

USING LEAN SIX SIGMA AS A MOTIVATIONAL TOOL FOR PROCESSES IMPROVEMENT

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The purpose of this paper is to demonstrate how business environment and performance can be improved in an organization that used and implement Lean Six Sigma methodology and who create an organizational framework auspicious for theirs employees. Lean Six Sigma can be a management approach of an organization focused on quality and continuous improvement, based on the participation of all it's employees which aims to ensure long term success. It's very important for a organization to believe in the capacity of work and intellect of their employees, to invest in them, so in this way they will feel useful and will became more self confident and will help the company to move one step ahead in this very competitive market we are facing today.

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1. Introduction

"Create, improve continuously and bring innovative elements or die." This has become a crucial and critical element which is required of managers and the organizations they manage, to survive in a changing market. In a dynamic world of global competition, organizations must continuously innovate and create new products and services and adopt new technologies to the marketplace and to cope with fierce competition. Now we are not only in a new millennium but in a new era, the era of knowledge. Long-term competitive advantage depends on the construction and operation of basic skills. Resource-based orientation of an organization defines a strategic asset as one valuable and nonsubstituibil. Knowledge is seen as a strategic asset that has the potential to be a source of competitive advantage for the organization.

2. Knowledge management in business enviroment

Typically, the ability to understand human creativity, employee's creativity, to combine ideas in a unique way or to make combinations and associations between them to generate innovative field to bring more organization it is defined as creativity. Therefore, organizations must create a climate to encourage and foster positive and creative thinking of theirs employees. In other words, they must seek to eliminate organizational barriers at work that could complicate and hinder creativity. Creative potential could be triggered when the employee organization shall be provided adequate resources to guide them in their work when their work is a challenge to the intellect, when presenting a high level of autonomy and control over his work (Politis, J.D. 2004). Large organizations are increasingly turning their attention on the importance and role of knowledge on the efficiency and competitiveness. The main reason for this is concern over the

knowledge management an idea that both knowledge and application of knowledge management systems are ways in which creativity and innovation can be promoted and the knowledges extracted so to increase performance organization overall, whether it is about public, private or nonprofit sector.

Economic theories treat knowledge as a crucial economic factor. It appears, at present the tendency to achieve a new synthesis between the various approaches to economic knowledge in the form of theories of organizations based on knowledge and knowledge-based society. According to these theories, knowledge is the main source of economic organizations and, therefore, knowledge management shows a paramount importance.

Today, acquisition of an organization's success is to exchange information quickly and efficiently. Long-term competitive advantage is not rooted in physical assets and financial capital but in effective channel of intellectual capital.

The characteristic of the knowledge society is not in that it has vast amounts of information, but that in it should always know more. And ability to get to know more calls on the subject knowledge to human beings. Thus information is something external, which is available to us. Knowledge instead, is an internal development, an advance made ourselves, a practical enrichment of our existence, a potency of our operational capacity.

Competitive advantages which it holds economic organization on market no longer can be maintained only by the parameters characterizing the products or services and any investment in new technology. Excellence that provides competitive nature depends mainly on how to tap talent, professional skills and knowledge labor organization by nurturing a new culture in that economic organization.

Fierce competition in international markets causes companies to want to be one step ahead of its competitors, in other words, be smarter ensuring that properly use all available resources, make the most value relevant or, apparently, minor competitive advantage.

3. Lean Six Sigma tool

The continuously changing and diversification of products and services during the last century, due mainly to constant increase of client requirements, as well as to industrial progress and competition intensification, led not only to relatively frequent modification of the quality concept definition, but also to a consistent development of concerns of different organizations supplying products and services of the quality of their production.

To obtain that competitive advantage for organizations, Lean Six Sigma may assist them by creating, improving continuously it's processes, but also by implementing new organizational structures and processes which bring that added the organization has need to differentiate from its competitors on market.

To create a common improvement methodology you must create an integrated system for managing projects rather than separate systems for Lean or Six Sigma projects. As Juran (1989) admonished us, "improvement happens project-by-project and in no other way" (Snee, R.D. 2010). The Juran quality management philosophy focuses on three components: planning, control, and improvement. These are known as the Juran Trilogy (Montgomery, D.C. 2010).

Management must play an active role in the selection of projects for the newly trained Six Sigma teams to focus on, and also ensure that all required resources are made available (Raisinghani, 2005).

Table 1: Lean Thinking

| The Fundamental Objective provide perfect value to the customer through a perfect value creation process with zero waste in: | The Fundamental Insight |
|--|---|
| - <i>Design</i> (concept to customer) | -Focus on each product and its value stream rather than organizations, assets, process technologies, and career paths |
| - <i>Build</i> (order to delivery) | -Ask which activities are waste and which truly create value |
| - <i>Service</i> (order to cash) | -Enhance the value & eliminate the waste to optimize the whole |

Lean Six Sigma management type refers, primarily, to a structured approach in which the heart is invariably "customer voice", considering that in any economic context, not necessarily a crisis, understanding customer requirements is vital for a company.

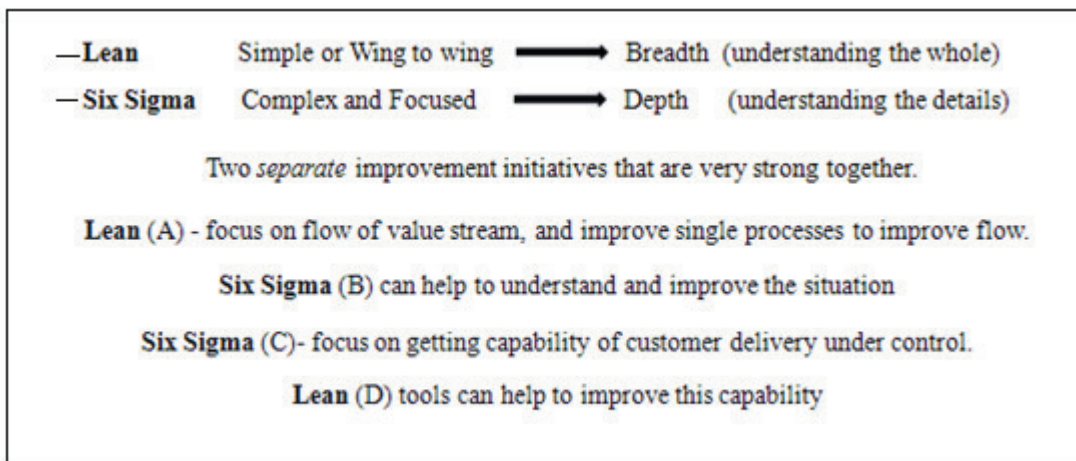


Figure 1: Lean Six Sigma interconnections

*Lean*²⁸⁸ (A) - Helps identify steps that **don't add value** and provides tools to eliminate them.

Lean (D) - Lean can help to improve the capability (improve phase).

*Six Sigma*²⁸⁹ (C) - Improves the capability of steps that do add value.

Six Sigma/Lean (B) - Lean identifies problems in **flow**. Improving the capability with Six Sigma can eliminate additional steps.

Lean Six Sigma is a methodology which is applicable both in manufacturing activity, as well as in services, and provide tools for solving a wide range of issues, whether we are talking about the speed processes, improve process's output or about cost reductions.

Although Lean and Six Sigma evolved independently, there are a number of encouraging articles discussing the use of an amalgamated approach. However, in order to drive a unified

²⁸⁸ Lean manufacturing extends the scope of the Toyota production philosophy by providing an enterprise-wide term that draws together the five elements of "the product development process, the supplier management process, the customer management process, and the policy focusing process for the whole enterprise".

²⁸⁹ The term "Six Sigma" refers to a statistical measure of defect rate within a system. Underpinned by statistical techniques, it presents a structured and systematic approach to process improvement, aiming for a reduced defect rate of 3.4 defects for every million opportunities, or Six Sigma.

methodology forward, a closer integration of the two approaches must be achieved, with significant scientific underpinning to provide a sound theoretical foundation (Pepper, 2007 cited in Pepper, M.P.J., Spedding, T.A. 2010).

4. Conclusion

The goal of any organization is to increase its customer's satisfaction by adapting services and products to new standards which are according with what clients want to receive. For that to come true they need both, Lean and Six Sigma working together in all its areas.

For a organization to adopt Lean Six Sigma is required quality improvement processes by integrating Lean principles with Six Sigma methodology as a holistic approach to continuous improvement for all the domains in which the organization operates.

To move forward to further visions such as agility and total supply chain integration, organizations will need to act as Lean as possible, providing transparency for the implementation of Six Sigma methods and techniques.

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