

ANALYZING AND COMPARING LEAN AND SIX SIGMA METHODS

Elvin Aliyev

(University of Kaunas Technology, Economics and Management/
School of Economics and Business: Kaunas, Lithuania.)

Senior Lecture Dr. Asta Daunoriene

(University of Kaunas Technology, Economics and Management/
School of Economics and Business: Kaunas, Lithuania.)

Abstract

Six Sigma and Lean are one of the most effective strategies today for companies to gain more profit and develop customer satisfaction. Lean and Six Sigma are business strategies applied in companies in order to reduce cycle time and reduce waste, to promote their business processes. Lean and Six Sigma methods presents data collection, data techniques during work process; quality improvement possibilities in order to provide perfect service or product for customers' satisfaction.

Key words: Quality, TQM, Six Sigma, Lean, Lean Six Sigma, Misconceptions.

Article

Introduction

In global and competitive market companies/ organizations are struggling to get more customers and increase their profits. Today not so many companies reach to success and manage to stay for longer period. Sometimes the best selling products and the best companies fail, later owners/ investors sell their companies. Some companies get great successful while keeping high satisfaction through the customers. Companies use various methods. For example: TQM (Total Quality Management), Six Sigma, Lean Management, Lean and Six Sigma, BPR (Business Process Re-engineering) (Basu -2009) etc. Later, management/ investors of the company achieve their aims. Top management of the company advice to other companies that might be, they could also apply the same strategies and improvements as Six Sigma and Lean methods. Every company implements different methods, strategies and create plans according to their products or services. I have introduced, Quality, TQM, Six Sigma, Lean, Lean and Six Sigma, Misconceptions regarding Lean Management and Six Sigma, Key Misconceptions regarding Six Sigma, Lean Management and other methods that you will get to know.

There are some similarities between TQM and Six Sigma. They are almost the same nevertheless these methods have few differences. Sometimes there are some miss understanding between companies when they want apply to the strategy of TQM (Total Quality Management) they make a decision that, better to move up to the latest strategy than previous one. For example: Six Sigma. Some authors (Kumar, Crocker, Chitra, Saranga 2006) were underlined that it is the same as TQM but it is the decision of the company's management.

Researches and analyses

Quality and TQM are one of the most important strategies in the company. Today companies do not pay enough attention to the Quality or TQM. Customer's Quality changes from business to business, from company to company and from country to country. (Aveta Business Institute 2014) It cannot be the same at every company. Company's top management emphasize that, for example restaurant service, hotel service, medical service and hospital service, all of those business services have variety roles and they provide diverse services in the business industry. Customers pay attention to the quality, cost and time when they receive products/ services from companies.

The top management of the company underlines that, it is very important to keep the trust of company's customers, because if customers lose their trust, it is hard to get the same customers again. According to the customer strategy, management of the companies continuously set lowest prices, high quality and promotions to provide on time services or products to get maximum customer satisfaction.

Customers

There is proverb: "A customer is always right". Customer is not right every time, although it is just a saying. When companies focus on customers, generally the company concentrates for their current customers. It can be variety of customers. The company's management should create a strategy to identify customers that are able to purchase in large quantities. If company wants to keep their customers permanent, It should be in companies best interest to regularly bring innovative and creative ideas on design and shapes to company's products, create more diverse products and always find the ways to create effective plan and development strategy. It is important to find out why customers leave the company's products or services and goes to use another company's products or services. If management at the company does not know the reasons why the customers leave company, it means the company can also lose its other customers. Later, it will cost the company to invest more capital to gain new customers. Another reason is: if company's products are the same as its competitors and if there are no any changes at the cost of products, in delivery time and in the quality then company ought to find the causes why customers left them and it is substantial to make inquiry or feedback from customers and company needs regularly to keep her customers happy. The next goal of the company is branding, it is essential for company customers too.

Findings

The company comes face to face with misconceptions of Lean and Six Sigma. When the management analyzes the whole procedures and appraises the methods. There are a lot of varieties of misconceptions in various business sectors to evaluate loan applications in the bank, to treat patients in a hospital and insurance industry all involves performing activities synonyms with the Lean management viewpoint. (Edward D. A., John M. 2005). It was practiced very successfully where the customers exist and an activity takes place to satisfy the customers. Today organizations focus on customers and forget its employees. In reality workers are the main key players at the companies. All companies are regularly needed to support its workers and provide motivation, trainings, and bonuses and always should take care of employees. Without company's staff members organization cannot get success, manage the system, arrange manufacturing process and provide services for its customers. Companies regularly try to build team building and create good communication with employees.

Additionally, companies should proactively perceive the benefits of understanding, managing and upgrading employee reliability. The most successful companies are those that can adapt their company behavior to the realities of the current work environment where success is dependent upon innovation, creativity and flexibility. The dynamics of the work environment have to reflect a very diverse population comprised of individuals whose motivations, beliefs and value structures differ greatly from the past and from each other. Due to (Insight link communications- 2014) The intention of every company should be to enhance the desire of employees to stay in the relationship they have with the company.

A merger of factors impacts employees' decisions to stay at their current job. Contribution factors include satisfying work, a sense of job security, clear opportunities for advancement, a compelling corporate mission combined with the ability to contribute to the organization's success and a feeling that their skills are being productively used and challenged. Especially, employees who enjoy their work identify themselves with their employer and perceive that the company is flexible regarding work.

Hence, include opportunities for personnel growth and invest heavily in the professional development of the best people in the organization. By providing employees with well-defined career path, mentors and tuition reimbursement for job related education. Train employees, even if it makes them more attractive to the competition. Without seeing an opportunity on the horizon, few high potential employees will stay with a company and allow themselves to grow stagnant.

Practical significance

The company really needs those methods or strategies (Six Sigma, Lean Six Sigma) because management/ investors want to earn good profit. Many of successful companies like Motorola, Toyota got great profit over implementing Six Sigma and Lean's techniques.

The companies come face to face through their methods of approach to the main problems and it becomes difficult for companies to set up primary goals that companies want to reach and grow. Particular, management gets significant advices, aspirations and tasks from the owners/ investors of the company that they should change the destiny of the company.

It is quite hard for many companies, to start business or enhance their business in the market because every market have special requirements and companies takes obligations that they will provide high standards. Usually, customers ask for quality, low cost, certification/ license and it brings some difficulties for business makers. According to the demand of customers company needs support through human resource for backing process for delivering the process/ manufacturing products to customers. Company is not sure of how much their adequate steps will be successful or the results will be failure. The company needs to struggle in the competitive market and respond to the needs of their customers. It is always hard for companies to make a decision, find own way, get own customers, follow their aspirations, make good profit, grow up, establish new projects and develop capacity of the company.

Hence, company's management decides to invest in employees and bring some strategies like Six Sigma and Lean Six Sigma methods after research in the market. The management gets appropriate results after trainings and educating employees.

The company needs to wait and detect firstly the success of employees; how workers work perfectly and respond quickly to customer's needs. When the income starts to enter to the account of company, investors/ management realizes correct decision making, accurate strategy and reaction of new methods. Top management regularly monitors and controls the surveys.

It is important for the company to check negative issues in the process, problems of employees, feedbacks from customers and view point of investors. Company might use only Six Sigma and Lean or only Lean Management. It will take for the company a long period in the beginning to apply to all of them in the same time or apply one by one and get diverse conclusions about these methods. Definitely, each of these strategies, methods has their own techniques and company can use them for distinctive production and disparate service. It's all depends on how much these methods of Lean and Six Sigma will play key role in company's achievements. Maybe be, top management will propose or discover another new method or program for the success of the company in future. It is real that, today companies actively use Lean and Six Sigma methods and try to find best solution for their customers.

The companies continuously look for new innovation, develop advance technologies and every time try to discover new processes and get new customers. By increasing their profits companies should always try to stay in the competitive market.

Originality/Value.

The Article focuses on Six Sigma and Lean Six Sigma strategies on the theory part, examples of companies which were successful using these methods, also it covers misconceptions related of usage of Six Sigma and Lean methods. The practical significance of my article is about employees at the companies.

Customer is King

The goal of the company is top management must pay attention to their customers. The customer is a king of the company. Today markets, customer requirements are becoming increasingly more rigorous and their expectations of the product and service in terms of conformance, reliability, dependability, interchangeability, performance, features, appearance, serviceability, user-friendliness, safety and environmental friendliness is increasing too. There are various types of customers. May be they are individuals or groups. It can be a company or an organization. In these days many superior-performing companies talk in terms of being customer-obsessed.

At the same time it is likely that the competition will improve and in addition new and low cost competitors may emerge in the market place. There three key holders of quality: they include the customers, the employees and the process. Customers define the quality of a product or a service as they are key decision makers. As an example three key holders of quality is shown on the diagram below in Figure 1.1

According to Aveta Business Institute, Six Sigma – 2014

Customers

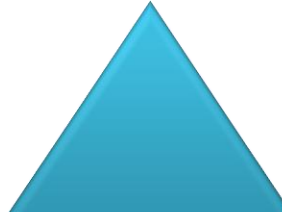


Figure 1.1 Three key holders of quality
Employees

Process

What is Quality?

Quality as in concept is quite difficult for many people to grasp and understand and much confusion and myth surrounded it. In a linguistic quality originates from a Latin word 'qualis' which means such as a thing really is. There is an international definition of quality, the degree to which is to set of inherent characteristics fulfill requirements BS (EN ISO 9000 (2000)). According to authors (Dale, Wiele, Iwaarden,- 2007) quality can be used with adjective such as poor, good or excellent. The following are some examples of this:

- By directors and managers (quality performance, quality of communication)
- By people in general (quality product, top quality, high quality, original quality, quality time, quality of communication, quality person, loss of quality, 100 percent quality.)
- Quality has been understood as a defect free product. Since then, quality has become an organization's comprehensive business concept and a critical success factor. It is linked to all operations in the company. Defining quality has become more and more difficult because of the development of quality thinking and growing importance of quality. Quality concept largely depends on the situation which varies case by case. According to the author, (Weele- 2005) emphasize that what is quality exactly? "Quality is the degree in which customer requirements are met. We speak of a quality product or quality service when both supplier and customer agree on requirements and these requirements are met". As an example three dimensions of quality is shown on the diagram below in Figure 1.2

- According to (Basu -2009)

Product Quality

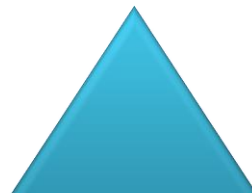


Figure 1.2 Three dimensions of quality

Process Quality

Organization Quality

Quality is the fulfillment of the specified requirements which can be measured and need to, find the areas that need improving and build quality in processes. Quality is all those aspects and characteristics that product or service meets the needs and expectations. When we do need to decrease the variance of the process, the consequence is the better quality and productivity.

- Product oriented
- Function oriented
- Customer oriented

Firstly, Product oriented quality is the sum of the properties of the product. Product oriented quality can be defined by metrics. According to this definition, better quality requires higher costs, because some new property increases costs.

Secondly, Function oriented quality is defined as a uniformity or equivalence to product specification. It is effective and faultless of the function. Function oriented quality is strongly linked to preventive problem solving and cost reduction.

Thirdly, due to authors (Johanna and Liu -2013) said that, customer oriented quality fulfills customers' needs and expectations and highlights suitability for use. Products with high quality fulfill customers' expectations and high quality can be defined many different ways and different kinds of peoples recognize it many different ways. The success of manufacturing companies depends mostly on their ability to identify the customer needs and create products that meet their needs and are produced at low cost.

Total Quality Management (TQM)

TQM – involves the application of quality management principles to all aspects of the organization, including customers and suppliers and their integration with the key business processes. According to authors (Barrie, Wiele, Iwaarden- 2007) Total Quality Management requires that the principles of quality management should be applied in every branch and at every level in the organization with an emphasis on integration into business practices and a balance between technical managerial and people issues. It is a company –wide approach to quality, with improvements undertaken on continues bases by everyone in the organization. The spread of the TQM philosophy would also be expected to be accompanied by greater sophistication in the application of tools and techniques, increased emphasis on people (the so called soft aspects of TQM), process management, improved training and personal development and greater efforts to eliminate wastage and non-value adding activities. The process will also extend beyond the organization to include partnership with suppliers and customers and all stakeholders of the business. Activity will be reoriented to focus on the customer, internal and external with the aim to build partnerships and go beyond satisfying the customer to delighting them. The need to self-assess progress toward business excellence is also a key issue making a contribution, quality awareness is enhanced, behavior and attitude change starts to happen and projects are brought to satisfactory conclusion.

What is Six Sigma?

Six Sigma was proposed by Motorola in the early of 1980s and appointed as the company infrastructure and brought contribution to many projects. The conception of Six Sigma was originated by trustworthiness engineer Bill Smith at Motorola in the middle of 1980s who persuaded Motorola's CEO, Robert Galvin to support Six Sigma. According to author (Elzbieta- 2005) mentioned that, today Six Sigma is considered the most powerful strategy that, offered for an organization to reduce defects, reduce waste and improve profitability. Many organizations such as General Electrics, Boeing, 3M, IBM, Xerox, and ABB have evolved their business achievements by increasing the methods of Six Sigma conception.

Six Sigma is process improvement methodology and over a period of time it has developed into a management strategy which can be used to run an organization. Six Sigma is a customer focused on quality improvement concept to archive an excellent processes, products and services. The procedure of Six Sigma is eliminating the defects from every product, operation, stock, inventory, process and transaction. Six Sigma introduce 5 important phrases for improvement and that is DMAIC.

1. Define it is a voice of customer or understanding the demand of customer, the project goals and specifically.
2. Measure main aspects of the current process and collect the significant data.
3. Analyze the data to investigate and check source and effect relationship. Define what relationships are and attempt to ensure that all factors have been considered. Pursue our root source of the defect under inspection.
4. Improve per optimize present procedure based upon statistical analyzes or mistake proofing and standard performance to create new and future state procedure.
5. Control is future state procedure to insure that any deviations from destination are corrected before they result in defects.

The CynCorp conducted a survey and it has revealed that the concept of Six Sigma is related highly compared to many other process improvement concepts. Table 1-1 shows the rating of Six Sigma and other process improvement techniques based on the survey conducted by the DynCorp to determine the most successful process improvement tool.

(Kumar, Crocker, Chitra, Saranga – 2006)

Table 1-1 Rating of Six Sigma and other Process improvement techniques

Process Improvement Tool	Impact
Six Sigma	53.6%
Process Mapping	35.3%
Root Cause Analysis	33.5%
Cause and Effect Analysis	31.3%
ISO 9001	21.0%
Statistical Process Control	20.1%
Total Quality Management	10.3%
Malcolm Baldrige Criteria	9.8%
Knowledge Management	5.8%

Six Sigma's differs is that it arranges a well-determined for destination of quality, which is not more than 3.4 defects per million opportunities. Actually, authors (Kumar, Crocker, Chitra, Saranga – 2006) declared that, the significant distinction between Six Sigma and Total Quality Management (TQM) is that Six Sigma is mostly business conclusions oriented model compared to a return on investment of Total Quality Management. Six Sigma can either be used as an operation strategy to reduce the number of defects or as a business strategy to upgrade business processes and evolve new business models. Design for Six Sigma (DFSS) concept uses Six Sigma to as a strategy to design and develop products compared to the traditional Six Sigma which purpose is to cut down the defects. (Kumar, Crocker, Chitra, Saranga – 2006)

The quality of manufacturing process can be measured using sigma levels (also called sigma quality level.) Table 1-2 gives the number of failures/ defects per million opportunities for various sigma levels. These were derived assuming that the number of defects in a sample is normally distributed and the process mean itself can shift up to 1.5 sigma. And the table 1-3 shows the number of defects per million opportunities without shift in the process mean.

Table 1-2 shows the number of defects per million opportunities with 1.5 sigma shift.

Sigma Level	DPMO
1	697.672
2	308.770
3	66.811
4	6.210
5	233
6	3.4

Table 1-3 Sigma Level and defects per million opportunities without shift in the process mean.

Sigma Level	DPMO
1	317.300
2	45.500
3	2700
4	63
5	0.57
6	0.002

It is significant to understand that a manufacturer cannot satisfy customer by providing defects free products alone. According to author (Sanga -2006) emphasizes that, archiving Six Sigma quality at the production stage alone cannot guarantee success for an organization. Product reliability, without any doubt is one of the most significant requirements for the customer. There is not any customer that would like to see her/his product failing within a short period of purchase even if the product is still under warranty. The effectiveness of the organization should be measured on the basis of the production effectiveness (manufacturing effectiveness), market effectiveness and product effectiveness.

- Production effectiveness refers to the quality of manufacturing and can be measured using Six Sigma.
- Product Effectiveness refers to the quality of design as measured in terms of reliability of the product – effectiveness in meeting customer requirements related to performance.
- Market Effectiveness refers to the quality of the product characters that arranges the product with a competitive verge in the market.

It was focused on product effectiveness (reliability) from a customer viewpoint and production effectiveness from a manufacturer's perspective. To achieve market effectiveness is significant to ensure that the product is effective as measured in terms of reliability and capability to meet customer requirements such a performance, maintainability, supportability as well as the effectiveness of the manufacturing procedures which can be measured using Six Sigma. Due to this issue it is important to consider the concept of six sigma.

What is Lean?

Lean was developed by the Toyota Production System (TPS) arose out of necessity in response to the circumstances surrounding the company. Many of the foundational concepts are old and unique to Toyota while others have their roots in more traditional sources. The oldest part of the production system is the concept of Jidoka which was created in 1902 by Toyoda founder Sakichi Toyoda. This concept pertains to notion of building in quality at the production process as well as enabling separation of man and machine for multi-process handling.

A Toyota Production System historically has had four basic aims that are consistent with these values and objectives: Provide world class quality and service to the customer. Develop each employee's potential, based on mutual respect, trust and cooperation. Reduce cost through the elimination of waste and maximize profit develop flexible production standards based on market demand. Toyota Company introduce its other strategies and they are: JIT (Just in Time), Jidoka (Built in Quality), Heijunka, Kaizen, Push and Pull, Tack Time. The aims of Toyota are to provide highest quality, lowest cost and shortest lead time.

The core idea is precisely understand customer value while minimizing waste. Simply, lean means creating more value for customer with fewer resources. A lean organization comprehends customer value and focuses its key processes to continuously raise it. The ultimate goal is to provide perfect value to the customer through a perfect value creation process that has zero waste.

To accomplish this, lean thinking changes the focus of management from optimizing separate technologies, assets, and vertical departments to optimizing the flow of products and services through entire value streams that flow horizontally across technologies, assets, and departments to customers. Eliminating waste along entire value streams, instead of at isolated points, creates processes that need less human effort, less space, less capital, and less time to make products and services at far less costs and with much fewer defects, compared with traditional business systems. Companies are able to respond for changing customer desires with high variety, high quality, low cost, and very fast throughput times. The information management becomes much simpler and more precise too.

Lean and Six Sigma

The lean use the minimum amount of resources- people, materials and capital to produce solutions and deliver them on time to customers. The lean is flow process although does not have discipline to deliver results predictability. Sometimes lean flow implementation involves an informal investigation into an organization's workflow, which is typically followed by an immediate rearrangement of processes. While this approach produces change quickly, it cannot be relied upon to yield desired result consistently. Lean Flow implementation can involve extremely through data collection and analyzes, which produces expected results but takes years before any change occurs. According to authors (Brett, Charels- 2014) proclaimed that, Six Sigma is designed to improve quality by enhancing knowledge-generating processes. Six Sigma is statistically based methods aimed at reducing variation and eliminating defects in a process- whether that process is producing hard goods or answering customer inquiries. Six Sigma focuses on the need to identify things considered 'critical quality' too. Six Sigma is metric states that propose affecting customers should have as little variation as possible.

By nesting Lean Flow methodology within the Six Sigma methodology, a synergy can be attained that provides results that are much more significant than the results of the individual approaches. When Lean is added to Six Sigma, slow processes are challenged and replaced with more streamlined workflows. The data gathered during Lean Flow implementation helps to identify the highest impact Six Sigma opportunities. When Six Sigma is added to Lean Flow, a much needed structure is provided that makes easier to consistently achieve optimum flow. The two methodologies work so well together that a new, integrated, Lean Six Sigma approach, with its own unique characteristics. Lean Six Sigma is the application of Lean techniques to increase speed and reduce waste and process complexity, while employing processes to improve quality and focus on the voice of customer. Lean Six Sigma means doing it right, the first time and implementing changes that great value while acting quickly and efficiently.

Misconceptions regarding Lean Management and Six Sigma

The Lean Management and Six Sigma were derived from two different points of view. Lean production was derived from the need to increase product flow velocity through the elimination of all non-value added activities. Six Sigma developed from the need to ensure final product quality by focusing on obtaining very high conformance at the OFD (Opportunities for Defect) level.

Key misconception regarding lean management

The most common misconception of lean management is lean means layoffs. While this misconception may be due to the term 'lean' it is a miss-interpretation of the term. In lean management if an employee were performing non-value added activities within their job, management and employee would work together to find a better way to perform the job to eliminate non value added activities. Laying- off the employee would be counterproductive since a knowledgeable person would no longer be available and the remaining employees would be reluctant to take part in future waste elimination projects.

According to authors (Edward, John – 2005) misconception is lean works only in Japan, because of their unique culture. This view is unsubstantiated. In fact lean management is not a universal system in Japan and some of the most successful lean management implementations have been within non-Japanese companies.

Key misconception is that, lean is only for manufacturing. Even in a manufacturing environment, lean management views each step in the process as a service step, where customer value is added within minimal waste.

The last misconception is lean only works within certain environments. This is the viewpoint of managers in operations that are traditionally large batch operations as well as from managers of diverse job- shop operations. While these types of operations may never comfort to the lot size of one principle, lean management encompasses much more than manufacturing process design. If attempts were made to identify and eliminate all non-value added activities throughout the organization, these companies would be practicing important aspects of lean management. These companies are pursuing other elements of lean management by continuously attempting to follow lean principles when adopting new manufacturing technologies.

Key misconceptions regarding Six Sigma

The most common misconception of Six Sigma is that it is new flavor of the month, pushed by quality consultants in a way similar to the way Deming Management, TQM, business process reengineering (BPR) and ISO 9000 were pushed in the recent past. Unfortunately, there will always be consultants who jump onto any bandwagon, take a seminar and proclaim themselves experts in a program. Six Sigma is no exception to this phenomenon. Six Sigma should be considered state of the art in term of quality management, in that it borrows from previous programs especially Deming's management philosophies and TQM's focus on the customer and adds new features such as a comprehensive training structure and a board definition of value from a customer perspective to include not only quality but service and delivery.

Another misconception of Six Sigma is that the goal of 3.4 NCPPM (non-conforming parts per million) is absolute and should be applied to every opportunity tolerance and specification regardless of its ultimate importance in the customer's value expression. While the 3.4 NCPPM was derived at Motorola based on the characteristics of its products, Six Sigma programs do not use this metric as an absolute goal in all cases. As part of Six Sigma the Pareto principles is applied so that improvement projects will focus on the lowest hanging apple and make improvements where they matter the most. Since no company's business remains static very long new products and services will generally provide a never ending source of low hanging apples. Alternatively, examples can be found where a goal of 3.4 NCPPM will never be good enough and the target must be set a higher sigma level. For example: the nuclear power, medical device and aerospace industries all require the pursuit of exceptional quality to prevent catastrophic loss of human life.

Integrating Lean Management and Six Sigma

It was pointed out earlier that companies practicing either Lean Management or Six Sigma alone might reach a point of diminishing returns. The benefits may be derived by combining the programs as described. In addition, recommendations are made that will help companies practicing one of the programs to integrate the programs via evolutionary, rather than revolutionary, changes.

What can Lean organization gain from Six Sigma?

Lean organizations should make more use of data in decision making and use methodologies that promote a more scientific approach to quality. For example: When quality problems occur within a lean management system, defects are likely to be identified internally ZQC (Zero Quality Control) system. When this occurs, waste is incurred in a number of ways.

There is loss of opportunity for the production of that component since operation times are synchronized with demand via the pull system of production control. The cost is added through rework or scrap. Indirect personnel and other overhead must be available to handle the scrap and rework, such as a repair department.

What can Six Sigma companies gain from lean management?

A competitive company must have both high quality goods and provide high quality of service. For example: a company that operates in a batch and queue mode runs the risk of providing poor service to customers even if quality is at six sigma level. By reducing manufacturing lead times a company that is producing to order will enhance competitiveness by archiving faster deliveries or by meeting promised due dates a higher proportion of the time.

A company that is producing stock will gain from reduced lead times by decreasing the horizon of their forecasts and by replenishing stocks more often thereby increasing the company's revenues and inventory turnover rate. Six Sigma organizations should include training in lean management methods that eliminate all forms of waste such as kaizen, reducing setup times and mapping the value stream. An example will be used to show how Six Sigma organizations may get to a point of diminishing returns (illustrated in Figure 1.3) due to the non-use of certain lean management methodologies.

Due to authors (Edward and John - 2005) six sigma and lean management was introduced in figure 1.3

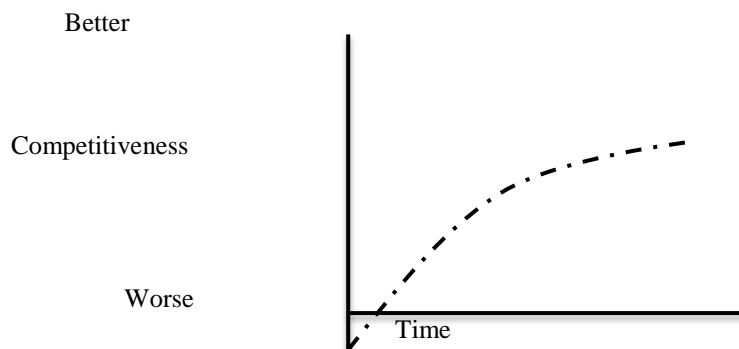


Figure 1.3 Improvements over time with six sigma or lean

Conclusion

By introducing this article, hopefully it will be helpful for companies to make decisions about their customers, processes and employees. Today many companies utilize the methods of Six Sigma and Lean as the business strategy. Many companies where Quality, Six Sigma and Lean are practiced are part of the company's plan and strategy. Each of these methods has different approaches to development company's customers and constantly promotes customer achievement.

Many of successful companies pay attention only to TQM but other fortunate companies prefer to apply Six Sigma and Lean Six Sigma methods. By hence, when company's management observe customers it is essential to build strong relationship with the customers. The faithfulness of the customer is significant for the company. When company gains its customers, it will increase the profit of the company. Due to Lean and Six Sigma methods, company always wants to get the way to the heart of its customers. Today, company's target should not be only customers; the top management ought to think about the employees of the company too. If workers do not do good work company's management cannot control the processes and without process and employees company cannot do business or get success. Employees are very significant at the company. As a related point, there are many misconceptions in Six Sigma and Lean methods. The main parts of these misconceptions are about the employees that, when top management of the company implements the strategies of Lean and Six Sigma at the work, they forget company's staff members. Employees may be workers at the manufacturing or services. After the work, workers become customers of those products or services. If they do not like their company's product or service they will not buy or use those products/ services. Hence, they will shift to another product/ service as customers and workers will become company's competitors in the competitive market.

About the Author

Elvin Aliyev, is bachelor student of Kaunas Technology University of Lithuania. I study Economics and Management at the faculty of School of Business and Economics since 2012. I completed my Erasmus Exchange Program at faculty of International Business in 2013-2014, University of Vaasa in Finland. Previously, I studied at faculty of Business Administration in 2010-2011, University of Anadolu in Azerbaijan. I am citizen of Azerbaijan.

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