	.089	.114	.078	<b>.536**</b>	<b>.589**</b>	1		
	Sig. (2-t)	.113	.201	.434	.314	.490	.000	.000			
<b>CT</b>	Pearson	-.031	.008	-.008	.212	-.085	<b>.549**</b>	<b>.558**</b>	<b>.638**</b>	1	
	Sig. (2-t)	.784	.944	.942	.059	.455	.000	.000	.000		
<b>CV</b>	Pearson	-.110	.135	.078	.089	.053	<b>.530**</b>	<b>.516**</b>	<b>.789**</b>	<b>.727**</b>	1
	Sig. (2-t)	.330	.232	.493	.430	.638	.000	.000	.000	.000	
**. Correlation is significant at the 0.01 level (2-tailed).											
*. Correlation is significant at the 0.05 level (2-tailed).											

Data set 6.2: presented the compiled result on the relationships between control and predictor variables that are appropriate to the study. From their association as job levels increase, the number of gender (female) may decrease. Additionally, as job levels increase the number of age, educational level, and experience increase parallel. On the other hand, as work experiences increased, the number of gender (female) may decrease. From the

relationship as the number of Age increased, educational level and work experiences increased parallel. The last correlation results show a high educational level with less working experiences. Despite that, control variables indicate no association with predictor variables. Except educational level has a positive relationship of organizational culture, which implies as a level of education increase will positively reflect and influence the perception of organizations.

The above table shows that knowledge management has a strong positive association with organizational culture, a sense of urgency, a coalition of a team, and a clear vision. This relationship suggests that companies creating an inclusive, collaborative environment provide practices to raise the knowledge management process. Organizational culture has a strong positive association with, a sense of urgency, a coalition of a team, and a clear vision, which implies initiating cultural change and reduces compliances resistance to change. A sense of urgency has a strong positive association with a coalition of a team and a clear vision. This relation indicates that creating a strong sense of urgency provides to form a strong alliance of a team and to state clear vision. Finally, a coalition of a team positively and significantly correlated with a clear vision. In summary, all predictor variable results show positive values, which implies that a strong positive linear relationship existed among the variables.

### **6.3 Reliability Analysis**

Analytically, applying the Cronbach's Alpha will simplify the effort of testing the reliability of research. "Alpha is a commonly used index of test reliability." Standardized value statistics within the range 0.70-0.90.

Table 6.3 Reliability Statistics

Reliability Statistics			
Variables	Questions	N of Items	Cronbach's Alpha
Overall items		34	.910
Organizational Culture	OC1-OC8	8	.848
Knowledge Management	KM1-KM8	8	.834
Sense of Urgency	SU1-SU6	6	.817
Coalition Team	CT1-CT6	6	.854
Clear Vision	CV1-CV6	6	.736

#### 6.4 Independent Sample T-test Analysis

Applied to examine the developed hypothesis and answered the research questions by comparing the mean averages of two group samples of high organizational performances (HP) and low organizational performances (LP) introduced. These analyses provide a summary table of independent sample T-test for each predictor variable (Knowledge Management, Organizational Culture, Sense of Urgency, Coalition of Team, and Clear Vision). General Premises to carry T-test

1. Variables should be interval data and normally distributed to each group. Variances of variables for each group; Observation regard to variables should be different; each person only being measured once. Data size should be  $N > 30$ ,
2. The null hypothesis (H0) = wanted to know whether high and low-performance companies have equal/ or the same. The alternative hypothesis (H1) = wanted to know whether high and low-performance companies have unequal/ different.

##### 6.4.1 High versus Low-Performance Organizations: Knowledge Management

Group Statistics								
KMV	KM1		KM3		KM4		KM7	
OS	LP	HP	LP	HP	LP	HP	LP	HP
N	42	38	42	38	42	38	42	38
M	3.62	4.37	3.64	4.05	3.24	4.37	3.50	4.05
Std.	1.18	.819	.759	.957	1.055	.541	.707	.613

Table 6.4. 1 Independent Sample Test: KM

		Independent Samples Test								
		Levene's Test for EV		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tail)	MD	Std. Err	95% Confidence	
									Lower	Upper
<b>KM1</b>	EVA	2.017	.160	<b>-3.250</b>	<b>78</b>	<b>.002</b>	-.749	.231	-1.208	-.290
	NEVA			-3.309	73.055	.001	-.749	.226	-1.201	-.298
KM2	EVA	1.219	.273	-1.203	78	.233	-.277	.230	-.735	.181
	NEVA			-1.192	72.373	.237	-.277	.232	-.740	.186
<b>KM3</b>	EVA	4.593	.035	-2.131	78	.036	-.410	.192	-.793	-.027
	NEVA			<b>-2.107</b>	<b>70.508</b>	<b>.039</b>	-.410	.195	-.798	-.022
<b>KM4</b>	EVA	15.232	.000	-5.934	78	.000	-1.130	.190	-1.510	-.751
	NEVA			<b>-6.112</b>	<b>62.477</b>	<b>.000</b>	-1.130	.185	-1.500	-.761
KM5	EVA	.042	.838	-.869	78	.387	-.154	.177	-.507	.199
	NEVA			-.860	71.263	.393	-.154	.179	-.511	.203
KM6	EVA	2.491	.119	-1.888	78	.063	-.355	.188	-.729	.019
	NEVA			-1.899	77.990	.061	-.355	.187	-.726	.017
<b>KM7</b>	EVA	6.155	.015	-3.717	78	.000	-.553	.149	-.849	-.257
	NEVA			<b>-3.744</b>	<b>77.865</b>	<b>.000</b>	-.553	.148	-.846	-.259
KM8	EVA	.021	.886	-1.126	78	.263	-.199	.177	-.551	.153
	NEVA			-1.122	75.523	.266	-.199	.178	-.553	.155

Knowledge management determined as **Sharing, Creation, Transferring, and Storage** constructed with eight measurement items. From the above table result, four elements KM1, KM3, KM4, and KM7 are showing a statistically significant relation, and rest items showed no significant differences with high versus low performing companies.

#### 6.4.2 High versus Low-Performance Organizations: Organizational Culture,

Table 6.4. 2 Independent Sample Test: OC

Group Statistics										
OCV	OC1		OC3		OC4		OC6		OC8	
OS	LP	HP	LP	HP	LP	HP	LP	HP	LP	HP
<b>N</b>	42	38	42	38	42	38	42	38	42	38
<b>M</b>	3.62	4.37	3.64	4.05	3.24	4.37	3.62	3.97	3.64	3.84
<b>Std.</b>	1.188	.819	.759	.957	1.055	.541	.882	.788	.759	.823

Independent Samples Test										
		Levene's Test for EV		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tail)	MD	Std. Err	95% Confidence	
									Lower	Upper
OC1	EVA	1.592	.211	<b>-7.272</b>	<b>78</b>	<b>.000</b>	-1.380	.190	-1.757	-1.002
	NEVA			-7.404	73.127	.000	-1.380	.186	-1.751	-1.008
OC2	EVA	.295	.588	.685	78	.495	.144	.210	-.274	.563
	NEVA			.685	77.092	.495	.144	.210	-.275	.563
OC3	EVA	1.213	.274	<b>-3.594</b>	<b>78</b>	<b>.001</b>	-.594	.165	-.923	-.265
	NEVA			-3.605	77.876	.001	-.594	.165	-.922	-.266
OC4	EVA	4.452	.038	-4.054	78	.000	-.867	.214	-1.293	-.441
	NEVA			<b>-4.102</b>	<b>76.612</b>	<b>.000</b>	-.867	.211	-1.288	-.446
OC5	EVA	.206	.651	1.172	78	.245	.188	.160	-.131	.507
	NEVA			1.170	76.795	.245	.188	.161	-.132	.508
OC6	EVA	2.229	.139	<b>2.000</b>	<b>78</b>	<b>.049</b>	.356	.178	.002	.710
	NEVA			2.025	76.309	.046	.356	.176	.006	.706
OC7	EVA	.129	.720	.507	78	.614	.079	.156	-.231	.389
	NEVA			.508	77.653	.613	.079	.156	-.231	.389
OC8	EVA	.717	.400	<b>-2.582</b>	<b>78</b>	<b>.012</b>	-.436	.169	-.772	-.100
	NEVA			-2.583	77.403	.012	-.436	.169	-.772	-.100

Organizational culture assessed with **Dominant Characteristics**, **Organizational Leadership**, and **Organization Glue** designed with, eight measurement items. From the above table result, the five items OC1, OC3, OC4, OC6, OC8 are showing a statistically significant relation, and rest items show no significant differences between high and low performing companies.

#### 6.4.3 High versus Low-Performance Organizations: A Sense of Urgency,

Group Statistics										
SUV	SU1		SU2		SU4		SU5		SU6	
OS	LP	HP	LP	HP	LP	HP	LP	HP	LP	HP
<b>N</b>	42	38	42	38	42	38	42	38	42	38
<b>M</b>	3.62	4.37	3.38	3.66	3.24	4.37	3.71	3.87	3.62	3.97
<b>Std.</b>	1.188	.819	.936	1.122	1.055	.541	.708	.875	.882	.788

Table 6.4. 3 Independent Sample Test: SU



Independent Samples Test										
		Levene's Test for EV		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tail)	MD	Std. Err	95% Confidence	
									Lower	Upper
SU1	EVA	11.772	.001	-2.220	78	.029	-.401	.181	-.761	-.041
	NEVA			<b>-2.283</b>	<b>63.712</b>	<b>.026</b>	-.401	.176	-.752	-.050
SU2	EVA	.021	.885	<b>-2.652</b>	<b>78</b>	<b>.010</b>	-.515	.194	-.902	-.128
	NEVA			-2.646	76.447	.010	-.515	.195	-.903	-.127
SU3	EVA	1.263	.265	.983	78	.329	.198	.201	-.203	.599
	NEVA			.974	72.823	.333	.198	.203	-.207	.603
SU4	EVA	.704	.404	<b>2.025</b>	<b>78</b>	<b>.046</b>	.346	.171	.006	.686
	NEVA			2.010	73.589	.048	.346	.172	.003	.689
SU5	EVA	.129	.720	<b>2.526</b>	<b>78</b>	<b>.014</b>	.439	.174	.093	.784
	NEVA			2.532	77.797	.013	.439	.173	.094	.783
SU6	EVA	10.134	.002	-1.984	78	.051	-.382	.193	-.766	.001
	NEVA			<b>-2.034</b>	<b>66.753</b>	<b>.046</b>	-.382	.188	-.757	-.007

A Sense of urgency (Kotter-1) measures with, six measurement items, from above table result five items SU1, SU2, SU4, SU5, SU6 are showing a statistically significant relation, and SU3 items showed no significant differences between high and low performing companies.

#### 6.4.4 High versus Low-Performance Organizations: A Coalition of Team,

Group Statistics												
CTV	CT1		CT2		CT3		CT4		CT5		CT6	
OS	LP	HP	LP	HP	LP	HP	LP	HP	LP	HP	LP	HP
N	42	38	42	38	42	38	42	38	42	38	42	38
M	3.62	4.37	3.38	3.66	3.64	4.05	3.24	4.37	3.71	3.87	3.62	3.97
Std.	1.188	.819	.936	1.122	.759	.957	1.055	.541	.708	.875	.882	.788

Table 6.4. 4 Independent Sample Test: CT

Independent Samples Test										
		Levene's Test for EV		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tail)	MD	Std. Err	95% Confidence	
									Lower	Upper
CT1	EVA	9.066	.004	-2.512	78	.014	-.435	.173	-.779	-.090
	NEVA			<b>-2.592</b>	<b>60.672</b>	<b>.012</b>	-.435	.168	-.770	-.099
CT2	EVA	9.995	.002	-3.398	78	.001	-.723	.213	-1.147	-.299
	NEVA			<b>-3.505</b>	<b>60.904</b>	<b>.001</b>	-.723	.206	-1.136	-.311

<b>CT3</b>	EVA	4.062	.047	2.185	78	.032	.380	.174	.034	.726
	NEVA			<b>2.208</b>	<b>77.012</b>	<b>.030</b>	.380	.172	.037	.722
<b>CT4</b>	EVA	19.154	.000	-6.476	78	.000	-1.075	.166	-1.406	-.745
	NEVA			<b>-6.678</b>	<b>61.369</b>	<b>.000</b>	-1.075	.161	-1.397	-.753
<b>CT5</b>	EVA	1.984	.163	<b>2.470</b>	<b>78</b>	<b>.016</b>	.566	.229	.110	1.023
	NEVA			2.431	66.686	.018	.566	.233	.101	1.031
<b>CT6</b>	EVA	5.323	.024	-4.333	78	.000	-.731	.169	-1.066	-.395
	NEVA			<b>-4.412</b>	<b>73.024</b>	<b>.000</b>	-.731	.166	-1.061	-.401

A Coalition of Team (Kotter-2) measures with, six measurement items, from the above table result, all six elements are showing a statistically significant relation between high and low performing companies.

#### 6.4.5 High versus Low-Performance Organizations: Clear Vision,

Group Statistics										
CV	CV2		CV3		CV4		CV5		CV6	
OS	LP	HP	LP	HP	LP	HP	LP	HP	LP	HP
<b>N</b>	42	38	42	38	42	38	42	38	42	38
<b>M</b>	3.38	3.66	3.64	4.05	3.24	4.37	3.71	3.87	3.62	3.97
<b>Std.</b>	.936	1.122	.759	.957	1.055	.541	.708	.875	.882	.788

Table 6.4. 5 Independent Sample Test: CV

Independent Samples Test											
		Levene's Test for EV		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tail)	MD	Std. Err	95% Confidence		
										Lower	Upper
<b>CV1</b>	EVA	.705	.404	1.631	78	.107	.336	.206	-.074	.746	
	NEVA			1.646	77.525	.104	.336	.204	-.070	.742	
<b>CV2</b>	EVA	4.062	.047	2.185	78	.032	.380	.174	.034	.726	
	NEVA			<b>2.208</b>	<b>77.012</b>	<b>.030</b>	.380	.172	.037	.722	
<b>CV3</b>	EVA	9.066	.004	-2.512	78	.014	-.435	.173	-.779	-.090	
	NEVA			<b>-2.592</b>	<b>60.672</b>	<b>.012</b>	-.435	.168	-.770	-.099	
<b>CV4</b>	EVA	.025	.876	-3.933	78	.000	-.722	.184	-1.087	-.356	
	NEVA			-3.934	77.262	.000	-.722	.183	-1.087	-.356	
<b>CV5</b>	EVA	4.062	.047	2.185	78	.032	.380	.174	.034	.726	
	NEVA			<b>2.208</b>	<b>77.012</b>	<b>.030</b>	.380	.172	.037	.722	
<b>CV6</b>	EVA	.717	.400	-2.582	78	.012	-.436	.169	-.772	-.100	
	NEVA			<b>-2.583</b>	<b>77.403</b>	<b>.012</b>	-.436	.169	-.772	-.100	

A Clear vision (Kotter-3) measures with, six measurement items, from above table result five items CV2, CV3, CV4, CV5, CV6 are showing a statistically significant relation, and CV1 items show no significant differences between high and low performing companies.

## 6.5 Hypothesis Testing

Table 6.5. 1 Summary of Results

<i>Final constructs Measured Organizational learning</i>	<b>Significant elements</b>	<b>Evidences (p-values)</b>	<b>Characteristic features of elements that showed a statistically significant difference between high and low performances.</b>
<i>Knowledge Management</i>	<b>KM1=</b> Sharing experiences <b>KM=3</b> Creating new knowledge <b>KM=4</b> Reward system <b>KM=5</b> Relevant knowledge easily shared	$t(78) = -3.250, p=0.002.$ $t(78) = -.1.203, p=.039.$ $t(62.477) = -6.117, p=0.000.$ $t(77.865) = -3.744, p=0.000$	<ul style="list-style-type: none"> <li>✚ The statically results showed that the declaration of the reward system would encourage the willingness to share knowledge and the creation of new knowledge and essential information easily shared.</li> <li>✚ All statistically significant results focused on knowledge sharing and knowledge creation process.</li> </ul>
<i>Organizational culture</i>	<b>OC1=</b> Culture of trust <b>OC3=</b> Formal procedure <b>OC=4</b> Operation procedure <b>OC=6</b> Share of information culture <b>OC8=</b> Risk-taking	$t(78) = -7.272, p=0.000.$ $t(78) = -3.594, p=0.001.$ $t(76.612) = -4.102, p=0.000$ $t(78) = 2.000, p=0.049.$ $t(78) = -2.582, p=0.012$	<ul style="list-style-type: none"> <li>✚ Creating a culture of trust, support, and encourage risk-taking ability.</li> <li>✚ Additionally, building a culture of trust, enhance openness which leads willingness to share information.</li> <li>✚ The availability of formal procedure provides for reducing miscommunication and failure to comply.</li> </ul>

**H1: Organizational Learning (OL) has a statistically significant effect on Organizational Success (OS).**

In the first hypothesis, H1, we investigate the effect of organizational learning (Knowledge management and organizational culture) on organizational success. The result showed there is strong evidence of a statistically significant effect on organizational success. The positive value (p-values,  $p < 0.05$ ) coefficients rejected the null hypothesis and supported the existence of a significant impact of organizational learning on organizational success.

<b><i>Final constructs measured Change Management</i></b>	<b>Significant elements</b>	<b>Evidences (p-values)</b>	<b>Characteristic features of elements that showed a statistically significant difference between high and low performances.</b>
<b><i>Kotter 1 Sense of Urgency</i></b>	SU1=Need for change SU2= Creating change initiative's SU4= Employees understanding change SU5= Organization promotes change SU=6 Clearly defined need for change	$t (60.672) = -2.592, p=0.026.$ $t (60.672) = -2.592, p=0.010.$ $t (60.672) = -2.592, p=0.046.$ $t (60.672) = -2.592, p=0.014.$ $t (60.672) = -2.592, p=0.046$	✚ The statically result showed that to start a change program as first steps required aggregate corporations of many individuals.
<b><i>Kotter 2 Coalition Team</i></b>	CT1=Team formation CT2=Skills of managers-leading change CT3=Team change effort CT4=Authority given to the team CT5=Team management style CT6=Organizational resistance for change	$t (60.672) = -2.592, p=0.012.$ $t (60.672) = -2.592, p=0.001$ $t (60.672) = -2.592, p=0.030.$ $t (60.672) = -2.592, p=0.000.$ $t (60.672) = -2.592, p=0.000.$ $t (60.672) = -2.592, p=0.000$	✚ The statically result showed that conducting a change program requires the formation of coalition teams with adequate power; shared commitments, and managing teamwork.
<b><i>Kotter 3 Clear Vision</i></b>	CV2= Agreement of employees	$t (78) =1.631, p=.030,$ $t (60.672) = -2.592, p=0.012$	✚ The statically result showed that carrying a change program requires creating a

	<b>CV3</b> = Aligning of vision with realistic targets <b>CV4</b> = Clarification of need for change <b>CV5</b> = Vision linked to daily tasks. <b>CV6</b> = Manager engaged with the vision	$t (78) = -3.933,$ $p=0.000.$ $t (77.012) =2.208,$ $p=0.030$ $t (78) = -2.582,$ $p=0.012.$	clear vision those agreed with employees and prepared strategies for sense the vision.
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**H2:** *Change Management (CM) has a statistically significant effect on Organizational Success (OS).*

In H2, we tested the effect of Change management (Kotter1, sense of urgency, Kotter2, a coalition of a team, and Kotter-3, clear vision) on organizational success. The result showed there is strong evidence of a statistically significant effect on Organizational Success (OS). The positive value (p-values,  $p < 0.05$ ) coefficients rejected the null hypothesis and supported the existence of a significant effect of change management on organizational success.

## 6.6 Qualitative Analysis

After getting statically significant pieces of evidence from the companies' responses, the study took a qualitative analysis from consultants' previews. To find out the reason why some companies show statistically significant results and other companies did not show. This section provides further investigation conducted using an open-ended (free form, survey question) from 10 consultants from the Kaizen Consultancy Institute. The interviews were composed of 10 open-ended questions. The study collected eight answers out of 10 measurement instruments that were sent out through mailings. We received four responses from best-performed (show statistically significant results)

companies, consultants. Four from weak performed (did not demonstrate statistically significant results) companies’, consultants.

Table 6.6. 1 Qualitative Analysis Results

Five measurement elements				
Knowledge Management	Organizational Culture	Sense of Urgency	Coalition of Team	Clear Vision
<b>Consultant responses from Best performance companies</b>				
<b>Sharing Information</b> <i>Platforms for information sharing. such as meetings &amp; information boards</i>	<b>Impact of Culture on Kaizen project</b> <i>There existed a Positive workplace culture.</i>	<b>Promoting change by senior Mgt.</b> <i>Middle Mgt. &amp; supervisory level Mgt. staff play a vital role in promoting change.</i>	<b>Authority</b> <i>Some level of authority, like organizing functional teams, evaluating teamwork performances.</i>	<b>Existences of clear vision</b> <i>The company sets a clear vision, but not future-oriented</i>
<b>Store Knowledge</b> <i>Knowledge management policy. Such as reports from supervisors and team leaders,</i>	<i>Solving problems as team &amp; knowledge sharing platforms</i>	<i>But Lacks endurance in staying committed to bringing change, they are fanatics of short term goals and results.</i>	<b>Leadership talent</b> <i>Some team leaders are more charismatic and exemplary, and they walk the talk</i>	N.A.
<b>Consultant responses from week performance companies</b>				
<b>Sharing Information</b> <i>There is no knowledge sharing platform system.</i>	<b>Impact of Culture on Kaizen project</b> <i>Poor working culture and lack of mutual benefit</i>	<b>Promoting change by senior Mgt.</b> <i>It has inferior attention from senior management</i>	<b>Leadership talent</b> <i>Lack of practical talent and followers (team members) lacks the confidence to follow</i>	<b>Existences of clear vision</b> <i>The company sets no clear vision</i>
<b>Store Knowledge</b> <i>There is no retaining knowledge system.</i>	N.A.	<i>Decline and lacks sustainability follows the decreasing involvement and commitment of senior management.</i>	N.A.	N.A.
<b>Common Internal Factors that force companies to change</b>				
<i>Poor corporate culture</i>	<i>A Lack of knowledge and skills</i>	<i>A weak commitment of top management</i>	<i>Poor communication and ineffective among the management and employees</i>	<i>A problem existed related to safety and workplace organization and employee’s complaint.</i>
<b>Common External Factors that force companies to change</b>				
<i>Low Productivity</i>	<i>Employee Turnover</i>	<i>High Manufacturing Cost</i>	<i>Higher customer complaint</i>	<i>Less Competitiveness of the Manufacturing Sector</i>

**A. Consultant Responses from Weak Performance Companies**

1. Weak performance companies face poor working culture and lack the mutual benefit of implementing companies, employees’ motivation gets shortfall- the issue of “what is in it for me” of the employees and company owners’ passiveness to respond to this mutual interest is a growing challenge.
2. Top management commitment gap, absence of documented procedural channel, organizing all works in functional teams or lack of volunteers for participation, and companies don’t have a clearly defined need for change. Thus, it’s challenging to set a vision for the company.

**B. Consultant Responses from Best Performance Companies**

No	<i>Final constructs measured Organizational Learning and Change Management</i>	Response rate	
		A	B
<b>1</b>	<b>Knowledge Management</b>		
	<i>Formal channels for knowledge sharing</i>		
	<i>Top management support the creation of new ideas</i>	√	
	<i>Documented procedures channels</i>		√
<b>2</b>	<b>Organizational culture</b>		
	<i>Build a Culture of Trust</i>		√
	<i>Formal procedure</i>		
	<i>Culture of Share information</i>		
	<i>Commitment &amp; Risk-taking</i>	√	
<b>3</b>	<b>Sense of Urgency</b>		
	<i>Acknowledge the need for change</i>		
	<i>Creating change leaders</i>		
	<i>The Organization promotes change</i>	√	
	<i>Clearly defined the need for change</i>		√
<b>4</b>	<b>Coalition of team</b>		
	<i>Team formation</i>		
	<i>Skills of managers-leading change</i>		√
	<i>Team change effort</i>		
	<i>Adequate power/Authority</i>	√	
	<i>Team management style</i>		
<b>5</b>	<b>Clear Vision</b>		
	<i>Agreement with the employees</i>	√	
	<i>Aligning of vision with realistic targets</i>	√	
	<i>Clarification of need for change</i>		

A- Stands for to a great extent, B-stands for to a certain extent,

The highest response rate indicated the great degree of impacts of elements among the selected significant elements. Here we examined the highest response rate.

1. All factors matter, but the lack and inadequacy of “Top management support the creation of new ideas” matters a lot in the success of companies. The top management committed enough in mobilizing and empowering the entire workforce to contribute as much as they can. Additionally, Top management establishes a system where project leaders and team members can learn new ideas continuously and consistently.
2. Commitment and Risk-taking. Precisely to bring change, what matters a lot is tremendous commitment and self-discipline from all level staff.
3. All factors are critical, and they affect the status quo. “The Organization promotes change” is vital if the promotion for change at an organizational level is all encompassing and is based on consensus and based on knowledge. Awareness and desire for change alone does not work, but the experience and skill for change combined with the company-wide promotion of change.
4. “Authority is given to the team,” matter a lot having to optimize the necessity of other factors. The team should be more autonomous and shall exercise its full authority for the best accomplishment of the project.
5. “Aligning of vision with realistic targets” and Agreement with the employees. The vision to be crafted needs to be more realistic and needs not to be more abstract. Once a realistic vision put in place, the work of aligning the company’s work culture towards the company’s vision becomes more agreeable.



## **CHAPTER VII: DISCUSSION, CONCLUSION AND RECOMMENDATION**

Afterward the demonstration of study results from the previous section, this section describes a summary of study findings; discussed key findings with a purpose of inquire possible interpretations founded in the literature (chapter 2) and shown through the theoretical framework (chapter 4) ; Next presents conclusions and recommendations drawn relied on key findings and results of the study.

### **7.1 Discussion**

This study constructed and tested a conceptual model of the shared impact on organizational learning and change management on one outcome variable: organizational performances/success. The result of the independent sample t-test analysis supported the proposed hypotheses.

Two research questions directed the research:

1. To what extent does Organizational Learning (Organizational Culture and Knowledge Management) impact Organizational Success?
2. To what extent does Change Management (Sense of Urgency, Coalition of Team, and Clear Vision) impact Organizational Success?

#### **7.1.1. Organizational Learning on Organizational Performances**

The first purpose of the survey was to analyze to what extent the organizational learning impacts on the success of change implementation. The effect helps to amend both the growth and competitiveness of the manufacturing industry sector in Africa,

especially in Ethiopia. Organizational learning identified as knowledge management and antecedent element organizational culture. The significant findings of the study were the considerable evidence that elements of organizational learning impacts on the successful change implementation.

### **Empirical study key findings**

- 1) For organizational learning to take place, the organization needed to create “Formal channels to share knowledge”; “Top management should support the creation of new ideas”; “Documented procedures should exist centrally stored for ease of access”; and “Useful knowledge should easily share and acted upon.” This significant result confirms the previous findings of Zgrzywa-Ziemak, (2015), and Liao & Wu, (2009). Agreed that organization exercising the higher knowledge management practice had a more excellent capability in enhancing organizational learning. This argument means the business organization with more organization learning implies high capacity in improving performance. However, “acquiring knowledge,” “knowledge processing,” “knowledge sharing channels,” and “accessibility of documented procedure” didn’t show the impact on organizational performances.
- 2) For organizational learning to take place, the organization needed to “Build a culture of trust among employees”; there should be “Formal procedure that generally governs what people make out”; “Organizational structure should allow employees to work effectively”; “Culture of Share information activities among departments should exist”; and “Commitment and Risk-taking activities from all level staffs should exist”. Confirms the previous findings of López, Peón, & Ordás, (2004), Abdi, et al., (2018), and Hussein, Omar, Noordin, & Ishak, (2016).

These empirical studies agreed that embrace a collaborative culture of a learning organization ensured high business performances. Hence, the learning process at an organizational level embedded within the culture. However, “dynamic and innovative workplace,” “effective organizational structure,” and “co-operation existences” didn’t show the impact on organizational performances.

### **7.1.2. Change Management on Organizational Performances**

The second purpose of the survey was to examine to what extent the Change Management impacts on the success of change implementation. Change Management identified as Kotter change Management models (Kotter 1, Kotter 2, and Kotter 3). The significant findings of the study were the considerable evidence that elements of organizational learning impacts on the successful change implementation.

#### **Empirical study key findings**

1. To manage change successfully, organizations should acknowledge the need for change through the whole organization. Clearly defined the need for change; Creating change leaders; encompassing promotion for a change at the organizational level. However, “creating change initiatives,” didn’t show an impact on corporate performance.
2. To manage change successfully, team formation with the equivalent units of managers and leaders to direct the change. Knowledge and leadership talent to change effort; and Authority give to the team should be more autonomous and shall exercise its full Authority.
3. To manage change successfully, the organization needed to establish a clear vision; Aligning of vision with realistic targets; and Agreement with the

employees. However, the “establishment of clear vision” didn’t show an impact on organizational performances.

Confirms the previous findings, Shurrab, Hafez & Zec, and Milos. (2013), and Auguste (2013). These empirical studies agreed that adapting Kotter’s model straight steps was helpful to the successful transformation of organizations. Specifically, firms persist to Kotter’s model straight steps. Will allow being capable of gaining sustainable growth and of being competitive and continually getting through uncertainty evolving in the business environment.

Thus, the study constructed 34 items of questions for measuring five variables, among those items of questions, 25 out of 34 elements had statistically significant differences between high and low performing companies. However, nine questions didn’t show an impact on organizational performances.

## **7.2 Conclusion**

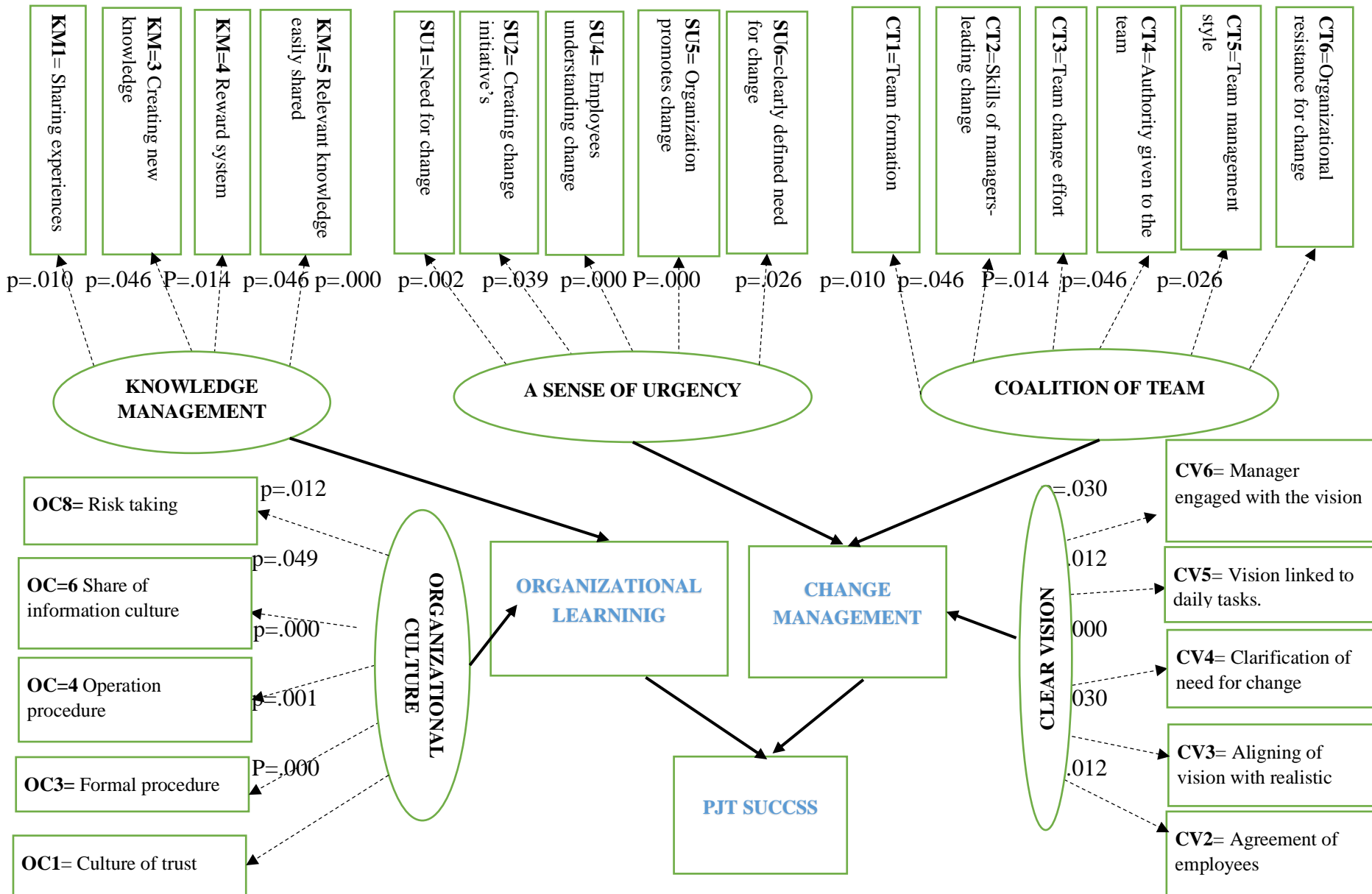
This research aims to determine what extent of organizational learning and change management affect the success of change implementation in Kaizen projects. The study provides a framework for the sustainable implementation of the Kaizen change program. Data were collected from manufacturing companies operating in Ethiopia and currently implementing the Kaizen change project. The main conclusion showed that organizational learning and change management were critical for continuously and consistently enhancing corporate performances of manufacturing companies in Ethiopia.

The primary analyses revealed that most of the organizational learning elements, organizational culture, and knowledge management have, to a significant extent impact on corporate Performances. Based on the analysis results showed that these elements had

statistically significant differences between high and low performing companies. The second analysis revealed that most of the change management model (Kotter 8-steps) elements sense of urgency (Kotter 1); a coalition of the team (Kotter 2); and clear vision (Kotter 3); have to a significant extent impact on organizational performances. Based on the analysis results showed that these elements had statistically significant differences between high and low performing companies.

The study found that 38 companies out of 80 under this study were partially practicing organizational learning and change management elements. However, none of the 80 companies understudy implementing a comprehensive framework for managing change. According to the literature of Rune, (2005), for any organization managing change approach was crucial to gain sustainable growth and achieving bargaining power, especially in today's competitive and continually evolving business environment. Thus, Organizational learning is a process of how organizations analyze, interpret and perceive their situation to adapt to their environment. To change or adapt in their environment has a great influence on enhancing the capability to manage any change process. The result of the study also proves it.

Therefore, organizations change when they learn. And when change happens it affects organizational culture, structure, strategy, and also it affects the internal and external business environment of the organizations. Without organizational learning, culture, and change management models, there will be no any sort of successful change implementations. And that is because change implementation cannot separate from organizational learning and change management. Figure 7.1 Summary of framework.



### 7.3 Recommendation

- This paper recommends
  1. Before creating awareness for both management and staff members, a culture of trust is the most influential driving force. Play a significant role in attitudinal change and facilitating fertile ground followers who trust in the change and listen to their leaders.
  2. Most companies lack documented procedural channels for that reason; the company doesn't get the expected knowledge from the trainees. Establishing a proper knowledge sharing system plays a substantial part in a regular capacity building plan. Like formal channels for knowledge sharing: creates a platform to share knowledge of the supplier to the consumer.
  3. The change leader teams should be more autonomous and shall exercise its full authority for the best accomplishment of the project. Most teams authority to take with responsibility, but lacks power. Formation of the right team having various experiences from theoretical, practical, and leadership skill perspective is unquestionable from the beginning.
  4. The study recommends companies should set a clear vision. Vision is a little bit a big thing; companies in third world countries are not this much visionary and not future-oriented. Equally, there is no active market competition, companies are not seriously concerned about the future goal rather than melting down for short term benefit goals. From the kaizen project perspective, companies do already have project goals that are difficult to say vision. The vision to be crafted needs to be

more realistic and needs not to be more abstract. Once a realistic vision put in place, the work of aligning the company's work culture towards the company's vision becomes easier.

Broadly, The outcome of this research: - It will induce a significant contribution to the academic literature, which is a resource for other researchers who are interested in investigating change management challenges and exercises. It will inform the management of the organization concerning the existing challenges of change management in their organization. Also, it will alarm them to take appropriate actions when they try to use other change management theories and methods. It will also serve as a source document for those who want to pursue further study. Lastly, it will also inform top management in manufacturing industries to which stage of change management needs more attention and help to take action and decision to minimize the challenge.

### **Limitations of the study**

As well as the contribution of wisdom, the study has limitations. The restriction of this research was, primarily, respondents responses were self-administered, which makes it hard for the overall conclusions of statistical solutions. Another limitation was the study used limited dimensions to examine the impacts of factors for managing change successfully. Thirdly the study concentrated on those manufacturing companies implemented Kaizen change projects. Thus, in that respect is a limitation of representing all characters of manufacturing industries which would be difficult to generalizations of the findings of this survey. Lastly, the selected Kotter change model had much applied to large scale manufacturing sectors which limited for small-scale manufacturing sectors.



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## Appendix I: Measurement Scales

Construct Dimension	Item Coding	Item Description	Source
Knowledge Management (KM)	KM 1	People at the workplace share their experiences and knowledge willingly.	Adapted from materials provided by (Lawson, 2002)
	KM 2	Employees can spend adequate time to acquire the relevant knowledge	
	KM 3	Top management supports the creation of new ideas in the organization.	
	KM 4	Top management offers incentives for knowledge sharing in the organization	
	KM 5	Stored knowledge is used to make future planning and better decision.	
	KM 6	Formal channels for knowledge sharing (like a meeting, courses, tours, and similar activities) exists.	
	KM 7	Useful knowledge can be easily shared and acted upon.	
	KM 8	Documented procedures are centrally stored for ease of access across the firms.	
Organizational Culture (OC)	OC 1	The organization has built a culture of trust among employees.	Adapted from materials provided by (Cameron and Quinn, 2006)
	OC 2	The organization is a very dynamic and entrepreneurial place.	
	OC 3	There are formal procedures that generally govern what people make out.	
	OC 4	The organization has developed operational procedures to help employees to work efficiently.	
	OC 5	The organizational structure allows employees to work effectively.	
	OC 6	Managers share relevant up-to-date information with employees.	
	OC 7	Co-operation activities among departments have existed.	
	OC 8	People are willing to stick their necks out and take risks.	
A Sense of Urgency (SU)	SU1	The need for change was established through the whole organization.	Adapted from materials provided by (Keith, 2002)
	SU 2	By creating change initiatives, the level of compliance was reduced.	
	SU 3	Employee's belief change is important and has an impact on the organization's success.	
	SU 4	Employees understand that the organization was ready to deal with changes.	
	SU 5	The organization promotes a positive approach to change.	
	SU6	The need for change was defined clearly.	
Coalition of Team (CT)	CT1	The change was directed by a team formed with the right mix of managers and leaders that includes members with strong line-leadership responsibility.	Adapted from materials provided by
	CT2	Skilled, Credible and Influential managers and leaders lead to change effort.	
	CT3	The team kept the change effort on target goals.	

	CT4	A real authority was given to the team to lead the change effort in the organization.	(Kotter, 1996)
	CT5	The team managed to keep employees on the right track.	
	CT6	The team helped counter organizational resistance for the change.	
Clear Vision (CV)	CV1	In creating change initiatives, a clear vision was established.	Adapted from materials provided by (Kotter, 1996)
	CV2	The vision was agreed upon by the employees.	
	CV3	The vision was provided with a clear and realistic target for evaluating success.	
	CV4	The vision clarified why the old manner of doing things should let the pass away and dedicated to bringing about the need for change.	
	CV5	The vision was linked to daily job tasks.	
	CV6	The managers worked in line with the vision.	

## Appendix II: Descriptive Statistics

<b>Items: Knowledge management</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>	<b>Min.</b>	<b>Max.</b>
Sharing experiences	80	3.80	4	4	2	5
acquiring knowledge	80	3.35	3	4	1	5
Top management support-knowledge creation	80	3.68	4	4	2	5
Top management offers-knowledge sharing	80	3.38	3	4	2	5
Knowledge processing	80	3.40	3	3	2	5
Knowledge sharing channels	80	3.53	4	4	1	5
Relevant knowledge- easily shared	80	3.44	4	4	1	5
Accessibility of Documented procedure	80	3.34	3	4	2	5
<b>Items: Organizational Culture</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>	<b>Min.</b>	<b>Max.</b>
Culture of Trust	80	3.38	3	3	2	5
Dynamic & innovative workplace	80	3.31	3	4	1	5
Formal procedure	80	3.60	4	4	2	5
Operational procedure	80	3.44	3	3	2	5
Organizational structure-effectiveness	80	3.58	4	4	1	5
Share of information	80	3.45	3	3	1	5
Co-operations existences	80	3.46	3.5	4	2	5
Risk taking	80	3.13	3	3	1	5
<b>Items: Sense of Urgency</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>	<b>Min.</b>	<b>Max.</b>
Need for change	80	3.65	4	4	1	5
Creating change initiative's	80	3.46	3	3	2	5
Employee's belief's change	80	3.88	4	4	2	5
Employees understanding change	80	3.55	4	4	1	5
Organization promotes change	80	3.63	4	4	2	5
Clearly defined need for change	80	3.40	3	3	1	5
<b>Items: coalition of team</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>	<b>Min.</b>	<b>Max.</b>
Team formation	80	3.53	4	4	1	5
Skills of managers-leading change	80	3.31	3	3	2	5
Team change effort	80	3.43	4	4	1	5
Authority given to the team	80	3.41	4	4	1	5
Team management style	80	3.43	3	3	1	5
Organizational resistance for change	80	3.35	3	3	1	5
<b>Items: Clear Vision</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>	<b>Min.</b>	<b>Max.</b>
Establishment of clear vision	80	3.70	4	4	1	5
Understanding of employees	80	3.31	3	3	1	5
Aligning of vision with realistic targets	80	3.41	3	4	2	5
Clarification of need for change	80	3.43	3	3	2	5
Vision linked to daily life	80	3.06	3	3	1	5
Manager engaged with the vision	80	3.19	3	3	1	5