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The White Collar Employee's Motivations for Participating Continuous Improvement Projects

Beyaz Yakalı Çalışanın Sürekli İyileştirme Projelerine Katılma Motivasyonları

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ABSTRACT

As the competition increases day by day, the need for adaptation to continuous improvement is increasing. Employees, who are the most important factors of leading the companies' goals, play a major role in this process. Research conducted so far has shown that the motivation of employees affects the fate of the company largely. In this context, it is seen that there are some factors that will increase the participation of employees in change and continuous improvement activities. Although these factors vary from person to person, it has been observed that these factors have a positive effect on the motivation of employees. At the first part of the model factors that will be focused are incentive, management support and competency scale. In the second part of the model, the areas affected by change are examined. The impact of change on employee commitment, company's strategic goals and market performance will be investigated. Research will be tested on a foreign automotive company's employees, which is operated in Turkey.

ÖZET

Günümüzde rekabet artmasıyla birlikte sürekli iyileştirme ve değişime uyum sağlama ihtiyacı artmaktadır. Şirketi hedeflerine götüren en önemli unsurlardan olan çalışanlar, bu süreçte büyük bir rol oynamaktadır. Bugüne kadar yapılan araştırmalar göstermiştir ki çalışanların motivasyonuna etki eden bir takım faktörler bulunmaktdır. Bu faktörlerin kişiden kişiye değişmekle birlikte genelde çalışanların motivasyonlarına pozitif etki ettiği gözlemlenmiştir. Literatür araştırması yaparken birçok çalışma incelenmiş ve çok sayıda faktörün araştırıldığı görülmüştür. Modelin birinci bölümüde etkisi ispatlanan faktörler arasından teşvik, yönetim desteği ve yetkinlik ölçeği üzerinde durulacaktır. Modelin ikinci bölümünde ise değişimin etki ettiği alanlar incelenecektir. Değişimin çalışan bağlılığına, şirketin stratejik hedefleriyle ilişkisine ve pazar perfomansına etkisi araştırılacaktır. Araştırma Türkiye'de faaliyet gösteren yabancı bir otomotiv şirketi çalışanları üzerinde test edilecektir.

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ABBREVIATIONS

CI Continuous Improvement

Inc Incentive

Mangs Management Support

Comp Competency

EmpCom Employee Commitment

MarPer Market Performance

DMAIC Define, Measure, Analyze, Improve, Control

Sort, Set in Order, Shine, Standardization, Sustain

(JIT) Just in Time

ASS After Sales Services

HR Human Resources

MCCR Ministry of Consumer and Commercial Relation

SIPOC Suppliers, Inputs, Process, Outputs and Custo

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CHAPTER ONE

INTRODUCTION

The thesis is about the motivations behind employee's contribution of Continuous Improvement activities and deployment of Continuous Improvement Culture. Some motivation factors are focused in the research. These are Management Support, Incentives and Competency. These factors has been researched at various companies and countries then different result were obtained. The study's aim is measuring these factors in a global automotive company and company's Turkey operation therefore both vision can be understood. The study can be defined as glocal.

Many practicioners defend there should be some factors for succesfull Change Management. For example, Shea and Howell mentioned that competency effects employees' contribution of CI activities (Shea & Howell, 1998). Mosadegrhrad emphasized importance of management support in quality and change implementations (Mosadeghrad, 2014). Strentght of Management has been argued in many years and many studies revealed importance of it, so nowadays many managers get trainings about how to manage employees by motivating them to be more efficient.

Based on Kaizen theory, there are continuous, small improvements in the process especially implemented by workers. Continuous Improvement prioritizes the process and supports management efforts. Any process or flow is not too perfect not to need a little improvement. It is the task of everyone especially those who works in the field of the improvement. Where and when there is an improvement, this will ultimately lead to an improvement in quality and efficiency. Quality is everything that can be improved (Ateş, 2017). Kaizen and quality are bundled definitions those cannot be separated.

Worst companies are defined as companies those do not carry out any activities other than the current state protection activities, ie they do not attempt any Kaizen or innovation. They only apply improvements when the changes are forced by market conditions or competition. As Kaizen is a continuous process that requires

everyone involved in the enterprise, everyone, in the hierarchy, engaged with Kaizen during its activity (kaizen-or-continuous-improvement, 2009).

Kaizen is the starting point for deveplopment, indicated as the need to realize the need to development. The need arises when a problem is noticed. There is no need to improve if there is no problem. Satisfying the situation is the enemy of Kaizen. Therefore, Kaizen prefers to be aware of the problems (Ates, 2017).

There are some components of successfull Kaizen,

- Team work
- Appropriation
- Motivation
- Regular Check
- Continuous Improvement

The main objective of the Lean Manufacturing System is minimizing to spend the resources and time, eliminating non-value added steps and processes that do not create value in the process starting from the raw material to the delivery of the final product to the customer. Nowadays, many companies are conducting lean transformation projects to survive in competitive conditions. However, most of these projects fail (Bilgin, 2018). Failure ratios cannot be underestimated this is why long since practicioners has been studying on solutions.

When these failures are examined, there may be many reasons such as lack of management support, expectation of getting results in the short term and resistance to change. One of the reason is that the purpose of lean manufacturing is forgotten and lean tools are not seen as the criterion of success. Companies can actually fall into a position that contradicts lean thinking by spending unnecessary resources and time while serving to customers in any sector that is to say CI can be applied in any sector or in company. CI transformation can start from a different area in each company to meet the company's needs. It should be associated with a target by using each vehicle management system to prioritize and focus on CI (Lean or Six Sigma) tools that fit business needs (Bilgin, 2018). The definition of tools will be mentioned at coming chapters.

When we look at the role of the manager, we see that the supportive and stimulating role is directed towards improving the processes and the controlling role is directed towards the outcome. The Kaizen concept emphasizes the role of management is promoting and encouraging people's efforts to improve processes. Management, with its control-based role, has to develop process-priority criteria (Bilgin, 2018).

1.1. ORGANIZATION OF THE STUDY

The thesis is designed as follows. Chapter Two mentions the components of thesis model. In this context Incentives, Competency and Management Support factors are explained and the relationship with Continuous Improvement will be written by taking into consideration literature. The thesis model contains perceived Market Performance and Employee Commitment in this part these factors will be examined from employee's perspective. In the second part of the model, the areas affected by change will be examined. The impact of change on employee engagement, strategic alignment with company and market performance will be investigated. Overall, the focus is measuring and explaining the relationship between employees' contribution of Continuous Improvement activities and above-reffered factors. Then, Chapter Three explains proposed model and hypothesis that are related to model. In this section, research methodology and design will be explained as well. Chapter Four contains analyses and measurement of hypothesis by SPSS. According to results, Chapter Five will be about findings of thesis, theoretical and managerial implications, limitations and future research suggestions for this research topic.

1.2. HOLISTIC APPROACH and CONTINUOUS IMPROVEMENT

As in every marketing strategy, integrated marketing primarily aims positively affirm the customer's approach to the brand. The more satisfied customer is, the more she/he connects to the brand and continues to receive products and services. This exchange of trust and loyalty should form the basis of a marketing strategy. Because of loyalty to the brand, new groups of potential customers are formed.

The holistic marketing process considers the evaluation of stakeholders, customers, employees, suppliers and community as a whole while creating and implementing marketing strategies. Holistic marketing has gained popularity because of its high saturation rate and increasing competition in the market. Businesses realize that they can keep themselves apart with a holistic marketing approach and at the same time create a synergy between the departments in the organization (Cheung, 2018). Continuous improvement in marketing helps you get a better return on your investment in marketing. Continuous improvement is a form of quality management that focuses on making minor improvements to a process, rather than trying to achieve large changes. In marketing, you can use continuous improvement to achieve goals such as increasing the accuracy of targeting, increasing the quality of products or services, increasing customer satisfaction or providing higher quality advantages to the sales team (Linton, 2018).

1.3. AUTOMOTIVE SECTOR in TURKEY

The thesis survey will be implemented on automotive company's employees which operating in Turkey. In this sense, it is needed to briefly mention the position of the automotive sector in Turkey. When it is looked at the fact that the Turkish automotive industry has a meaning for the country's economy with numerical data, it is seen that 2006 is a turning point. According to the data of 2006, it is produced 1 million vehicles in Turkey for export markets. Exports of vehicles' revenue had reached 10.1 Billion US Dollars. The automotive sector was achieved by 18% of Turkey's exports in 2006, it is sector in the years following this rule by capturing the championship in Turkey exports (SGM, 2011). If Turkey's foreign trade balance in the automotive sector is beginning to come into favor exports since 2006. It is seen from the results that the factor, triggering the production in the Turkish automotive industry, is the demand from the external markets rather than the domestic market. Since this period, Turkish automotive industry has turned into a production base in Europe, especially in the category of light commercial vehicles' (Yılmaz & Karakaldılar, 2010).

The company that the thesis survey will be applied is exporting high amont of vehicles. The report's that is mentioned above is aligned with the companies' vision.

CHAPTER TWO

LITERATURE REVIEW

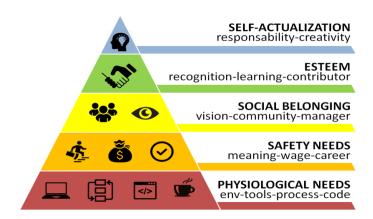
2.1. MOTIVATION and EMPLOYEE MOTIVATION

Motivation is Latin rooted world that contains, Motio, Moveo, Movere, Movus and Motivus as can be translated into motion, to move, set into movement or motive power. In literature, motivation defined in various way, majority of researches focuses on behavior of workers who referred to motivation. The common definition could be summed up as motivation is an attribute that moves people to do or not to do something. (Kirkegaard & Larsen, 2011) Motivation has researched many times before because of its role in the work life. It is not a thing that can be explained with a basic formula so practitioners have been working on this in issue year-on-year. It can be explained on a behavioral way, it also contains psycho biologically impulse. The definition also explains the situation "Motivation is a value-based, psycho biologically stimulus driven inner urge that activates and guides human behavior in response to self, other, and environment, supporting intrinsic satisfaction and leading to the intentional fulfillment of basic human drives, perceived needs, and desired goals" (Story, Stasso, & Hart, 2008).

Workers are motivated by many reasons such as physical and mental needs (Alawi, 2005). Maslow created the Needs Hierarchy Theory, which defends peoples' needs are more related to mental needs. Maslow told that human beings have a strong desire to reach their full potential. In his own words: "a man's desire for self-fulfilment, namely the tendency for him to become actually in what he is potentially: to become everything that one is capable of being...." (Maslow, 1943). According to Maslow's that quote, people love show their potential to others so work motivation could not explained just monetary motivation. Workers have intrinsic desire to be successful like be hailed from others. Lots of philosophers

and practitioners have been working on motivation. (McClelland, 1996) Maslow commonly defends working motivation is not all about economic issues.

Figure 1. Motivation Pyramid



(Maslow, 1943)

This concerns and theories drived the dissertation, it is going to be measured relationship between CI projects motivation behind work collar workers' perception. In this work, some of focused departments are IT, Controlling, Dealer Management, Sales, Treasury, Accounting, Human Resources, Production. All of them are not related 100% manufacturing. Even, the company's core business is manufacturing vehicles; the study's aim is understanding motivation in indirect departments' attribute as well. Like all people, also departments have different motivators. This study is targeting to identify the differences, which also mentioned in literature.

2.2. INCENTIVES

For defining incentive, the literature is examined and many thoughts are compared. The study asserts incentive and change motivation has a significant relationship the claim going to be measured a survey as well. Meeting with desires is huge encouragement for retention and constancy. It is also the same from consumers' perspective. If the customers get together with their desires at a brand their retention, acquisition and loyalty level are constantly increasing (Parasuman, 1988). It is also the same from workers' perspective. If the workers find their

needs in a company, she/he will be probably loyal and productive. The idea is also supported and formulized by Maslow (Maslow, 1943). In Maslow's pyramid, there are significant indicator that can be used by any manager or human resources department. While competing in any market, one of challenge is gratifying employees. For people, the focus is having the physical needs so money is the way of having them. Even the money as incentive is a controversial topic, according to Maslow and many practitioners', money is the crucial motivation of any achievement. Maslow has mentioned the motivation factor in pyramid that created by him. Maslow defends that monetary and non-monetary things would be motivator and each of factor has different level of affect. From that perspective, in this thesis incentive will be collected under monetary and non-monetary variables.

There are some choices, which allows improving employee loyalty and motivation. Employee motivation is one of driver while competing in the market so companies focuses on the ways of motivating workers. Employee motivation is a huge asset in itself. Human Resources departments should show an approach such as employee-focused and take in consideration how they can make workers' satisfied. In order to increase employee loyalty incentives are the factors that companies should pay attention (Kebapci, 2009).

Nowadays, firms are changing their human resources strategy, their new perception mostly based on employee behavior. It has been researching that there are various motivators those effect employees' performance. Markos and Sridevi have published an article in 2010 that defends employee engagement and motivation have huge effect that the way of reaching companies' target (Sridevi & Markos, 2010). In developing world, reaching the target can only be changeable and flexible. It is valid for every single company or every single person. Heraclitus had summarized the situation with a sentence "There is nothing permanent except change." Even change is happening every moment, people always prefer to stay on hold and show resistance to changing (Lawrence, 1969).

People fears anything unknown so the change carries obscurity in it. Incentive is one of tools for increasing employee satisfaction and contributing them to change management activities. In this thesis incentives will represent rewards, promotions and career movements. All these factors had researched by practitioners such as

Hultman, Epstein, Ward and Lee. All of them have same perception that incentive plays big role towards motivation.

Incentive would be in various ways such as fiscal, promotion or better relationship with management level. Any type of incentive has common results such as loyalty, morale, better teamwork and better concentration. Reward system emphasizes that companies are not underestimating employees' ideas. Morale is also important factor the way of reaching goals (Lawler, 1984). Promotion also substantial for an organizational success. Promotion requires discipline and discipline brings success. Any career movement motivates workers' for achieving the organizational goal. Manager or HR consultants also commonly know these.

Reward is one important instrument for implementation of CI (Kerr & Slocum, 1987). Identifying rewards is also the point that companies have to take into consideration. Reward would be anything like new position, promotion, premium or award. Therefore, the reward would be the target for worker if it is tangible employee could be motivated more for reaching it (O`Reilly, 1989).

Lawler in 1977 mentioned the enviable reward system and how it should be. There some typical definitions that created by Lawler;

Reward level: For achieving the goal, reward should be adequate for employees' daily needs.

Individuality: It should be satisfying to cover personal needs.

Internal Equity: For achievement of any reward, it should seem fair from employees' perspective. If workers realized the system is not equitable, that drives the motivation on a bad side. While workers' are comparing themselves with their colleagues' they want to realize how much the reward system is equal.

External equity: There are lots of exiting firms in the market so workers can easily compare the systems with other firms' employees. It should also seem fair while compared to others.

Trust: Without reliability, any firm or any worker would not be successful. Every healthy relationships based on trust (Lawler, 1984).

Nowadays, companies are facing a huge competition in their market. Globalization, innovation, digitalization are increasing every moment while they are existed. Companies' management attention is always towards to change and keeping up to improvements. One of the biggest challenging is reaching whole changes and responding customers' desires as soon as possible. Since the competition is getting hard, companies should change quickly by taking into consideration customers' need. For changing successfully and quickly, employee attention is important. Without employee concentration, companies cannot change as they should do and target. Therefore, while companies exist, they should focus employee's motivation and satisfaction. The research model is targeting to measure the relationship between incentives and change engagement.

Up until today, there has been lots of research for measuring employees' engagement. The results have ambiguity such as, the article which was publish in Journal of Entrepreneurship & Organization Management defends that incentive is not much effective while motivating the employee's for change. The article also mentions incentives are important tool for employee loyalty but not directly motivator for changing activities (Shuqqo & Ghanayem, 2018). Some researchers support the idea that the reward system drops the companies Total Quailty Management performance in consequence of workers would lose their overall concentration and they would have just individual goals instead of companies success target (Waldman, 1994). On the other hand, another research that measured importance of incentives in Algerian market, showed incentives are playing crucial role while implementing Total Quality Management implementations (Haffar, 2016). If the employees realize that they will attain something for participating the changing activities, they are unremarkably more eager for contributing the change operations (Shea & Howell, 1998). Therefore, any kind of incentive can be called mutually beneficial factor. Reward system encourages the workers for hardworking and the system which supported with incentive creates more productive workplace that allows the change processes

more efficient. Individual motivations of change increases organizational motivation therefore employees get more loyal to their organizations.

The incentive factor has been much-debated point for many years. According to many researches, in order to have permanent change companies should manage the process clear. If company cannot clarify the workers' mind, there would increase some rumors, which can blight change management. Therefore, during any change, managers should convince the workers' the new situation would not be worse for them from any side. Otherwise, if employees think that they might lose their salary or any staff they might avoid implementing change (Argüden, 2018).

Majority of resistances to change consists of economic concerns. In these situations, in order to keep the resistance at low level, incentives would be applicable tools. Without any economic concerns, employees can adopt better (Tunçer, 2013).

In change management activities, incentive is old but still valid tool. In 1987, Ontario Ministry of Consumer and Commercial Relations (MCCR) had driven a change activity. The focus of management is austerity and using the resources more efficiently. During the activities, it was expected that increase of customer services, employee contribution and better technologic infrastructure. There was 17 different projects started by 200 employee volunteered. These employees had some career opportunities and chance to increase of their competencies. The prior target of project was catching customers' changing desires. After two years, majority of customers' complaints carried in electronic environment and customers could reach easily to call center. MCCR knew that technologic increase was not the only that could make customers' satisfied. Employee satisfaction was also the factor the way that increases customer retention. The second part of change was creating better Human Resources Management by eliminating redundant process then creating efficient work climate. In this context, 30% of job definition had cut then there was an efficient and sustainable process occurred. All these process happened with workers' and organization was aware of their importance therefore managers gave some rewards and incentives in order to keep the success sustained (Daniel, 1993). In addition, the intention of these incentives

was also supported to higher worker contribution for upcoming projects (Akgeyik, 2001).

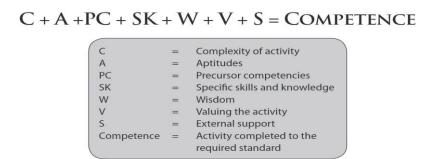
2.3. COMPETENCY and SELF EFFICACY

Different practitioners have been researched competency and majority of definitions have same claim. It possesses the efficacy for completing any operation, as it should be. It cannot be framed only skill or knowledge. Competence is a compound that requires various factors. Competency standards' change for each work therefore if the work gets more complicated, competency level should be increased for covering the need. Complexity and competency should be linear for reaching target (Lewis & Billerby, 2012).

Every single day, people have to take many decisions and some decisions are crucial like entering new market or changing organizational staffs. This kind of decisions or movements necessitate knowledge that can be called as competency. Any kind of activity needs knowledge, ability, experience etc. otherwise, every single steps contains risk inside. Sometimes, even the knowledge is adequate people could fail but people have to have knowledge and ability so that they can overcome such problems.

Lewis and Martin have formulized that idea as below,

Figure 2. Competence



Source: (Lewis & Billerby, 2012)

Competency that can be called as self-efficacy will be mentioned together in this thesis. They both represents how much workers cover their jobs' needs. In the

thesis, it going to be measured the relationship between competency and motivation for Continuous Improvement activies.

Competency and efficacy have two sides such as organizational and individual. Individual efficacy is main focus of this dissertation thereby its importance of overall concentration. In any organization, workers' individual goals and forces bring success so the organizations requires funding improvement of competency. The work climates are changing as a consuquence of technology and innovation. Companies are facing with big rivalry in the market so they should focus employees' competencies in order to compete in the market. If self-efficacy level increase, workers' motivation will increase therefore companies' perform better (Lewis & Billerby, 2012). Incompetence is the crucial force that companies experienced. Thence, leaders should create good position plan for their employees (Bandura, Self-efficacy in Changing, 1995). This approach is going to be mentioned at the Management Support part of thesis.

Competency and self-efficacy are variable those can be scaled and in this dissertation it is going to be measured. One of scaled factor is training, if employees' get adequate training for any kind of change in organization, they would feel more comfortable and ready to change. This variable can be also explained in "Awareness" factor yet there are related factors (Shea & Howell, 1998). This idea also supported by Lyndon Pugh in 2007, he supports that self-efficacy is belief of peoples' own abilities which can be increased with some efforts (Lyndon, 2007).

There are six criteria to the achievement of competency whilst performing in any activity, and they summarisied by Lewis and Billerby.

- Alignment of the individual to the complexity context of the activity
- Alignment of aptitudes (physical, cognitive and emotional)
- The possession of precursor abilities (skills, knowledge and wisdom)
- The possession of activity-specific abilities (skills, knowledge and wisdom)
- Valuing the achievement of the activity

• Outsource backing for the activity (Lewis & Billerby, 2012)

Competence is really important variable to reach any change culture deployment. Competence is not a thing that can have in a short time it requires continuous improvement and training. Competence includes various factors that are going to be measured.

Continuous Improvement is a culture also can be called as philosophy. CI is also a culture that implemented by Toyota sufficiently via Lean tools. The behind of Toyota's success is culture deployment. Emiliani mentioned Toyota's culture, the research tells training has significant importance for deployment of competence; competence brings successful changes (Emiliani M. L., 2004). There are different approachs that while defining competence but majority of them mentioned about skills. Sandberg (2000) defined three definition of competence:

Worker-orientated: According to that approach efficacy can be explained as ability and know-how.

Work-orientated: It defends, competence is more related to task rather than workers. Second factor is employee therefore the point of view is firstly focusing task fulfillment than employee's efficacy (Sanberg, 2000).

Nevertheless, it seems each of approach mostly related with each other (Sanberg, 2000). According to Sandberg, work and employee high correlated variable that cannot be separated. In this dissertation, competence and efficacy will be measured bilateral. The approach is also supported by Bandura (Bandura, Self-efficacy in Changing, 1995). In 2002 Deci and Ryan and in 1995 Bandura claimed similar approach with different definitions (Ryan & Deci, 2000). Competence and self-efficacy are both effected by feeling adequate about job. Confidence and effectiveness causes positive employee engagement about any kind of responsibility (Flora, 2004). Majority of people who reinforced about any task that is observed the people feels confident about that work (Skinner, 1974). There are lots of researched that had been done and most of them claims similar ideas that confidence and adequateness occurs better reinforcement results in consequence of high levelled competence. People's attitude always towards to do that they feel confident so people always shows resistance to change. If companies desires to

increase people's engagement to change they should consider employee's feelings first. People generally avoids the contingencies and their approaches always closed to stay same or change to know. Competence consists of mastery, power and potency so all these factors should be ideal level to convince people to change implementation (Skinner, 1974).

Human resources management plays a key role about employees' efficacy therefore Change Management. In successful organizations, human resources departments always tends to create sufficient management and performance system such as reward, award, trainings, evaluation of performance etc. those systems generally occur increase of competency so peoples' change reflections' on positive side.

In developing world people are not only feel satisfied with salary, they are looking for many factors while performing in a job. Factors are management styles, reward systems, trainings, insurances, job securities etc. If employees were satisfied with these competents, they would perform better and try to increase their knowledge about their tasks. A successful human resources management approach effects employees' efficacy level that reflects response to change. All these thought refers to importance of management focus that should be individual-focused (Lewis & Billerby, 2012).

Fluent and successful change implementations have common traits such as peoples' engagement. It is observed that peoples' engagement is highly related to changes' properties. If the change is totally unfamiliar and unpredictable, employees avoid from the change. It seems aversive from workers' perception so that creates unachieved change implementation process. Change leaders should create an environment, which consists of fun and joy by taking consideration of workers' competencies (Eisenberger, 1996).

One of the factor that should be considered is knowledge level. While firms change their process or any of habit, they should inform their workers' clearly. This is kind of selling the idea in an appropriate way. Employee engagement is a component that would not be underestimated. Change is a culture so it should be long-termed, for long termed achievement, CI as a change management should be

framed clear and accurate. In this thesis the relationship between competency and contribution of CI are going to be measured.

2.4. MANAGEMENT SUPPORT

Manager is not just the people who manages people, manager also steers companies resources and production factors. In order to ensure organizational success, managers aim to increase employee commitment, communication and relationship in the companies since therefore managers should have some special information and competencies.

2.4.1. Needs of Managers for Continuous Improvement

For example, motivating subordinates, hassle-free relationship, recognizing employees' characteristic features after all this they also should place the employees in right position. In addition, managers should have characteristics that can be trusted by employees and open to change. If managers get respect from their subordinates and they support to change then they can be called leader (Tunçay & Sağlam Arı, 2010). The leadership is the most common point, which debated in literature. In this thesis, the focus is the factors, which are effect employee's contribution to change management therefore it going to be focused the leadership behavior of managers.

Leadership is a topic, which is debating in centuries. Some key indicators show as leadership level of a person those are role of leader and behaviours. In order to create more efficient Human Resources Management, leadership gets more popular day to day. In many job postings, it can be seen that leadership is the compentency, which companies are looking for. But as everthing, the definition of leadership is also changing rapidly because leaders manage the organization that they are responsible for and organizations' needs and focuses' are quikly changing too (Sipahi, 1999).

In globalization world, leadership mind naturally changes, companies are facing with new systems and rising competition. As consequence of these alterations,

leadership becomes more important. In literature, leadership had defined by various definitions but in the simplest term, it is power of influcing people. In 1980s, Globalizations' importance increased, leadership need also appeared. Leadership can be defined as leading the group who are working for same target (Hitt & Middlermist, 1986). In other definition, leaders make the targets reachable by creating start point then track the process and at the end achieve the target (Hitt & Middlermist, 1986).

Change is a topic that examined in management literature as well. Especially after 1990s compaies should keep up with technological developments, social, political and economic changes. The pressure of these rapid changes are started to be palpable from organizations therefore they need to create effective management style in order to respond these changes. Success comes with good management it is known by companies so change management is new the gun of companies. Who better manages is staying in sector (Hussey, 1988).

Change can be separated as planned and unplanned change. In planned change, companies are ready about what, when, why, how they have to do. However, sometimes conditions force the companies to change their strategy or operations therefore unplanned chage arises. Regardless of how, companies can come across with mandatory changes. The important point is knowing how to manage it. Importance of leadership gains importance at these points. Leaders have huge importance while organizations reach goals because leaders motivates the employees in order to reach targets. With another definition, leadership is managing people livelong companies exist (Yilmaz & Altınkurt, Yahya, 2012). Individuals need leaders for make them aligned the vision of the company also steer them to go common target with make them enthusiactic. In any change, individuals' contribution states the change's success. Leaders drives each individuals' feelings and energy. Today, there is multinational, multicentered, diversifying world existes. The world, which has these properties, creates new leadership needs mentioned the situation with a statement As the result of the environmental factor is difficult to change, it cannot be framed as easily as in old times (James, 1998).

Currently, managers should separate managing and steering. This difference also divides managers and leaders. In literature, especially in change management leaders come into prominence. The leaders have steering skills, good comminucation, respect, trust and problem solving skill and many properties that organizations' need. The people, who have these skills, can motivate subordinates and solve the problem. Change contains some difficulties so indivuduals need to understand these difficulties and improve their capacities in order to overcome the diffuculties. Leaders make the people enable to overcome these difficulties by steering them with a map, which carries them to target. As a sum up, leaders should teach the employees how to learn (Tapscott, 1998).

There are two different definitions of leadership arises such as transformational and transactional leadership. Many of researches aimed to reveal the difference of these leadership styles. At first these leadership styles explained from political perspective by Burns in 1978 (Burns, 1978). However, as the time goes by, organizational cultures gained importance therefore practicioners defined these leadership methods from organizational context in 1999 (Eisenbach, 1999).

Transactional Leadership: Transactional leader leads the individuals and enlight their responsibilities and roles in order to reach common target (Grobler, 2006). Transactional leadership is a style of leadership in which leaders promote compliance by followers through both rewards and punishments (Bass & Aamodt, 2018).

Transformational leadership: Transformational leadership is defined as a leadership approach that causes change in individuals and social systems. In its ideal form, it creates valuable and positive change in the followers with the end goal of developing followers into leaders (Bass & Aamodt, 2018). Transformational leaders effect the organization members in order to consist common organizational target rather than individual goals. Transformational leaders successful about defining mutual objectives therefore organizational purposes gains more importance so members would be willing to reach common target rather than their personal goals (Ülgen, Hayri & Mirze, 2018). Transformational leadership is leadership style that creates a work climate, which the employees know their responsibilities and feel necessity of learning in this

context transformational leadership has relationship with charismatic and inspirational leadership properties (Certo, 1997).

According to Robbins, Transactional and Transformational Leadership are complementary management styles (Robbins, 1996). Transactional leader appreciates and rewards the employees if they succeed. Transformational leader instils the members to vision, mission and respect. If the change management literature examined it can be seen that transactional leaders tend to protect status quo by focusing the existing target and make the organizational members harmonized each other (Eisenbach, 1999). Charismatic and visionary transformational leaders can change the status quos by acting in appropriate way, which can affect the other members. Transformational leaders can create an inspirer and strategic vision in order to break the old and inefficient working styles. During this process, transformational leaders can also be inspirational for the workers (Kotter, 1999). Transformational leadership style is more related to future rather than dissatisfaction with current situation (Eisenbach, 1999). The main task of leader during the change is stimulating the employees' success desire and improvement needs in order to make the change attracting (Eisenbach, 1999).

2.4.2. Need of Change and Continuous Improvement

The main focus of companies is having profit. It is the first concern of majority of firm. How can companies make a gain? The answer is the question is customer. If someone buy firms' service or product, company gains money then profit increases so company can operate in market. If the customer is the key of sustainability, companies should focus their needs and perceptions (Gerger, 2004).

By delivering change in business,

Figure 3. CI tools and aims



(thinkperform, 2018)

Customers' expectations and desires always tend to change so companies are facing with these rapid changes. Satisfied customers is one of the most effective marketing way. Customer is not just a single person. It also can be a company, government, municipal, hospital, school etc. These are also tend to change by technological developments. Innovation and technology mostly seem like friend of companies but sometimes it is not. If company cannot keep up with the developments, the companies' activities probably dwindling down.

In the thesis, it is going to be examined an automotive company so the literature had investigated more related to this sector. Automotive sector is one of key player in the worldwide market. The sector provides employment opportunity, economical benefit and value-added activities in each company that any automotive companies operate. Even retail customers can be drivers of automotive sector, tourism, infrastructure, construction, transportation, agriculture or any sector, which need motor vehicles, are also mass drivers of sector. Therefore, their desires and needs are way of competing in market

(https://challenge.tubitak.gov.tr/2010-tr.html, 2010).

Automotive sector is globally crucial sector in worldwide, there are nearly 20 firms those created in 6 countries are driving 90% of whole sector. Therefore, size of the

sector pushed the companies having some quality standards in order to operate with same quality standard in huge market (Aydoğan, 2004). Six Sigma, Lean Management, Total Quality Management and other quality management methods rised up because of desire of serving better and accurate way. The main focus of these methods is "doing the right thing at first" (Aydoğan, 2004). Accordingly, if companies wants to reach the level of serving high quality, they should design their processes in an efficient way. As it mentioned, desire of customers constantly change, firms should be flexible to respond clients' demands (Ömürbek, Bülbül, & Tekin, 2005). If companies cannot reach the changes, they cannot meet with customers on a right way thus they probably lose their market share (Ennew & Klaus, 2004).

Continuous improvement is crucial for Change Management. Continuous Improvement is a type of Change Management. The definition of Continuous improvement comes from one Japanese word that is "KAIZEN". The root of word is better improvement. KAI means change, ZEN means better. Kaizen is a problem solution approach that is applied for process improvements. The philosophy of Kaizen is eliminating non-value added activities in the processes. The method also beneficial for low performed processes through improving their period. The main focus of Kaizen is having inefficient process then improving it. It also advanced to reduce the costs (Acpherson, Lockhart, & Kavan, 2015). First condition of Kazien is know to the problem then applying DMAIC. DMAIC is common for each Continuous Improvement activities such as Lean Management, Six Sigma, and Total Quality Management that are going to be mentioned in this thesis. Kaizen generally consist of smaller but perpetual operations. These small but continuous improvements create better and efficient workplace.

Kaizen is not only about production it is also essential approach for administrative departments too. In the thesis the main aim is trying to understand indirect areas' change management such Human Resources, Marketing, Legal, Accounting, Sales, Controlling etc as well as production. It is known in literature, Kaizen in administrative task is effective, it provides the company competitive advantage (Lareau, 2003). Administrative Kazien is kind of agent that support to whole company Continuous Improvement Culture. This culture also effects management perception therefore tools of management, leadership structure and many of staff

are changing with this method. If employees adopt to Continuous Improvement and Kaizen culture, it is big milestone while competing in the market. Kaizen cultured companies can do same activities in a shorter time and more effective that creates competition advantage (C. Chen & Cox, 2012). Continuous Improvement tools are mainly explained by production perspective but G&A departments are also benefit from these methods as much as production departments.

There are 3 eras that can be mentioned about continuous improvement methods;

The first one is **knowing stage** which was more popular pre-1995. In that times, kaizen had been thought just like engineering perception. Managers and engineers believed they had to just define the waste or problem then found a solution. Any kind of CI method could be applied in those type of situations (Kemenade, 2014).

The other one is **understanding organization** era that was improved knowing stage. The process changed from just finding solution to understanding companies' culture, stakeholders' desires and organizing shop floors but it was still surface. Nevertheless, the method is still valid and has the similar perceptions with control paradigm (Kemenade, 2014).

The last and still valid era is **thinking organization stage** that was got more popular end of 1990s. Value Stream approach got more took off and spread many of companies. In this stage, problem defining method was got more detailed and deeply. The problem was started to measure then effect of the problem also defined by examining organizational processes. The new era is more focused to customer needs. The main desire of the change is not just gaining profit it is also serving to customers in a better and qualified way. The stage is still not enough to serve to best (Gebresas, Analysis of Kaizen Implementation in Northern Ethiopia's Manufacturing Industries, 2014).

Thus, yet well-grounded CI line assists firms to manage margin, minimize employees' turnout, focalize non-defectedness and more logical, develop employees' competencies by generating a colloborative worklife where workes gets totaly aware of the main targets, every step of the CI process requires to be laid out and evaluated to ensure fiscal value to its clients. According to Glover if CI workers implement CI tools the workplace gets more efficient and closed to

reach companies' targets. He defends that Continuous Improvement activities makes the employees' more competent and supports team working. Team working stirs up deployment of CI culture in all over the company (Glover, 2011). It has been researched the companies which are CI internalized are more efficient and making improvements are easier at that kind of work places (Gebresas, 2014).

2.5. EMPLOYEE COMMITMENT

2.5.1. Human Resources Management & Employee Commitment & Change

The word of change defined many times but many of them have different meanings. As the definition of change, management of change can also have different approaches. Tyson (1995) explained change as improve for better (Tyson, 1995). That is to say, change is adopting the new staffs in a suitable way. Shepher and Mathews gave a conference in 1977 and they define change as amend of organizations. Change alters the position than creates a new situation. Many practitioners had defined organizational change but the most common one is changing for keeping up with improvement of updates, they can be sociological, legal, technology, political, economic. The most important concerns is meeting the expectations by changing employees' task and companies' target those requires restructuring in firms (Hartley, Jacobson, Klandermans, & Vuuren, 1990)

From the human resources frame, change can be torminous. The responsibility of HRM is quite important because many researches emphasized the importance of HRM behavior during to change process. It can be said change is constant situation so human resources should create a permanent strategy in order to reach goal and have better competition market (Schuler, 1998).

Schular also highlighted that human resources have to create a change climate without stress in order to give the employees effective roles in change management. Iverson in 1996 advised that human resources should inform the employees about change and make them clear that what it brings and what the responsibilities are the workers. In order to responding customers' need by the

fastest way, organizations should be aware of being agile for changing there organizations should be based on flexible and agile management (Beardwell & Holden, 2000). With the quick changes, new demands, technological improvements customers' need are getting more alternant. Especially nowadays, YouTube, Instagram, Twitter and other social platform drives the customers' consumption. The new concept of being YouTuber is playing crucial role of clients' purchasing intentions. If it is examined, it can be easily seemed; Youtubers' suggestions and concepts are rapidly changing therefore customers purchasing intentions too. From automotive sector to diaper sector, they drive each sector considerably. Companies are facing these perpetual changes and they redesign their products or marketing approaches every single day otherwise they can easily wiped up from market.

At the starting point of change, employees' attributes take shape. Some of employees prefer to be moderate towards to change, some of them have an enthusiastic attitude. When the management give information about change it brings concerns, fear, confusion with it. Employer should be aware of how to manage the concerns (Lines, Selart, Espedal, & Johansen, 2005). The first reflect of change also give an information about the early change adopters. While choosing a change agent, these attributes should be taken in consideration.

Definition of openness to change is not basic because of definition of change is not standard too. Many researchers have different explanation with different methods. As it mentioned before, employees' attribute is crucial factor to reaching change goals therefore practitioners collected attitudes to change under three title such as,

Affective Attitude: The scale of affective attitude demonstrates how much the employee happy with the change and if she/he recommends the change to others or not.

Cognitive Attitude: It is belief of change's importance. If the employee believes the necessity of change, they have supportive attitude for change activities and encourages the colleagues for supporting to change activities. It is also disbelief

too it is word to say having negative thought towards to change therefore not to support.

Behavioral Attitude: Employee contributes to change and have an effective role in change management. In this situation, workers help to change and benefit from changes' opportunities.

Openness to change is defined as being ready for implementing change. Emotionally and psychologically readiness for change implementation (Weiner, Amick, & Lee, 2008). Two scales help to measure openness of change. First scale is, desire of change support, the other one is positive effect of potential results (Wanberg & Banas, 2000). Openness to change increases with non-menacing organizational management, trust of management and positive experience (Devos, Buelens, & Bouckenooghe, 2007).

From the employees' perspective, the employees who opened to change think change is usual and necessary. They think that change supports to improvement and helps to company in order to reach their goals. In the literature, it seemed that there is a correlation between openness to change and self-improvement. Traditional attitude and innovative attitude are at opposite polars (Tal & Yinon, 2002). Individual change readiness has been worked in many times and in this thesis, this is the part of measurement model. If an employee feel ready to change, she/he supports to process and adopt easily (Armenakis, Harris, & Feild, 2001). Cochran, Bromley and Swando had a research in security department, the result of change of openness is having positive attitude and feeling towards to change. (Cochran, Bromley, & Swando, 2002).

In a research, it seem American workers are more openness to change more than Chinese, Indian or Philippine. This research also shows openness to change is related to culture too. Culture's importance should not be underestimated. Culture is important while determining the action plan (Morris, 1988).

Beer ve Nohria claimed that majority of change implementation had failed up to now. 70% of change implementation has failed as consequence of wrong approaches. Common reason of fail is employee resistance towards to change.

Resistance is supporting anything for avoiding change. Resistance could occur loss of organizational commitment (Chawla & Kelloway, 2004).

2.6. CONTINUOUS IMPROVEMENT METHODS

2.6.1. What is Six Sigma?

Six Sigma is a management method that applied by many firms. Nowadays, the method is getting more popular because of its benefits. Six Sigma targets to maximize and sustain companies' achievement level. Many of companies fail about Change Management, Six Sigma avails to carry companies' standards in addition it help to companies having better Continuous Improvement processes.

The main focus of Six Sigma is reducing defects so creating more effective processes. The methodology's aim is keeping the defect level lower. As a measurement, Six Sigma works up keeping the defect level 3.4 / 1000, that is to say if a company produces 1000 unit the expected maximum scrap is 3.4.

If the Six Sigma value reduces, number of defects get higher unit. Generally, Six Sigma supports to create more efficient workplace therefore responding the customers' need in a faster and better way. Jack Welch has a good definition that sums up Six Sigma. "Six Sigma is a quality program that, when all is said and done, improves your customer's experience, lowers your costs, and builds better leaders."

Six Sigma aims having better serving to customers and not only in production side. Every single department of company should adopt this method for uplifting. In the literature, there are many metaphors for explaining Six Sigma such as, Texas Instruments told an sample that adverts 3 Sigma quality equals to occur 1.5 misspelled vocable every page in a book. A Six Sigma ratio should be equal to one missed typed word in a library.

There are two types of Six Sigma Process. The first one includes defining, measuring, analyzing, improving and controlling steps. The second one is

targeting to reach Six Sigma quality level and defining the new process after that measuring, analyzing, designing and justifying process. It measures the level of current process then compares the ideal process and current process and defining the potential mistakes and aim to prevent the potential mistake then creating a sustainable and measurable process for a company. Both of Six Sigma types the first step of method is defining the problem then determining the root reasons of the problem. If the solution of the problem cannot not be applied in a short and direct way, Six Sigma is the method that can be applied. As it mentioned above, Six Sigma is a method that measuring the data first, then creating a solution frame. In 2001 Breyfogle, Cupello and Meadows sorted five questions.

- 1. What is the operational definition for all critical to quality characteristics?
- 2. Can the critical quality characteristics be objectively measured?
- 3. What is the baseline performance of the process?
- 4. Has the success target been determined from the customer's perspective?
- 5. Are the relevant metrics visible and widely accessible?

The key questions also drives the process eliminating non-value added steps in a process. Define, Measure, Analyze, Improve, Control steps identified as DMAIC. DMAIC helps to monitor improvement and create sustainable frame. (Arthur, 2007).

In the analyzing phase, benchmarking is a way comparing the companies with the rivals in the market. It underlined that the importance of data of rivals, this is the way of highlighting the best practices and adjusting the possible ones. Then the implementation phase, tracking is the most important activity of Six Sigma method. (George, 2003).

2.6.1.1. History of Six Sigma

The historical development of Six Sigma started with the sale of American company Motorola and Quasar to a Japaneese company Matsushita in

consequence of Motorola's high scrap level and inefficient processes. In spite of the bad state of Motorola, Matsushita changed the company's destiny and created lower scrapped production system and more efficient management approach. After new strategy of the company, the level of defect reduced 3% from 150%. The success had remarked from many organizations then companies realized that the level of these deviations causes unsatisfied customers. Then the awakening, 4 stepped problem solution method rised up as "measure, analyze, improve, control". Then the process was adopted as reaching of Six Sigma. In 1987, Motorola carried out the method of Six Sigma as long-levelled policy of the company.

After, Motorola implemented Six Sigma, company reaped Malcolm Baldridge International Quality reward. Following that, many of companies such as Citibank, Freztech, Invensys, Maxwell, Medrotonics, Pilkington, Shimano, Wipro Allied Signal, Sony, Whirlpool, General Electric and Texas Instruments applied Six Sigma method as well. Motorola has been applying Six Sigma method since 1980. The efficiency level of company increased three times more than former. Allied Signal Inc. also applied the method in 1991; General Electric started to implement Six Sigma in 1991. The company spent 400 mio \$ for Six Sigma investment but Return of Invesment was measured as 600 mio \$.

Wyper and Harrison applied Six Sigma with a different point of view. They managed their Human Resources Management process by Six Sigma method. This method is related with the dissertation. The dissertation's aim is deeply understanding Continuous Improvement methods in indirect areas like what happened in Wyper and Harrison. Company firstly identified customers then created a process map. Statistical Control Cards, Ishikawa Diagram and Pareto analyzes are some of techniques that company used. At the end of that implementation, employee cost reduced 34% and general expenditures decreased approximately 250.000 Pound. The other important result was the increase of customer satisfaction level. (https://www.capital.com.tr/yonetim/liderlik/six-sigma-zamani, 2003).

Up to now, Six Sigma method had applied at many firms but the first company that adopted Six Sixma is Motorola in 1979. First intention of Motorola was increasing quality level of production for gaining more profit (Harry & Schroeder , 2006). General Electric is another company that implemented Six Sigma and marketed it in marketplace. Jack Welch, the CEO of General Electric, described Six Sigma as,

"The most challenging and potentially rewarding initiative we have ever undertaken at General Electric"

Allied Signal is one of the companies, which implemented Six Sigma, and the saving result of Six Sigma was \$600 million in a year (Pande, Neuman, & Cavanagh, 2000).

There are six parts of Six Sigma method that consists of six components. The first one is focusing customers' desire. That point of view puts the customers at the center of the method. In order to measure clients' satisfaction and perceived quality performance, it can be apllied for various methods. It is important because the main success indicator is customers' satisfaction according to this approach. Second component is data. Data is the way of measuring success indicators. Data analyzing shows the key factor that is behind of success of the failure. Data should be used effectively for deeply understanding. In this thesis will be applying to data to understand employees' perception of Six Sigma.

Third and really important one is process management and development. According to that approach, every organization consists of chain of processes. The factor of success is how to manage these.

The outcome is at the background, the first factor is how the process is managing. Well-managed process occurs better results and less defects (Harry & Schroeder, 2006). The other two ones are proactive management and limitless cooperation. Six Sigma allows the people to have more responsibility therefore more awareness. Six Sigma also supports to define each roles in organization and their relationship with each other. This clearness' benefit is having more care and awareness therefore better interactive management approach in whole organization. The last one is targeting the perfect and removing the defects. The

last part represents the main aim of Six Sigma preventing the defects before it happens. Perfection side of last part is being open for new opinions (Pande, Neuman, & Cavanagh, 2000).

2.6.1.2. Key Components of Six Sigma

The meaning of Sigma ($\Sigma \sigma \zeta$) is standart deviation from the ideal situation. Deviation is using in statistic science as statistical discrepancy (Pande & Burgess, 2003). Six Sigma is a worldwide standart that targets to keep error rate the lowest level. 3.4 error for each 1.000.000 unit is the common target for Six Sigma. The approach is not just keeping the fail level low it also aims to gain more profit, to create satisfied customer, to reduce costs, to reach the companies' target (Özturaç & Bayraktar, 2007). The fundamental of Six Sigma is gaing clear financial profit and having traceable processes. (Türkan, Manisalı, & Çelikkol, 2009).

Six Sigma is a measurable method that makes that preferable. The companies, which implemented Six Sigma, accomplished gratifying results such as quality, efficiency, productivity, austerity, customer satisfaction etc. (Iṣiğiçok, 2007). Some method have been using for Six Sigma. Value Stream Maps, Pareto Analyzes, Histograms, Control Charts and some surveys. These methods' common property is being measurable. In order to variation management or defect reduction, managers need to analyze some of statistical methods for creating a long-term map. SIPOC method is generally used for Six Sigma. It Includes Suppliers, Inputs, Process, Outputs and Customers. In addition to that, methods there also some tools are also valid for Six Sigma. ANOVA, t-test, regression analysis, chi square, central tendency etc. These tools can be applied on some of statistical programs such as SPSS then allows analyzing results in a logical and measurable way. (Breyfogle, Cupello, & Meadows, 2001).

Each implementation of Six Sigma has four level of belts. First, one is champion who have the most experienced of that method and the top responsible for Six Sigma projects. Champion chooses the projects then accepts and tracks. In the operational implementation phase, the responsible people are expert black, black

and green belts. Green belts measures, analyzes, documents etc. (Harry & Schroeder, 2006).

2.6.2. Definition of Lean Management

Nowadays, companies are focusing to produce more value with less resources therefore managers struggle with creating some method to reduce costs and creating efficient processes. Japanese managers are attractive based on their approaches. Majority of improvement ideas come from Japanese culture thus western business people turned their face to Japanese methods. Lean Management is one of the philosophy that comes from Japan.

Beginning of 20. Century, Mass Production rised up and labor force's importance decreased, mechanization's value increased. All these changes provided a basis of new movement of thought. Almost all of the western production approach was producing serial and high amount of production. Capitalistic philosophy can be still seen in market.

While Capitalistic approach was driving western market, at the same time there was different and efficient philosophy prevailing in Japan. The Japanese approach is calling "Miracle of Japan" recently. Lean Thinking is very common and popular approach in this time and age. Lean Management and Mass Production approaches are almost tally unlike each other. Even the big difference of these two methodology, Lean Management was remarked from American, English and other countries. After 1980, Lean Thinking got more popular all around the world (Womack, Jones, & Roos, 1990).

Lean was mentioned first by Krafjick in 1988. The articled told the method of having less resources and producing more. The focus of research was production efficiency with less workers, less place, time, motion etc (Krafjick, 1981). The lean approach also aims to clean process from the activities that are redundant. If one-step does not increase customer satisfaction and it is not increasing market performance, lean approach targets to eliminate that step. Muda principle, which is created by Japanese people, is management approach that targets decreasing redundant steps from any process (Lewis & Billerby, 2012). In Contiuous

Improvement projects, employees are picked from different organizations, the main reason of those creating multi skilled workers in company (Womack, Jones, & Roos, 1990). The book of 'The machine that changed the World' mentions about history of Lean Management. In order to write the book the writers observed several automotive companies.

Lean Thinking is not just for production based. Lean is a philosophy so it can be applied in any organizations or departments. In the literature, lean method implemented many researches in many organizations such as airlines sector, hospitals, schools, human resources and finance departments. (Piercy & Rich, 2009). High quality and low cost: the Lean service (Piercy & Rich, 2009). For the best implementation of lean culture, companies should have listening culture (Atkinson, 2004). Creating and Implementing Lean Strategies. (Atkinson, 2004). Because Continuous Improvement implementation can be applied through workers so companies should consider their needs first. Customer satisfaction is the way of staying at market so in long term plans of firms, Continuous Improvement should take place. Eliminating waste and Continuous Improvement increases customers' retention. (Melton, 2005). The Benefits of Lean Manufacturing: What Lean Thinking has to Offer the Process Industries. (Melton, 2005).

As it mentioned CI techniques are not only for production, there are many successful implementations in the literature. For example, in any of Service Sector the implementation of lean really creates efficient and quicker serving chance. In Service Sector, identifying waste by measuring seem not easy but it can be generated in any company or any organization in an efficient way. (Piercy & Rich, 2009). High quality and low cost: the Lean (Piercy & Rich, 2009).

In this thesis relationship between management approach and change, implementation is going to be measured. In the literature, it had been researched that management attention is an important factor for achieving the change target. If managers empower and encourage the subordinates, change implementation gets easier. (Maleyeff, 2006).

The main focus of lean is eliminating waste. Waste is everything that is not value added from customers' perception. It would be part, tool, approval etc (Slack,

Chambers, & Johnston, 2007), (Bicheno, 2004). In the literature it seemed that waste is unlimited it can be anything which creates expenditure. (Emiliani M., 1998).

In contrast to waste, there are some activities, which customers can benefit from. The activities called as value added activities. The value is defining from customers' perception so anything that customer cannot feel is not value added. (Kollberg, Brehmer, & Dahlgaard, 2007). Measuring Lean initiatives in health care services: issues and findings. Therefore, non-value added activies could be defined as the activies that does not change client's purchasing intention (George, 2003).

In literature, practitioners mentioned about that 'customer value' is can be applied by eliminating wastes and serving service or production in a cheaper and efficient way. (Hines, Rich, & Holweg, 2004).

Womack and Jones (1996) created a list that includes some steps that companies can take for implementing lean culture:

- 1. Get Started by assigning a change agent, spreading Lean philosophy, Lean management tools and implementing in organization
- 2. Build a new work climate by making the employees' know the product range, building a Lean know-how, spreading the soul of being the best and serving the best
- 3. Set organization through presenting Lean approach, starting expedient transmission and publicizing Lean tools by using some incentive tools
- 4. Accomplish the spreading the lean culture by using the methods that are above, spread whole culture from suppliers to customers and put an global vision in whole organization

In the first step, the map mentions about "change agent" in companies that examining for thesis, Change Management departments tries to implement that culture as well. Up to now, some of employees volunteered to be a change agent and lean consultants trains them about continuous improvement methods and how

to implement the culture in their own departments. In the thesis, the mindset of "change agent" is going to be mentioned.

In Lean Change Management book, there is an important advice to manager who are willing to change. The recommendation is while managers are assigning a change agent they should be aware of their capabilities. The change agents should have to have some attributes such as aligning and notice the changes easy therefore manager should aware of while they trying to find some of to assign change agent. Early adopter can be good choice for this task. (Little, 2014). In literature, majorty people defended that job rotation increases their job satisfaction (Treville & Antonakis, 2006). It also examined in literature, Lean companies tend to allow job ration more than non-lean companies (Bouville & Alis, 2014). According to some practitioners" opinion one of essential point of Lean is allowing employee rotation in non-production departments. One of aim of Lean is creating multifunctional work climate through trainings and spreading the culture in every single department (Forza, 1996); (Shah & Ward, 2003); (Bouville & Alis, 2014).

Lean based firms have employees that are more multifunctional because Lean organizations need job rotation in order to increase awareness for wasted steps. Business blindness is common issue that have been struggled in many years. According to some business practitioners, lean can also prevent business blindness to because of the reason is doing the same job for many years therefore rejecting to improve or change standard process (Hiltrop, 1992).

In craft based producing firms, workers should had to be high skilled. Because machinery was not valid as much as nowadays. High skilled works could do limited things because a staff that people could do is basic than the staff can machine supported one. The situation caused that firms could not supply with customers' changing needs. Craft based production also was not practical it took lots of time by comparing with machinery production. Mass productions era was very different from craft production era. The both of facilities got together and firms started to be able to produce quick and huge amount.

The mass production companies was not required high skilled employees because of the task had been narrow. They were just focused producing more and selling more but that approach made the companies lose the quality standards and forced them to employ unneeded number of workers. The other financial lost was producing more then market needed. Redundant productions had increased expense of place and extra supply. This confusion made the employees' demotivated and exhausted. On the other hand, lean companies has almost whole advantages of craft and Mass Production styles. The approach combines both of them and creates processes that are more useful.

Five Principles of Lean Management;

• Value

Value is defined as service that customers desire to pay for it. Value is serving the customers what they need, when they need. From this perception, value is just defining from customers' point of view. Everything that customers do not desire to buy is "muda".

Value Stream

Every single step in an organization is diving as 3 topics as value-added, nonvalue-added, unavoidable costs. After defining whole process, the first principle is eliminating the nonvalue-added ones. There are some unavoidable costs in every firms even they are sometimes mandatory, companies even so try to eliminate them but some of them obligatory like legal controls etc. In order to define the whole process, companies sometimes use value stream map because VSM allows to companies identify nonvalue-added step even some of them clear they cannot be realized before mapping.

• Flow - Make Value Flow

After eliminated wasteful activities, the ratio of value added activities naturally increases. Value added activities should be applied one by one. The speed of flow is important because if it is quick it easily returns to cash.

Pull

For realizing, the value flow there is an important point is controlling speed of process. Process controlling happens by eliminating whole wastes in the process. The main focus of Lean System is producing customers' need therefore every step

is driver of the previous steps. So the system is based on customer demand. When pull system applied, can be prevented that overstock problem. The fluctuation risk also vanishes with well-planned pull system is valid.

Perfection

The better is always valid. From that approach companies focus customer desire so each processes are planned take in consideration of customer value. Kaizen is the part of that step. If you continuously improve, you are closed to perfect.

In each piece of Lean approach one thing is always in the foreground is "waste". So what is "waste" and how is defined in literature.

Defects

Scrap or failure products are totally waste for a company. The productions those produced failure but could be fixed are waste because of fixing and time waste. Unrecoverable parts are labelling as if scrap the situation causes waste of labour, money and time.

Overproduction

Producing more than customers need causes waste. Overproduction is massive problem in mass production based companies. These type of firms produce more than market demanded therefore they are facing lots of problems like huge stock and stock place costs. Customers does not pay for stock that means overstock is redundant.

Waiting

In production or serving cycle ever single thing that waits create waste. Raw material, semi-product, labor, vehicle or any kind of participant of production should work non-stop. Otherwise, every time that they wait is waste.

Non-utilised resources/talents

Human Resources operations fails sometimes because they hires employees that they cannot be efficient in company. If employees could work that matches their skills the organizations would be more efficient.

Transportation

Any transportation transaction does not contribute value of good so companies should keep the transportation level as low as they could. It does not have to be good it also can be invoice, paper. The departments that are in relationship should located closed. (e.g. Controlling and Accounting)

Inventory

Overstock is one of big problem that the companies facing. There are many incidents as consequence of overstock. After Second World War, Ford faced a big economic crisis but the depression is not the only thing that company should had to overcome. Company bear the stock cost too. Number of production should be planned by taking consideration customers' need.

Motion

Every redundant movement is waste. Every movement should be related to production otherwise it is calling as waste in lean approach. The work environment should be well organized for avoiding that waste.

Excess processing

Some of activities can be waste for production cycle. Duplicated steps or redundant approvals can be classify as excess processing. High hierarchical management systems sometimes cause excessing the process.

2.7. COMMON TOOLS OF CONTINUOUS IMPROVEMENT

2.7.1. 5S

Lean approach targets to have clean, safety, efficient work climate in company. In order to reaching the desired work environment 5S is a common tool that is used by many companies. 5S supports the organizations to separate ideal and redundant steps in a process. 5S is systematic way that carries the companies CI point. 5S is explained by many researches in many times. (Savage, Bagnall, & Longhurst,

2005), (Chapman, 2005), and (Al-Aomar, 2011). As a sum up it, consist of five ranking steps such as,

• Sort (Seiri)

In this step, the redundant items are separated from process and the process is cleaned from these unnecessary steps.

- ► The required materials are separated from unnecessary materials.
- ▶ The materials those are unnecessary are removed from the work area.
- ▶ The materials to be used on the work are accumulated on one side.
- ► The materials considered as a waste are removed from the work area; put in a common area. Authorized persons are empowered to organize this area.
- ▶ Redundant materials are labeled red and placed in a common red area.
- ▶ The authorities to arrange the common red field area will meet at the head of the red zone and decide which material and tool will go to which unit.

• Set in Order / Simplify (Seiton)

Materials are arranged appropriately and safely so that they are ready for use when necessary. The aim is to reach the materials when it required for use within 30 seconds.

- ► Each material is named individually and the frequency of use is determined.
- ▶ The installation of objects is carried out as, very necessary items are in the hands or in the work area, the less necessary items are placed in the lower shelf, the less necessary items are placed in the top shelf. The equipment and documents required should be available within 30 seconds.
- ► The layout of cables, air ducts and pipes at work should also be considered. According to the arrangement in the 5S technique, the cables, air ducts and pipes must be installed in a higher place than the ground.

- ▶ The operating manual of the tools, materials and equipment used in the work area is placed near the point of use. In addition, facilitations can be made by using the visuals and charts. For example, the pressure gauge value range information is marked on the pressure gauge with the help of a pencil, so that even a person without this information can easily check the range.
- ▶ The storage area is kept wide. Storage is done along the walls to save space.
- ▶ Place the front side of the materials for easy transportation.
- ▶ The color is used to determine the materials quickly. Each material and the site where it is stored is markedly marked.
- ► Specially designed panel is used to arrange the instruments and measuring instruments required for each special machine.

• Shine/Sweep (Seiso)

The work area must be free of any dust, oil and dirt and should be kept clean. Pollution should be eliminated in its source.

- ► To investigate the sources that cause pumping.
- ► Measures are taken for difficult-to-reach places.
- ► Working is done to decide which part to clean.
- ► Work safety warnings are made.
- ► The cleaning method is decided.
- ► Any material and equipment are cleaned first.
- ► The worn wires, hoses, and tubes are replaced with new ones.

• Standardization (Seiketso)

Being clean and tidy should be made a habit. Standards and procedures targeting continuity of applications should be established. A control mechanism must be established to ensure that everyone is in compliance with the procedure.

- ► Ensure that everyone knows his or her responsibilities for sorting, editing and cleaning.
- ► To ensure the continuity of each thing, photo and visual controls are used.

The state of the 5S application is reviewed by reviewing regularly maintained checklists.

▶ The standard color codes are used for the materials used continuously.

• Sustain/Self-Discipline (Shisuke)

Being clean and tidy should be made a habit. Compliance with the procedure and the results obtained should be measured, recognition and appreciation should be applied.

- ▶ It is decided to apply the rules for the education and discipline to be given.
- ▶ Training is provided to everyone in the field of study, 5S and its objectives.
- ► The supervision of the given 5S training and the mentioned rules is done continuously.
- ▶5S communication board is created and audited regularly.
- This process is continuously monitored and open to improvement.

(Yükselen, https://yalindanisman.com/just-in-time-2/, 2018)

2.7.2. Just-in-Time (JIT)

Various definitions can be introduced to the Just-in-Time Production (JIT). Some of these definitions limit the system only to the reduction of inventories. However, JIT is far more extensive. Not only in manufacturing-related activities it can be used also in other areas of the production system, from material procurement to storage, from maintenance to engineering design, from sales to top management. Because JIT is a strategy that aims at a significant and continuous improvement of work efficiency through the prevention and destruction of time and resource losses in the entire organization. More generally, the JIT philosophy is a strategy that

aims at continuous improvement to ensure the lowest cost and highest customer satisfaction with the participation of all units. Unfinished inventories of finished and semi-finished products are eliminated in the operation of this principle, which can be summarized as first sell then produce. JIT, also known as non-stock production or inventory, is based on the optimum use of all production resources. In this system, inputs such as capital, equipment and labor are used in the most appropriate utilization. It is aimed to develop a system where customer's quality and delivery requirements are met with the lowest costs.

The objective of JIT is to eliminate any element that prevents productivity in production, imposes unnecessary costs to customers or jeopardizes the competitiveness of the company. JIT has no claim to destroy past applications. Although it is an integrated system within itself, it may not need to include all units of the organization in practice. However, JIT is a system that requires new changes in concept and behavior that may be contrary to the traditional approach at every stage of production, from subcontracting to deliver.

(Yükselen, https://yalindanisman.com/just-in-time-2/, 2018)

2.7.3. Kanban

Kanban, first introduced by David J. Anderson in early 2000s, as a Lean Production principle (especially the lean manufacturing method that Taiichi Ohno began to implement in Toyota in 1953) and the Theory of Constraints is an evolutionary methodology that involves systemic optimization approaches such as Systems Thinking (Tonga , http://www.acmagile.com/blog-tr/kanban-nedir/, 2018).

It aims to detect and alleviate the system by first identifying the points creating the garbage producing and waiting points by visualizing them and then destroying them. With this lightening and simplification, the organization will be able to give responses that are more agile. Due to its evolutionary nature, negative reactions from the organizational culture that can be experienced in other applications are observed at the lowest level.

Kanban begins with the introduction of basic principles and the application of general practices. Because of the effectiveness of the first application steps and the

high value obtained because of these applications, Kanban's only purpose is to visualize the system and limit the work. The main purpose of Kanban; is to create a stable system that can create a real pull system and adopt a "just-in-time production".

2.7.4. Continuous Flow

Continuous flow, raw materials, materials and parts can be transformed into products without any retention with sequential operations, and thus productivity, cost, delivery time, compliance with demand changes, stock level, right production at the first time, provides significant improvement in performance indicators.

(www.lean.org.tr/surekli-akis-yaratmak-egitimi/, 2018)

2.7.5. Standardized Work

Standard Work determines the procedure for doing business in a machine-dependent or independent process. Standard Business is a key element that plays an important role in the Toyota House. The standard work improves the stability of the process and reveals the improvement conditions in the process. Taiichi Ohno said,"Where there is no standard, Kaizen does not exist! It is a clear expression of how important it is to capture perfection. After determining business standards, Kaizen studies and standards are continuously revised and the PDCA cycle is continuously returned.

(Yükselen, https://yalindanisman.com/standart-is/, 2018)

2.7.6. Policy Deployment (referred to as Hoshin Kanri)

Nowadays, companies make plan fort he future in order to compete with their rivals' in a vying way (Yükselen, https://yalindanisman.com/hoshin-kanri/, 2018). The plans always are medium or large term. Hoshin Kanri is one of the pratice. The targets of Hoshin Kanri's are listed below,

Increase of companies' skill and performance

Establishing the corporate strategy on the annual management plan by

making the unified policies and plans unfolding,

• Utilizing the main resources just for management

Gathering quality, cost and time in a efficient way

Protecting company from unexpected developments and strategical

evolutions

Hoshin: Method, form, magnet, compass

Kanri: Management, control

When the meanings of the both words are blended, policy deployments rise up.

Although, the method changes company to company, Policy Deployment,

Managing for Results, Target Expansion etc. are the various definition of the same

method. Hoshin Kanri provides an excellent management and planning tool for

the company to see its priorities and to use its resources in this direction. The aim

of Hoshin's conviction is to get rid of the current situation, to analyze the existing

problems and to make a big leap in the way of environmental conditions. Hoshin

Kanri is a one-year plan for achieving the goals of management and the goals

developed by the organization in order to achieve these choices (Akao, 1991).

Hoshin; It can be formulated as Hoshin = Targets + Tools.

2.8. MARKET PERFORMANCE

Market Performance is a factor that can be measured by variuous KPI such as

sales, profit, market share, penetration or customer satisfaction. Each of these

variables shows performance level of a company. These indicators are tangible

measurement but performance can be construed as perceptional way such as

consumers' attitude towards a brand or perception of people (Jayapal, 2018).

Figure 4. Continuous Improvemevent and Market

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(Leankit, 2018)

Market Perfomance can be gathered under 5 titles such as; productive effectiveness of suppliers, distributive efficiency, the setting of 'fair' prices to consumers, product performance, technological progressiveness (C. Pass, B. Lowes, & L. Davie, 2005). These indicators required continuous improvement in order to reach markets' rapid changes. Continuous Improvement methods such as Six Sigma, Lean Management targets to serve customers' better service of production. As it mentioned at Lean Management part, Lean philosophy's aim is eliminating non-value added activies from the processes therefore increasing the customers' satisfaction. All CI tools are focusing customer satisfaction and market performance.

CHAPTER THREE HYPOTHESES AND PROPOSED MODEL

3.1. COMPETENCY (SELF-EFFICACY)

GSE was measured applying the nine-item scale created by Schwarzer, R., & Jerusalem, M. Participants marked a Likert scale ranging from "strongly disagree" to "strongly agree" to identify their feelings about their competency to reach their targets (e.g. "I am confident that I could deal efficiently with unexpected events."). (Bandura, 1997) Defended competency as conscience in one's skills to perform and manage issues of working required in managing prospective statements.

Figure 5. Goal Attainment and Motivation



Practitioners claim when people feel competent they motive their selves to act. Some of researches have showed that competency is not just personal concern it effects organizational performance (Gist & Mitchell, 1992). When initially considered as a specific variable for the task, support for general self-efficacy has been shown, a trend that foresees individual behavior among situations (Lennings, 1994). The most effective mastery of self-efficacy (personal gain), indirect experience (modeling), verbal persuasion and physiological arousal; each serves to increase self-efficacy perceptions (Gist & Mitchell, 1992). Schunk (1983) stated that self-efficacy is especially remarkable in a crisis. People's experiences will create a general set of expectations that lead to new situations of leadership, self-efficacy and interdependence (Sherer, ve diğerleri, 1982).

Second part was about Competency / Self Efficacy and the question set is below,

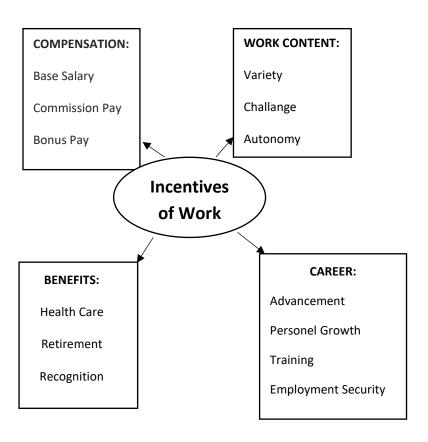
General Self-Efficacy Scale (GSE)		warzei	r, R.,	& Jei	rusalem,
	M. (1995)				
I can always manage to solve difficult problems if I try hard enough.	1	2	3	4	5
I am confident that I could deal efficiently with unexpected events.	1	2	3	4	5
Thanks to my skillfulness, I know how to handle unforeseen situations.	1	2	3	4	(5)
It is easy for me to stick to my aims and accomplish my goals.	1	2	3	4	(5)
I can solve most problems if I invest the necessary effort.	1	2	3	4	(5)
I can stay calm when facing difficulties because I can rely on my coping abilities.	1	2	3	4	5
When I am confronted with a problem, I can usually find several solutions.	1	2	3	4	5
can usually handle whatever comes my way.	1	2	3	4	(5)
Changes always puts me under stress. (R)	1	2	3	4	(5)

(Vandenabeele, Brewer, & Ritz, 2014).

3.2. INCENTIVES

According to Locke, personal goals are of great importance as a determinant of the success of the employees. Behaviors and responses to the realization of organizational goals at the workplace depend on the perception and judgment processes appropriate to the people's goals. The relationship between motivation and incentives is a reasonable result for institutions. Each motivation theory or study tries to find out why it is a performance decline for public employees and organizations by trying to find out how to increase individual productivity, so they identify a set of determinations and start to explore how to motivate employees. Selected incentives should motivate and encourage employees, so they should be determined in line with organizational realities and, in particular, the demands of employees. They may be financial or non-financial, but only lar correct incentives alar, practices, or sanctions may encourage employees to work efficiently. It should be considered in the public sector in determining the men public service motivation ve incentive, which includes attracting public policy and policy, public interest and citizenship duty, compassion and self-sacrifice (Vandenabeele, Brewer, & Ritz, 2014). At this stage, the theories share various types of incentives, directly or indirectly. Various theories and models have been developed about motivation. Most of the models focus on incentives.

Figure 6. Incentives types while performing



In order to measure employees' perception of incentive while contributing of

Statements		Holt, 2007			
Individual reporting of results and rewarding of success affect my contribution.	1	2	3	4	5
Non- financial rewarding (recognition by top management, mention of personal success) of the contribution performance affects my participation.	1	2	3	4	5
Taking extra bonuses after Continuous Improvement participation affects my contribution positively.	1	2	3	4	5
Setting the contribution of Continuous Improvement as Lead goal affects my participation.	1	2	3	4	5
Meeting with new people affects my contribution positively	1	2	3	4	5

Continuous Improvement activities the questionnaire is applied which is below.

3.3. MANAGEMENT SUPPORT

Management Support plays crucial role when the literature is examined. It has been contradictive issue that how the behavior should be shaped. Practitioners have been working on this topic in many years. When the literature is analyzed that can be seen leadership shines out. Change or CI activates need leaders rather than tyranny. Continuous Improvement is a culture and volunteering work this is why supportive and motivational behaviors become more crucial. In the literature, Management has been measured with different scales and methods. Some of researches it was called as "Transformational Leadership" and Podsakoff's (1990) scale has been applied. Some of research defended that self-efficacy and leadership behavior could not been separated therefore they measure these factors together (Shamir, House, & Arthur, 1993). (Bandura, 1986), (Kirkpatrick & Locke, 1996), (Yukl, 1998), (Eden, 1992) and many of practitioners had been analyzed Management topic. Effective management of organizational change;

understanding the current situation, envisioning the desired future situation, ensuring the movement of the organization from the current situation to the desired future and monitoring its progress in this way. Managing change requires leadership approaches and skills beyond ordinary situations (Keçecioğlu, 2001). In order to better understand how organizational change can be effectively realized, it is necessary to integrate the views expressed on transformational leadership and change.

Statements		Holt, 2007)7
Encouraging to change by senior managers (E3)	1	2	3	4	5
Encouraging to change by managers(E4)	1	2	3	4	5
Our organization's top decision makers have put all their support behind the change effort. (E2)	1	2	3	4	5
Every senior manager has stressed the importance of the change (E3)	1	2	3	4	5
Every manager has stressed the importance of the change (E4)	1	2	3	4	5
This organization's most senior leader is committed to the change. (E2)	1	2	3	4	5
Thinking that we are spending a lot of time on this change when the senior managers don't even want it (REVERSE)	1	2	3	4	5
Management has sent a clear signal the organization is going to change	1	2	3	4	5

3.4. PERCIEVED EMPLOYEE COMMITMENT AND MARKET SUPPORT

The company, which the research is applied, considers about industrial safety so some of information cannot be taken. For example employee commitment scaled questions are confidential therefore cannot be asked in questionnaire. Employee commitment replaced as perceived employee commitment. Each of department roles and responsibilities are determined with procedure therefore the questionnaire should be related to Lean Management departments' tasks. Employee commitment and Market Performance parts are more related with Human Resources, Marketing departments. While publishing the questionnaire the main focus is deeply understanding the motivations that set the employees in a motion and their perception about Continuous Improvement. By considering the literature, questions were shaped.

Statements				
Increases final customer satisfaction.*	1	2	3	4 5
Increases final customer focus.*	1	2	3	4 5
It supports a faster response of final customers' desires and requests*	1	2	3	4 5
Increases employee commitment*	1	2	3	4 5
Increases communication with other managers	1	2	3	4 5
Increases interdepartmental collaboration*	1	2	3	4 5
Increases employees' competency	1	2	3	4 5
Improves the effective angle of view against problems	1	2	3	4 5
There is a link between the Lean approach and the long term strategic direction of the company	1)	2	3	4 5
The Lean Team provide support for implementing the Lean initiative	1	2	3	4 5
Communication about the Lean business strategy has been good	1	2	3	4 5
There is an awareness of the impact of the Lean business strategy	1	2	3	4 5

Lean as an improvement methodology is suitable to our organization	1	2	3	4	5
Implementing the Lean business strategy has been more problematic than it was anticipated	1	2	3	4	5
Through adoption of Lean business strategy, senior managers show their commitment for increasing performance.	1	2	3	4	5
As a result of Lean business strategy, staff are focusing on improving the cross functional processes.	1	2	3	4	5
The Lean business strategy has enabled the department to meet customer requirements better	1	2	3	4	5
Lean business strategy has enabled the department to match resources to workload better.	1	2	3	4	5
There is scope for spreading Lean strategy in other departments.	1	2	3	4 (5

There was a 19 item-scaled questions below which includes strategy of CI, employee commitment and Market Performance

3.4.1. Percieved Employee Commitment

Increasing organizational talent seems to be becoming more crucial in the 1990s and there is an evidence that institutions are under intense pressure to respond to changing conditions. Some of the authors, who have addressed the field of commitment and change, point out that the decline of the 1980s and 1990s encouraged employers to explore new control systems and motivations in the workplace and to get rethink the foundations for managing the workforce. Indeed, the dynamism of organizational change has gained importance because the

institutions have a large number of internal and external pressures and have to remain competitive. The aim of managers, especially human resources function, is to create an environment in which employee participation can be maintained after organizational changes. However, there has been no adequate explanation as to how this can be solved.

Employee Commitment	(Meyer & Herscovitch, 2001)					
Increases employee commitment*	1 2 3 4 5					

3.4.2. Percieved Market Performance

Market performance is primarily determined by market structure and market conduct. For example, in markets where economies of scale are important, a high market focus may be necessary to minimize procurement costs. In terms of behavior, the rivalry price among firms is likely to have a negative impact on consumer well-being, while conspiracy benefits consumers. This and other elements of the market structure and behavior are a major concern of a government's rivalry policy and industrial policies (https://financial-dictionary.thefreedictionary.com/market+performance, 2018). In order to make customers satisfied, processes should be qualified and eliminated from wastes. CI cultures provides lean service to customers as consequence of that people can get services cheaper and more qualified.

Market Performance	(Asmi, 2016)
Increases final customer satisfaction.	1 2 3 4 5
Increases final customer satisfaction.	1 2 3 4 5
Increases final customer focus.	1 2 3 4 5

3.4.3. Alignment with Business Strategy

With this set of questions, it is aimed to measure the link between continuous improvement activities and the company's strategic direction. The related set of questions was taken from a doctoral thesis which was previously conducted and applied to measure the perceptions of employees. In the previous research, the compatibility of lean management and strategic plans of the employees with the question set was measured.

In this thesis, this question will be asked to the employees of the company where the vehicle was made and it is aimed to interpret the deficits with a metric result.

Alignment with Business Strategy	(Asmi, 2016)				
There is a link between the Lean approach and the long	1	2	3	4	(5)
term strategic direction of the company					
Communication about the Lean business strategy has	1	2	3	4	(5)
been good					
There is an awareness of the impact of the Lean business	1	2	3	4	(5)
strategy					
Lean as an improvement methodology is suitable to our	1	2	3	4	(5)
organization					
There is scope for spreading Lean strategy in other	1	2	3	4	(5)
departments.					
Lean as an improvement methodology is suitable to our	1	2	3	4	(5)
organization					
Implementing the Lean business strategy has been more	1	2	3	4	(5)
problematic than it was anticipated (R)					
As a result of Lean business strategy, staff are focusing	1	2	3	4	5
on improving the cross functional processes.					

Lean business strategy has enabled the department to 1 2 3 4 5 match resources to workload better.

Figure 7. Lean and Components



CHAPTER FOUR

RESEARCH FINDINGS

4.1. RESEARCH OBJECTIVE AND DESIGN

4.1.1. Research Objective

The conceptual model has several claims that are going to be measured by questionnaire. Based on the research model, there are relationships between contribution of Continuous Improvement activities and Management Support, Incentives and Competence. In order to measure these relationships literature is examined and a question set is created. Qualitative research method is commonly used by researched who wants to measure participants' perception in numeric way. This way provides to researches narrower and framed paradigm (Teddlie & Tashakkori, 2008). Quantitative researches, which are applied with a survey and scales are easier to comment. Answers can be converted to numeric style and some of analyzing programs such as SPSS can measure the correlational, regressional relationship. Quantitative research contains statistically explainable data so it

follows the postpositive paradigm (Black, 1999). Numeric answers are the most appropriate way for this research because of high amount of participants. These participants can be classified with their answer and it is easier to test the hypothesis.

In this thesis, each of factors have different measurements. In order to reach ideal reliability, majority of scales are multi-item. Single item is mostly not preferred because of its low reliability (Churchill, 1979). All factors are measured by using Likert scale as strongly disagree, disagree, neutral, agree and strongly agree. Likert scale provides the respondents to answer how degree of they agree or disagree therefore measurement also be easier. Demographic questions are asked at the beginning of the survey in order to attract to respondent's attention, the questionnaire was published in the company and the respondents maybe quitted at beginning of the survey by getting confused about the questions.

Questions were determined by examining previous research. In this context, more than 40 thesis and articles had analyzed then each of research model's survey had considered. Many of researches had applied in various companies and sectors but this thesis is going to be applied just in automotive company so questions had to be shaped in view of the fact that situation.

All the scales were used in previous research so they tested and approved before. The coming part the questions will be shown.

The questionnaire was published to the white-collar employees of the company via Google Forms and it was given 1 week to answer. The results were adjusted and all statistical analyzes were performed via SPSS program. The results were tested by several methods. These tests were reliability, factor, correlation and regression tests.

Employees had one week in that to finish and respond the survey. The focus for this thesis is to understand and investigate how companies motivate the whitecollar workers for Continuous Improvement projects in direct and indirect fields. There some motivations for easing of Lean deployment, the intention of thesis is exploring these reasons in deeply. While reviewing literature, it could be seen lots of research for explaining white-collar workers' motivations. First, overlook the terms that our model includes.

4.1.2. Research Design

Continuous Improvement has been applied in many years in different types. In the existing company Lean Management department have a coaching role in order to diffuse Lean Culture and Continuous Improvement discipline this is why many of questions and majority of thesis parts consist of Lean Management philosophy. Lean is firstly implemented in manufacturing area in an automotive company then it diffused in many company as a culture. In this thesis, questionnaire is asked both production departments and non-production departments in order to understanding common and different perspectives. The intention of Lean Department is diffusing the Lean Culture by paying employees' attention. Employees affect from various factors but many practitioners agreed on some factors such as incentives, competency and management support. Different people have measured these factors several times and many of results show these factors effect employees' contribution of Continuous Improvement activities.

When the literature examined, studies mentioned relationship between motivation and contribution of change management. Change management is explained under different titles, such as Six Sigma, Lean Management, and Total Quality Management. Every single method focuses creating more efficient workplace by employees' contribution. Previous studies showed motivation factors that employees affected. Maslow created the hierarchy pyramid that also explains people's motivation. Motivating workers has been crucial and challenging point for employers. Motivation is important because it sets employees in motion while whey are working in daily life. Leaders should understand the factor that motivates the employees therefore; they may effectively manage them aligned with organizational target (Brent, 2018).

Employee motivation is a key factor a company because without employee motivation, companies could not reach their goals that carries the company in a

risky position. If workers are motivated, they generally be more productive and successful (Heryati, 2018).

When the previous researches and company's current position gathered, there was a need born. How much each of factor effects Continuous Improvement activities so company could take a position by considering results. However some of factors effect employees' motivation, nevertheless they cannot be applied. So the factors, those would take place in model, should be selected which can be applied in company. If the independent variables cannot be applied, employees may not answer in an appropriate way therefore the results of survey would not be reliable.

4.2. SAMPLE SELECTION AND DATA COLLECTION

An automotive company operates more than 100 years all over the world. The company is operating in various country but thesis focus is company's Turkey Operation. In Turkey, operation approximately 7000 employees are working and 1500 of them white collared. The questionnaire is applied for just white collared workers.

Company is operating Turkey market for approximately 50 years and Lean Management department is constituted 10 years ago. The main tasks of Lean Management Department are diffusing culture and coaching the employees' whilst they are operating Continuous Improvement projects. Lean Management applies some ways to assign some agents for diffusing Continuous Improvement Culture. Lean Management uses some methods in order to pay employees' attention. Lean Consultants mostly apply marketing methods such as arranging little contents, rewarding good projects, coffee time activities etc. These are the main indicators that company really consider about Lean and Continuous Improvement Approach.

Lean Management Department has been trigged more than 100 projects with various department but the focus is not driving projects, department's focus is diffusing the CI culture. In order to understand the motivations that behind the contribution of CI activities, the thesis and survey is going to play crucial role. While sending the survey e-mail content is, "We would like to measure the motivations that set us in motion to deploy the Continuous Improvement Culture

and diffuse this culture in our company. The questionnaire that we have shared will enable us to measure your perspective on the Continuous Improvement Culture and be a road map for how we can diffuse this culture."

The Lean Management Department's intention is also took place in literature. Filiz Eyüboğlu defined the ideal Process Management and Improvement as steps below,

- There should be some process owners and they manage the process that are responsible for, monitor continuously and initiate improvement efforts by establishing improvement teams when they see deviations or disruptions from the target or when customer expectations change.
- Process owners do not create improvement teams every time. It is important for employees to solve a problem or a step that would be more efficient to replace or change. Several volunteers are important for continuous development and systems and tools to encourage this should be established; establishing a well-managed Suggestion System, taking into account the number of suggestions in the performance evaluation, participation of all employees for Process Management is essential.
- It is important that employees can run the process fast without asking anyone. They should be empowered.
- Measurement system will be formed to monitor process performance and deviations in measurements will be examined (Eyüboğlu, 2018).

Lean Management team also considers the items that are listed below while assigning CI agents and additional criteria is being volunteer.

By taking consideration these factors, Lean Management department carries on the CI activities in the company.

4.3. QUESTIONNAIRE DESIGN

In this thesis, each of factors have different measurements. In order to reach ideal reliability, majority of scales are multi-item. Single item is mostly not preferred because of its low reliability (Churchill, 1979). All factors are measured by using Likert scale as strongly disagree, disagree, neutral, agree and strongly agree. Likert

scale provides the respondents to answer how degree of they agree or disagree therefore measurement also be easier. Demographic questions are asked at the beginning of the survey in order to attract to respondent's attention, the questionnaire was published in the company and the respondents maybe quitted at beginning of the survey by getting confused about the questions.

Questions were determined by examining previous research. In this context, more than 40 thesis and articles had analyzed then each of research model's survey had considered. Many of researches had applied in various companies and sectors but this thesis is going to be applied just in automotive company so questions had to be shaped in view of the fact that situation.

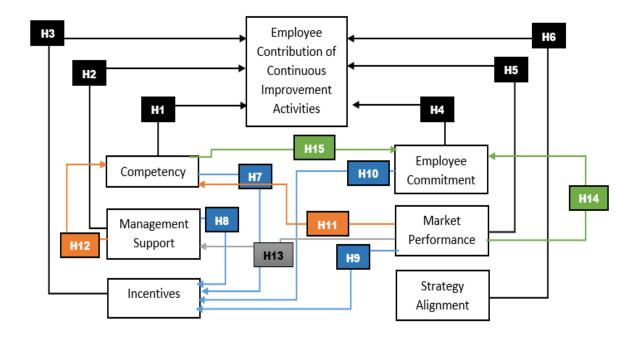
All the scales were used in previous research so they tested and approved before. The coming part the questions will be shown.

The questionnaire was published to the white-collar employees of the company via Google Forms and it was given 1 week to answer. The results were adjusted and all statistical analyzes were performed via SPSS program. The results were tested by several methods. These tests were reliability, factor, correlation and regression tests.

Employees had one week in that to finish and respond the survey. The focus for this thesis is to understand and investigate how companies motivate the white-collar workers for Continuous Improvement projects in direct and indirect fields. There some motivations for easing of Lean deployment, the intention of thesis is exploring these reasons in deeply. While reviewing literature, it could be seen lots of research for explaining white-collar workers' motivations. First, overlook the terms that our model includes.

4.4. THEORETICAL FRAMEWORK OF RESEARCH

The proposed model is below claims the hypothesis above,



H1: Incentives positively affects employee's contribution of Continuous Improvement activities.

H2: Competency positively affects employee's contribution of Continuous Improvement activities.

H3: Management Support positively affects employee's Continuous Improvement activities.

First three hypothesis created to measure the relationship between selected motivation factors' relationship with Continuous Improvement activities. In the literature, the each factors measured but in different countries. These factors are measuring at first time in Turkey. Each of variable has different reference questions; they are going to be explained in coming parts.

H4: Contribution of Continuous Improvement activities increases Perceived Employee Commitment.

H5: Contribution of Continuous Improvement activities increases Perceived Market Performance.

H6: Continuous Improvement Strategy and Business Strategy has a lineer relationship

These two hypothesis claims that Continuous Improvement activities positively affects employee's commitment and market performance but there is an obstacle while creating questions set. The questionnaire is applied in automotive company by using all-user e-mail data therefore some of sensitive questions cannot be asked this is why model is shaped as perceived Employee Commitment and Market performance by asking several questions.

H7: Competency and Management Support has a relationship

H8: Competency and Incentive has a relationship

H9: Incentive and Management Support has a relationship

H10: Incentive and Market Performance has a Relationship

H11: Incentive and Employee Commitment has a relationship

The last three-hypothesis aim is understanding the impact of factors each other. The result would be should the aspect of relationships if they are linear or not. as for what it will do, if the relationship is straightforward, applying two scales can increase the effect. Since each of the scales are asked in terms of measuring the contribution to change, the results will probably not be misleading.

CHAPTER FIVE

DATA ANALYSES AND RESULTS

5.1. RESEARCH FINDINGS

The questionnaire was published to the white-collar employees of the company via Google Forms and it was given 1 week to answer. The results were adjusted and all statistical analyzes were performed via SPSS program. The results were

tested by several methods. These tests were reliability, factor, correlation and regression tests.

5.1.1. Descriptive Stastistic Fof Demographic Variables

Demographic questions are often used to separate participants into smaller groups based on criteria such as class, age, education, income level, marital status. If one of the objectives of the survey is to determine the important differences between the responses of different groups, such questions become important (Jetanket, 2018). In addition to age and educational status, the surveys were also asked in the survey. The aim is to capture the differences between the people working in the production and non-production areas. The departmental data will be applied at future studies.

Details of demographic results can be seen below;

Table 1. Demographic Distribution

Measure	Items	Frequency	Percentage
Age	19–24	33	6,0%
	25–29	106	19,4%
	30–39	239	43,7%
	40-49	135	24,7%
	50+	34	6,2%
Gender	Female	135	24,7%
	Male	412	75,3%
Education	High school	81	14,8%
	University	310	56,7%

	Master	154	28,2%
	PhD	2	0,4%
Working Years	0-1	87	15,9%
	2-4	105	19,2%
	5-9	104	19,0%
	10-19	166	30,3%
	20+	45	15,5%
Directly connected to the	e Yes	148	27,1%
final customer	No	399	72,9%
No. of Job Changing	0-1	292	53,4%
	2-4	224	41,0%
	5 +	31	5,7%
Department	R & D	50	9,1%
	Finance	27	4,9%
	Product Development	57	10,4%
	Customs & Foreign	2	0,4%
	Trade	52	9,5 %
	Information Tech.	31	5,7%
	Human Resources	39	7,1%
	Quality Management	5	0,9%
	Lean Management	33	6.1%
	Marketing	12	2,2%

Planning	23	4,2%
Procurement	20	3,7%
ASS	27	4,9%
Transportation man.	148	27%
Production	21	3,85
Spare Part		

Thesis survey was delivered to approximately one thousand people and response was received from 547 people. In this part of the findings, demographic data were examined in terms of gender, age, education, working year, job changing volumes, customer focus and status of departments. It is understood that men responded to questionnaires more than women did. 75% of the respondents were male. This can be attributed to the fact that the employees in the production departments are mostly male.

43% of the respondents in the survey consist of employees 30-39 aged, and it is followed by 25% to 40-49 aged. The majority of respondents have changed jobs by 0-1 times. This shows that the participants do not work in many different companies. When the general structure of the respondents is analyzed, it is seen that the job change does not occur very often and that most of the participants work in this company for 10-19 years.

73% of the departments in which the participants work are not directly contacting the customer. This question provides important data when the research is expanded. It will help to interpret the differences between the points of contact with the customer and those who do not.

The majority of respondents (58%) were university graduates. However, the graduates of master degree cannot to be underestimated.

The question of department is one of the questions asked in order to fund the future studies. When the plans made within the company, two main headings are

mentioned. They are direct and indirect areas. Direct areas represents production departments. Other departments can be grouped under indirect heading. Examples of indirect departments are Human Resources, It and Finance. According to the answers of this survey, it is observed that 28% of the respondents who are worked at production.

5.2. FACTOR and RELIABILITY ANALYSES

Factor analysis, a large number of variables measuring the same structure, less a multivariate statistics are used to obtain meaningful and significant variables. The structural validity of the tools developed to measure many features such as sensory characteristics, personality and development in behavior sciences can be examined by applying factor analysis. In this paper, which explores the explanatory factor analysis, the basic concepts related to the analysis and the explanations related to the use of the analysis in scale development are given.

Before performing a factor analysis, variables whose correlations are less than 30% in the correlation matrix of the dataset should be subtracted from the dataset. Thus, dataset will be more suitable for factor analysis. In the next step, part correlation coefficients should be considered. If part correlation coefficients are high, the data will not be well represented. In this case, factor analysis should not be applied.

A test approach for the investigation of the factor analysis is available in the literature. In this approach it is tested whether the correlation matrix is equal to the unit matrix. This test is Bartlett's sphericity test. This test is valid in samples where the data comes from a multivariate normally distributed population and the sample size is greater than 150. Factor analysis should not be applied if the significance of the test is greater than 5% (which is 5% dependent on the researcher's own judgment).

Another test for evaluating the factor analysis is the KMO (Kaiser-Meyer-Olkin) test. In fact, KMO is not a test. It is a criterion. As a result of the calculations, the KMO value is between 0 and 1. The closer this ratio is, the more likely it is the factor analysis. Since the KMO scale is not a statistical test, a number of restrictions have been introduced for this ratio. As the KMO value, the number of

sample units, the average correlations, the number of variants increases and the number of factors decreases, the KMO value approaches one. In general, the KMO value of greater than 0.80 or some of the circles (programmers) was also considered to be greater than 0.60 (Sedef, 2018).

5.2.1. Factor and Reliability Analysis for Competency

The extent to which the data is useful and suitable for the factor analysis, Kaiser-Mayer-Olkin and Barlett test measures were obtained. The results (KMO=0.901, χ2Bartlett test 62,209 df=1, p=0.000) were adequate. Anti-image correlation diagonals are all exceeding 0.50, meaning all single items in the factor analysis are to be involved. No items were excluded.

Following these measurements, component analysis and varimax rotation was performed. Cronbach's alpha coefficient was determined, and it was estimated to be reliable. One dimension was found as a result of the analysis, and its total variance is 62.209%.

Table 2. Factor and Reliability Analysis of Competency

Factor Name	Factor Item	Factor Loading	%Variance	Reliability
	Competency 9	0.973		
	Competency 2	0.819		
	Competency 8	0.802		
	Competency 3	0.754		
Competency	Competency 7	0.746	62.209	0.830
	Competency 6	0.745		
	Competency 5	0.741		
	Competency 9	0.725		
	Competency 9	0.700		

5.2.2. Factor and Reliability Analysis for Management Support

The extent to which the data is useful and suitable for the factor analysis, Kaiser-Mayer-Olkin and Barlett test measures were obtained. The results (KMO=0.791, χ 2Bartlett test 272,832 df=1, p=0.000) were adequate. Anti-image correlation diagonals are all exceeding 0.50, meaning all single items in the factor analysis are to be involved. No items were excluded.

Following these measurements, component analysis and varimax rotation was performed. Cronbach's alpha coefficient was determined, and it was estimated to be reliable. One dimension was found as a result of the analysis, and its total variance is 72.832%.

Table 3. Factor and Reliability Analysis of Management Support

Factor Name	Factor Item	Factor Loading	%Variance	Reliability
	Item	Loading		
	ManSup7	0.942		
	ManSup6	0.939		
Management Support	ManSup1	0.927		
Support	ManSup2	0.925	72.832	0.762
	ManSup5	0.919		
	ManSup8	0.782		
	ManSup4	0.693		
	ManSup3	0.682		

5.2.3. Factor and Reliability Analysis for Incentives

The extent to which the data is useful and suitable for the factor analysis, Kaiser-Mayer-Olkin and Barlett test measures were obtained. The results (KMO=0.761, χ 2Bartlett test 398.728 df=5, p=0.000) were adequate. Anti-image correlation

diagonals are all exceeding 0.50, meaning all single items in the factor analysis are to be involved. No items were excluded.

Following these measurements, component analysis and varimax rotation was performed. Cronbach's alpha coefficient was determined, and it was estimated to be reliable. One dimension was found as a result of the analysis, and its total variance is 50.207%.

Table 4. Factor and Reliability Analysis of Incentives

Factor Name	Factor Item	Factor Loading	%Variance	Reliability
Incentives	Inc2	0.738		
	Inc1	0.730		
	Inc4	0.729	50.207	0.761
	Inc3	0.698		
	Inc5	0.644		

5.2.4. Factor and Reliability Analysis for Market Performance

The extent to which the data is useful and suitable for the factor analysis, Kaiser-Mayer-Olkin and Barlett test measures were obtained. The results results (KMO=0.820, χ 2Bartlett test 338.051, df=6, p=0.000) were adequate. Anti-image correlation diagonals are all exceeding 0.50, meaning all single items in the factor analysis are to be involved. No items were excluded.

Following these measurements, component analysis and varimax rotation was performed. Cronbach's alpha coefficient was determined, and it was estimated to be reliable. One dimension was found as a result of the analysis, and its total variance is 81.42%.

 Table 5. Factor and Reliability Analysis of Market Performance

Factor Name	Factor Item	Factor Loading	%Variance	Reliability
Market	MarPer1 MarPer17	.947	81.42	.947
Performance	MarPer2	.916	01.42	.) 11

5.2.5. Factor and Reliability Analysis for Strategy Aligment

The extent to which the data is useful and suitable for the factor analysis, Kaiser-Mayer-Olkin and Barlett test measures were obtained. The results (KMO=0.841, χ 2Bartlett test 334.982, df=15, p=0.000) were adequate. Antiimage correlation diagonals are all exceeding 0.50, meaning all single items in the factor analysis are to be involved. No items were excluded.

Following these measurements, component analysis and varimax rotation was performed. Cronbach's alpha coefficient was determined, and it was estimated to be reliable. One dimension was found as a result of the analysis, and its total variance is 64.78%.

Table 6. Factor and Reliability Analysis of Strategy Alignment

Factor Name	Factor Item	Factor Loading	%Variance	Reliability
	StraAl9	0.889		
	StraAl10	0.869		
Stratogy	StraAl11	0.852	64.78	0.885
Strategy Alignment	StraAl12	0.820		
	StraAl13	0.727		
	StraAl914	0.735		
	StraAl915	0.738		

To analyze the data, Factor and Reliability Analysis procedures are conducted to each factor in the research model. A factor analysis should be applied in order to test construct validity. As prerequisite to complete a factor analysis, KMO and Bartlett Test results are checked for each factor: Competency, Incentive, Management Support, Strategy Alignment, Market Performance, Employee Commitment. KMO value changes between 0,5 to 0,901.

Alpha model is used for reliability analysis. Cronbach Alpha is the compliance value between the questions. The Cronbach Alpha value shows the reliability level of the questions under the factor. The scale is considered to be reliable when Cronbach's Alpha is 0.70 or higher. However, when the number of questions is small, this limit can be considered as 0.60 and above (Durmuş, Yurtkoru, & Çinko, 2011).

Employee Commitment factor is consisted of just one question therefore factor analyses had not been applied for it.

5.3. REGRESSION ANALYSIS

Regression analysis is defined as a reliable method followed by statistics to define the relationship between independent variables and dependent variables. With regression analysis, which variables have an effect on the research subject and the degree of this effect can be observed. The independent variables are the factors in which the researcher intends to investigate and therefore hypotheses about their relationship with each other or its relation to the dependent variable. On the other hand, the dependent variable can be defined as the main factor to be studied. If there is a relationship between two or more independent variables and a dependent variable, simple regression analysis is performed when multiple regression analysis is to be followed and the relationship between the two variables should be investigated.

5.3.1. Multiple Regression Analysis of H1, H2, H3, H4, H5, H6

To find the relationship between Incentives, Management Support, Competency, Employee Commitment, Market Performance and Strategic Alignment with Continuous Improvement, two separate Multiple Linear Regression Analyses were applied.

As reflected in Table 8. Management Suppport, Competenecy, Incentives have contribution on CI. The overall explanatory power of model was 56.1% (R=0.756; R²=0.561; F=39.36, p=0.000).

Table 7. Multiple Linear Regression of Hypotheses for H1 & H2 & H3

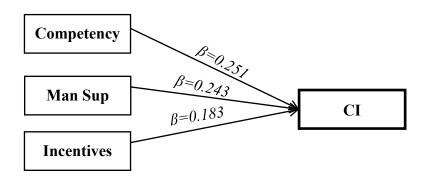
Dependent Variable : Continuous Improvement					
Independent Variables :	Beta	t-value	p-value		
Competency	0.251	2.124	0.036		
Management Support	0.243	3.025	0.003		
Incentives	0.183	3.079	0.022		

H1: Competency has a direct positive effect on employees' contribution of Continuous Improvement.

H2: Management Support has a direct positive effect on employees' contribution of Continuous Improvement.

H3: Incentives has a direct positive effect on employees' contribution of CI.

As it can be seen from Table 7. interaction with Continuous Improvement is seen as very similar for Competency (β =0.251, p=0,036), Management Support (β =0.243, p=0,003) Incentives (β =0.183, p=0,022).



As reflected in Table 8. Employee Commitment, Market Performance, Strategy Alignment have contribution on CI. The overall explanatory power of model was 54.3% (R=0.739; R²=0.543; F=37.33, p=0.000).

Table 8. Multiple Linear Regression of Hypotheses for H4 & H5 & H6

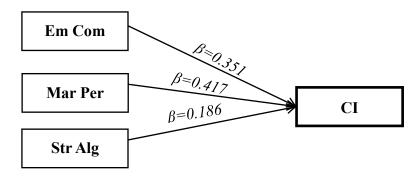
Dependent Variable : Continuous Improvement						
Independent Variables:	Beta	t-value	p-value			
Employee Commitment	0.351	2.124	0.000			
Market Performance	0.417	2.461	0.003			
Strategy Alignment	0.186	5.460	0.001			

H4: There is a positive relationship between Employee Commitment and Continuous Improvement.

H5: There is a positive relationship between Market Performance and Continuous Improvement.

H6: There is a positive relationship between Strategy alignment and Continuous Improvement.

As it can be seen from Table 8. Interaction with Continuous Improvement is seen as Employee Commitment (β =0.351, p= 0,000), Market Performance (β =0.417, p= 0,003) Strategic Alignment (β =0.186, p= 0,001).



5.3.2. Simple Regression Analysis of H7

In order to find the relationship between Incentives and Competency, separated Regression Analyses are applied.

Table 9. Simple Linear Regression of H7

Dependent Variable : Incentives					
Independent Variables :	Beta	t-value	p-value		
Competency	- 0.411	10.737	0,002		

H7: There is a relationship between Competency and Incentives for CI.

As reflected in Table 9;

Competency has not contribution on Incentives. The overall explanatory power of model was 16.9% (R=0.411, R2= 0.169, F=66.251, p= 0.002).

5.3.3. Simple Regression Analysis of H8

In order to find the relationship between Incentives and Management Support, separated Regression Analyses are applied.

Table 10. Simple Linear Regression of H8

Dependent Variable : Incentives					
Independent Variables :	Beta	t-value	p-value		
Management Support	0,215	3,980	0.000		

H8: There is a positive relationship between Management Support and Incentives for CI.

As reflected in Table 10;

Management Support has contribution on Incentives. The overall explanatory power of model was 4.6 % (R=0.215; R2=0.046; F=15,844, p=0.000).

5.3.4. Simple Regression Analysis of H9

In order to find the relationship between Incentives and Market Performance, separated Regression Analyses are applied.

Table 11. Simple Linear Regression of H9

Dependent Variable : Ince	entives		
Independent Variables :	Beta	t-value	p-value
Market Performance	0,228	5,472	0.000

H9: There is a positive relationship between Market Performance and Incentives for CI.

As reflected in Table 11;

Market Performance has contribution on Incentives. The overall explanatory power of model was 5.2% (R=0.228; R2=0.052; F=29,944, p=0.000).

5.3.5. Simple Regression Analysis of H10

In order to find the relationship between Incentives and Employee Commitment, separated Regression Analyses are applied.

Table 12. Simple Linear Regression of H10

Dependent Variable : Incentives				
Independent Variables :	Beta	t-value	p-value	
Employee Commitment	0,394	10,010	0.000	

H10: There is a positive relationship between Employee Commitment and Incentives for CI.

As reflected in Table 12;

Employee Commitment has contribution on Incentives. The overall explanatory power of model was 15.4% (R=0.394, R2=0.154, F=100.202, p=0.000)

5.3.6. Simple Regression Analysis of H11

In order to find the relationship between Market Performance and Competency, separated Regression Analyses are applied.

Table 13. Simple Linear Regression of H11

Dependent Variable : Con	npetency		
Independent Variables:	Beta	t-value	p-value
Market Performance	0,277	4,603	0.000

H11: There is a positive relationship between Market Performance and Competency for CI.

As reflected in 13.;

Market Performance has contribution on Incentives. The overall explanatory power of model 7.6% (R=0.277, R2=0.076, F=21.185, p=0.000)

5.3.7. Simple Regression Analysis of H12

In order to find the relationship between Management Support and Competency, separated Regression Analyses are applied.

Table 14. Simple Linear Regression of H12

Dependent Variable : Management Support					
Independent Variables : Beta t-value p-value					
Competency	0,316	6,664	0.000		

H12: There is a positive relationship between Management Support and Competency for CI.

As reflected in Table 14.;

Market Performance has contribution on Incentives. The overall explanatory power of model 9.9% (R=0.316, R2=0.099, F=44.410, p=0.000)

5.3.8. Simple Regression Analysis of H13

In order to find the relationship between Management Support and Market Performance, separated Regression Analyses are applied.

Table 15. Simple Linear Regression of H13

Dependent Variable : Management Support						
Independent Variables : Beta t-value p-value						
Market Performance	0,174	3,302	0.000			

H13: There is a positive relationship between Market Performance and Management Support for CI.

As reflected in Table 15.;

Market Performance has contribution on Incentives. The overall explanatory power of model 3% (R=0.174, R2=0.030, F=10.255, p=0.000)

5.3.9. Simple Regression Analysis of H14

In order to find the relationship between Employee Commitment and Market Performance, separated Regression Analyses are applied.

Table 16. Simple Linear Regression of H14

Dependent Variable : Employee Commitment					
Independent Variables : Beta t-value p-value					
Market Performance	0,428	11,060	0.000		

H14: There is a positive relationship between Market Performance and Employee Commitment for CI.

As reflected in Table 16.;

Market Performance has contribution on Incentives. The overall explanatory power of 18.2% (R=0.428, R2=0.182, F=122.323, p=0.000)

5.3.10. Simple Regression Analysis of H15

In order to find the relationship between Employee Commitment and Market Performance, separated Regression Analyses are applied.

Table 17. Simple Linear Regression of H15

Dependent Variable : Employee Commitment				
Independent Variables :	Beta	t-value	p-value	
Competency	0,316	6,664	0.000	

H15: There is a positive relationship between Competency and Employee Commitment for CI.

As reflected in Table 17.;

Market Performance has contribution on Incentives. The overall explanatory power of modle was 9.9% (R=0.316, R2=0.099, F=9.410, p=0.002)

Hypotheses	Results
H1: Competency has a direct positive effect on employees' contribution of Continuous Improvement.	Accepted
H2: Management Support has a direct positive effect on employees' contribution of Continuous Improvement.	Accepted
H3: Incentives has a direct positive effect on employees' contribution of Continuous Improvement.	Accepted
H4: There is a positive relationship between Employee Commitment and Continuous Improvement.	Accepted
H5: There is a positive relationship between Market Performance and Continuous Improvement.	Accepted
H6: There is a positive relationship between Strategy alignment and Continuous Improvement.	Accepted
H7: There is a positive relationship between Competency and Incentives for Continuous Improvement.	Accepted
H8: There is a positive relationship between Management Support and Incentives for CI.	Accepted

H9: There is a positive relationship between Market Performance	Accepted
and Incentives for Continuous Improvement.	
H10: There is a positive relationship between Employee	Accepted
Commitment and Incentives for Continuous Improvement.	
H11: There is a positive relationship between Market Performance	
and Competency for Continuous Improvement.	Accepted
H12: There is a positive relationship between Management Support	
and Competency for Continuous Improvement.	Accepted
H13: There is a positive relationship between Market Performance	Accepted
and Management Support for Continuous Improvement.	
H14: H14: There is a positive relationship between Market	Accepted
Performance and Employee Commitment for Continuous	
Improvement.	
H15: There is a positive relationship between Competency and	Accepted
Employee Commitment for Continuous Improvement.	

CHAPTER SIX

CONCLUSION AND LIMITATIONS

6.1. CONCLUSION

In this part of the thesis, it is discussed how the results of the analysis of the research can be interpreted in terms of academic accumulation, sectoral applications and what kind of contributions are mentioned. In addition, some suggestions are made regarding future studies by mentioning the constraints encountered during the conduct of the research. Finally, this study concludes with the last comment that emphasizes the importance of this study for the Turkish automotive industry. The aim of the thesis study is to conduct a research study on Kaizen philosphy in terms of Turkish automotive industry. Thus, the concern of both academic and practical implications for this study is driven. Therefore, this

thesis work for a number of important reasons. In addition, the validity and reliability of the measurement instruments adapted from the original literature related to the variables examined in the research model have been ensured. Therefore for future work which will be held in Turkey on the subject of this thesis it is a guide.

Although many new topics and concepts are being discussed and discussed in the field of management, the only concept that remains and does not become obsolete is the concept of change. While the changes that occurred around the enterprises have gained an extraordinary speed compared to the past, on the other hand, their effects started to be felt faster and more violent. Especially in the last 30 years, the extraordinary developments in the computer and communication technologies, also called digital revolution, have made the effects of change faster to be perceived and felt by the enterprises. Along with the efforts of the enterprises to respond to this change by restructuring their structure and processes, as well as the changes in the demographic structure and qualification requirements of the workforce, the new global competition has led to new expectations regarding the leaders of the future. The new leadership model that these expectations reveal is the transformational leadership model that transforms businesses while changing them at the same time and adapting them to changes in the environment. The transformational leadership model is the most appropriate model for responding to unusual situations and is the most widely used and accepted leadership model for businesses when it comes to adapting to changes in the environment. The transformational leadership model is also a model that can neutralize the possible resistance by supporting this culture, which facilitates the process of change by creating a culture that promotes team decision and behavioral control within the organization. The use of this leadership model in the direction of the organizational change process enables the change to be realized successfully. On the other hand, with a meaningful and attractive vision created by the transformational leader, it is possible for the organization to form strategies for the future and to make efforts to realize it. The main condition of successful management is the prevention of resistance to change and the change in organizational efficiency. In order to prevent the resistance to change in practice from reaching a dimension that can prevent the successful implementation of change, either resistance must be

completely eliminated or the resistance should be reduced as much as possible (Şimşek & Akın, 2003). Managing change is not a simple task. In particular, many people naturally resist changing. Thus, there should be ways to implement change effectively and to convince workers to accept change (Hitt M., 2009).

The chosen change approach should provide clear advantages to the employees and these advantages should be increased and used in the process. Employees have their own processes of change and their willingness to support change and depend on it. Failure to share information about change leads to failure of the process. For this reason, the information given should be related to the time of change, the steps and methods to be followed to achieve the objectives and should be used to prepare the employees. (Werkman, 2009).

In order to change to effectively, individuals who will be affected by change should be considered. To minimize resistance to change methods such as coercion, persuasion, security, understanding, time, participation, criticism, flexibility, negotiation and agreement should be used according to the time and place of the individual or groups (Schumacher, 2010). In order to reduce the resistance caused by more than one factor, the methods that management can refer to can be summarized as follows.

- Effective Management Support
- Clear and fair Incentives
- Individual Competency

These factors had measured in this thesis they significant role while deploying Continuous Improvement Culture therefore companies should take in consideration about this topic. In this thesis, the factors that will motivate the employees are examined. White-collar employees believe that continuous improvement has a positive impact on market performance and employee commitment. However, they think that continuous improvement is in line with the strategic vision of the companies. This information can shed light on future studies in the following contexts.

When companies want to spread the culture of continuous improvement, managers should be motivated about this issue firstly. Managers' motivation of employees plays a large role in the dissemination and adoption of culture.

In order to support this culture, employees should be employed according to their competencies and, if necessary, a number of activities should be done to increase their competence. In addition, incentives play a significant role in the dissemination of this culture. However, it is important that the incentives are clear and fair. Employees with awards, promotions and similar incentives can motivate them to continuous improvement.

Employees who think that continuous improvement activities are in line with the company's strategic vision have a more positive approach to participation in change. This shows the effect of sharing with the employees that there is a common line between the promotion of the culture of continuous improvement and the vision of the company.

6.2. LIMITATIONS AND FURTHER RESEARCH DIRECTIONS

Although this thesis study has made significant contributions to the academic and practical aspects, this thesis study includes some theoretical and methodological constraints as well as all other studies. This study was conducted to measure the motivations behind the participation of white-collar employees in continuous improvement activities. Similar studies have been tried several times in different countries and different results have emerged. One of the most important constraints in this study was that the survey would be shared with one firm. However, despite the fact that a single company was interviewed, the results could be interpreted and sufficient results were obtained from the relability test. The scales in the model of the thesis were tested in the literature and have proven. However, it has not been observed that it is specifically applied to a company in the literature and not faced with a similar study in the literature in Turkey. In this context, the research as conducted and the questionnaire was prepared by considering the characteristics of the company and the country. The survey was applied with a cooperation with HR department that also limited some of

questions, which would be efficient while measuring the employee commitment scale.

Değerli Çalışma Arkadaşlarımız,

Şirketimizde Sürekli İyileştirme Kültürü'nü yaymak ve bunun için de bizleri harekete geçirecek motivasyonları ölçmek istiyoruz.

Aşağıdaki anket, hem sizlerin Sürekli İyileştirme Kültürü'ne bakış açınızı ölçmemizi sağlayacak hem de bu kültürü nasıl yayabileceğimizle ilgili bize yol haritası niteliğinde olacaktır.

Ankete yalnızca 5 dakikanızı ayırıp 8 Kasım 17.00'a kadar yanıt vermenizi rica ederiz.

Anket

https://docs.google.com/forms/d/1nyDOfB_Dq35bBHjvRM4AEYr0fnvOMOBG zzvZcUcMZwA/viewform?edit_requested=true

*Sonuçları anonim olarak raporlanacak ve bireysel katılımcılar hiç kimse tarafından görüntülenemeyecektir.

DEMOGRAPHIC VARIABLES

Cinsiyet □Erkek □Kadın
Medeni Durum □Evli □Bekar
Yaş:
Son mezun olunan okulun derecesi:
□Lise□Üniversite □Yüksek Lisans □Doktora ve üzeri
Çalıştığınız birimde olarak nihai müşteriyle direkt bağlantı kuruluyor mu?
□Evet □Hayır

Mevcutte çalıştığınız şirkette kaç yıldır çalışıyorsunuz?

Kaç defa iş değiştirdiniz?

Çalıştığınız departmanı işaretleyiniz.

(Controlling, HR, Accounting, Treasury, Production, Supply Chain, IT etc.)

1-)Aşağıdaki yetkinlik ölçütlerinin Sürekli İyileştirme faaliyetlerine katılımınıza etkisini işaretleyiniz. (1: Kesinlikle katılmıyorum; 2: Katılmıyorum; 3: Kararsızım; 4: Katılıyorum; 5: Kesinlikle katılıyorum)

Yeterince uğraşırsam zor problemleri çözmeyi başarabilirim.	1	2	3	4 5
Beklenmedik olaylarla etkin bir şekilde başa çıkabileceğime inanıyorum.	1	2	3	4 5
Yeteneklerim sayesinde, öngörülemeyen durumların nasıl ele alınacağını biliyorum.	1)	2	3	4 5
Amaçlarıma bağlı kalmak ve hedeflerimi gerçekleştirmek benim için kolaydır.	1)	2	3	4 5
Gerekli çabayı harcarsam birçok sorunu çözebilirim.	1	2	3	4 5
Zorluklarla karşılaştığımda sakin kalabilirim çünkü zorluklarla başa çıkabilirim.	1	2	3	4) (5)
Bir problemle karşılaştığımda genellikle çeşitli çözümler bulabilirim.	1	2	3	4 5

Karşıma çıkan zorlukların ölçeği ne olursa olsun süreci yönetebilirim.	1	2	3	4	5
Değişiklikler beni her zaman stres altında bırakır.	1	2	3	4	(5)

2-)Aşağıdakilerden hangisi, Sürekli İyileştirme faaliyetlerine katılımınıza pozitif etki eder? Size uygun seçeneği işaretleyiniz.

(1: Kesinlikle katılmıyorum; 2: Katılmıyorum; 3: Kararsızım; 4: Katılıyorum; 5:Kesinlikle katılıyorum)

Sonuçların bireysel olarak raporlanması ve başarının ödüllendirilmesi katılımımı pozitif etkiler.	1	2	3	4 5
Değişime katılım performansının finansal olmayan (üst yönetim nezdinde takdir edilme, şirket toplantılarında kişisel başarımdan söz edilmesi vb.) teşviklerle ödüllendirilmesi pozitif etkiler.	1	2	3	4 5
Değişime katılım sonrası ekstra prim almak katılımımı pozitif etkiler.	1	2	3	4 5
Değişime katılımın performans değerlendirilmesinde ölçüt olması (lead hedeflerimin arasında olması) katılımımı pozitif etkiler.	1	2	3	4 5
Değişim çalışmasında yeni kişilerle tanışmak katılımımı pozitif etkiler.	1	2	3	4 5

3-)Aşağıdakilerden hangisi, Sürekli İyileştirme faaliyetlerine katılımınıza pozitif etki eder. Size uygun seçeneği işaretleyiniz.

(1: Kesinlikle katılmıyorum; 2: Katılmıyorum; 3: Kararsızım; 4: Katılıyorum; 5:Kesinlikle katılıyorum)

Değişimin üst düzey yöneticiler tarafından desteklenmesi	1	2	3	4 5
Değişimin yöneticiler tarafından desteklenmesi	1	2	3	4 5
Üst düzey karar vericilerin değişime destek vermesi	1	2	3	4 5
Üst düzey yöneticilerin değişimle ilgili stresli olması	1	2	3	4 5
Yöneticilerin değişimle ilgili stresli olması	1	2	3	4 5
Üst seviyedeki yöneticinin kendini bu değişime adaması	1	2	3	4 5
Üst düzey yönetimin değişimi istemiyor olmasına rağmen çok çaba sarfetmek	1	2	3	4 5
Yönetimden değişimin önemiyle ilgili net bir sinyal almak	1	2	3	4 5

4-) Sürekli İyileştirme faaliyetleri aşağıdaki faktörlere ne ölçüde etki etmektedir? Size uygun gelen seçeneği işaretleyiniz. (1: Kesinlikle katılmıyorum; 2: Katılmıyorum; 3: Kararsızım; 4: Katılıyorum; 5:Kesinlikle katılıyorum)

Nihai müşteri memnuniyetini arttırır.	1	2	3	4	5
Çalışanların, nihai müşteri odaklılığını arttırır.	1	2	3	4	5
Müşterinin ihtiyaç ve taleplerine daha hızlı cevap verilebilmesini sağlar.	1	2	3	4	5
Çalışan bağlılığını arttırır.	1	2	3	4	5

Diğer departmanların yöneticileriyle iletişimi arttırır.	1	2	3	4 5
Departmanlar arası iş birliğine katkı sağlar	1	2	3	4 5
Çalışanların yetkinliğini arttırır	1	2	3	4 5
Problemlere karşı etkin bakış açısını geliştirir	1	2	3	4 5

5-) Şirketimizi göz önünde bulundurarak, aşağıdaki ifadelerden size en uygun olanı işaretleyiniz. (1: Kesinlikle katılmıyorum; 2: Katılmıyorum; 3: Kararsızım;

4: Katılıyorum; 5:Kesinlikle katılıyorum)

Lean yaklaşım ve şirketin uzun vadeli stratejik yönü arasında bir bağlantı vardır.	1	2	3	4 5
Lean Management ekibi, Lea felsefesinin uygulanması için destek sağlar.	1	2	3	4 5
Lean iş stratejisi hakkında şirket için iyi bir iletişim vardır.	1)	2	3	4 5
Lean iş stratejisinin etkisi hakkında bir bilinç var.	1	2	3	4 5
Lean metodu organizasyonumuz için uygun bir iyileştirme metodudur.	1	2	3	4 5
Lean iş stratejisini uygulamak, beklenenden daha sorunlu olmuştur.	1	2	3	4 5
Yöneticiler Lean stratejisine bağlılıklarını gösterirler.	1	2	3	4 5
Lean iş stratejisinin bir sonucu olarak, personel, çapraz işlevsel süreçleri iyileştirmeye odaklanıyor.	1	2	3	4 5

Lean iş stratejisi bölümlerin müşteri gereksinimlerini	1	2	3	4 5)
daha iyi karşılamasını sağlar					
Lean iş stratejisi, kaynakların iş yüküyle daha iyi	1	2	3	4 (5))
eşleştirmesini sağlar					
Diğer departmanlarda Lean stratejiyi yaymak için bir alan	1	2	3	4 5)
var.					

Dear Colleagues,

We would like to measure the motivations that set us in motion to deploy the Continuous Improvement Culture and diffuse this culture in our company.

The questionnaire that we have shared will enable us to measure your perspective on the Continuous Improvement Culture and be a road map for how we can diffuse this culture.

We ask you to respond to the survey only by sparing 5 minutes until 8th November 17.00.

Survey

https://docs.google.com/forms/d/1vrJ1NFXDIjAUYj19N4Pq2ij4LloWGxw6Vy TL3iNx3SY/viewform?edit_requested=true

* The results of the survey will be reported anonymously and the individual participants will not be seen by anyone.



DEMOGRAPHIC VARIABLES

Sex □Male □Female
Marital Status □Married □Single
Age:
Last Graduated School:
□High School □University □Masters □PhD

Do you work in a business where you offer services directly to customer?

□Yes	□No

How long have you been working at your current workplace?

How many times have you changed jobs during your entire business life?

Which department do you work in?

(Generalize it as Controlling, HR, Accounting, Treasury, Production, Supply Chain, IT etc.)

- 1-) Select the affect of the following competency criterias on your participation in Continuous Improvement activities.
- (1: Strongly disagree; 2: Disagree; 3: Neutral; 4: Agree; 5: Strongly Agree)

I can always manage to solve difficult problems if I try hard enough.	1	2	3	4 (5
I am confident that I could deal efficiently with unexpected events.	1	2	3	4 (5
Thanks to my skillfulness, I know how to handle unforeseen situations.	1	2	3	4 (5
It is easy for me to stick to my aims and accomplish my goals.	1	2	3	4 (5
I can solve most problems if I invest the necessary effort.	1	2	3	4 (5)
I can stay calm when facing difficulties because I can rely on my coping abilities.	1	2	3	4 (5

When I am confronted with a problem, I can usually find	1	2	3	4 5
several solutions.				
I can usually handle whatever comes my way.	1	2	3	4 5
	_			
Changes always puts me under stress. (R)	1	2	3	4 5

2-) Which of the following statements has a positive effect on your participation in the Continuous Improvement activities?

(1: Strongly disagree; 2: Disagree; 3: Neutral; 4: Agree; 5: Strongly Agree)

Individual reporting of results and rewarding of success affect my contribution.	1	2	3	4 5	
Non- financial rewarding (recognition by top management, mention of personal success) of the contribution performance affects my participation.	1	2	3	4 5	
Taking extra bonuses after Continuous Improvement participation affects my contribution positively.	1	2	3	4 5	
Setting the contribution of Continuous Improvement as Lead goal affects my participation.	1	2	3	4 5	
Meeting with new people affects my contribution positively	1	2	3	4 5	

3-) Which of the following statements has a positive effect on your participation in the Continuous Improvement activities?

(1: Strongly disagree; 2: Disagree; 3: Neutral; 4: Agree; 5: Strongly Agree)

Encouraging to change by senior managers	1	2	3	4 5
(E3)				
Encouraging to change by managers	1	2	3	4 5
(E4)				
Our organization's top decision makers have put all their support behind the change effort. (E2)	1	2	3	4 5
Every senior manager has stressed the importance of the change (E3)	1	2	3	4 5
Every manager has stressed the importance of the change (E4)	1)	2	3	4 5
This organization's most senior leader is committed to the change. (E2)	1	2	3	4 5
Thinking that we are spending a lot of time on this change when the senior managers don't even want it (REVERSE)	1	2	3	4 5
Management has sent a clear signal the organization is going to change	1	2	3	4 5

4-) To what degree do the continuous improvement activities affect the following factors? Select the option that applies to you.

Increases final customer satisfaction.	1	2	3	4 5
Increases final customer focus.	1	2	3	4 5
It supports a faster response of final customers' desires and requests	1	2	3	4 5
Increases employee commitment	1	2	3	4) (5)
Increases communication with other managers	1	2	3	4 5
Increases interdepartmental collaboration	1	2	3	4 5
Increases employees' competency	1	2	3	4 5
Improves the effective angle of view against problems	1	2	3	4 5

5-) To what degree do the continuous improvement activities affect the following factors? Select the option that applies to you.

There is a link between the Lean approach and the long term strategic direction of the company	1	2	3	4	5
The Lean Team provide support for implementing the Lean initiative	1	2	3	4	5
Communication about the Lean business strategy has been good	1	2	3	4	(5)
There is an awareness of the impact of the Lean business strategy	1	2	3	4	(5)
Lean as an improvement methodology is suitable to our organization	1	2	3	4	5
Implementing the Lean business strategy has been more problematic than it was anticipated	1	2	3	4	5

Through adoption of Lean business strategy senior managers show their commitment for increasing performance.	1	2	3	4 5
As a result of Lean business strategy, staff are focusing on improving the cross functional processes.	1)	2	3	4 5
The Lean business strategy has enabled the department to meet customer requirements better	1)	2	3	4 5
Lean business strategy has enabled the department to match resources to workload better.	1)	2	3	4 5
There is scope for spreading Lean strategy in other departments.	1	2	3	4 5

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