### Why Are There So Many Different Continuous Improvement Models? A Reflection of Practice

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#### ABSTRACT

This article examines the implementation of continuous improvement patterns and the various continuous improvement (CI) models used in an organization. Despite the size of an organization, the goal is to achieve the maximum profit by pursuing continuous improvement. There are certain models and theories used in organizations for this reason, which include total quality management, business process re-engineering, Six Sigma, and Lean manufacturing methodology. These models are not only concerned with customer retention and profit maximization, but they are also equally effective for the employee's wellbeing. Different methodologies used in continuous improvement processes will help industrial engineers simplify complex tasks by applying CI tools to different situations. However, the key is to understand what tools and models are appropriate for each application.

#### **KEYWORDS**

Continuous Improvement, Industrial Engineering, Lean, Organizations Strategy, Six Sigma, Total Quality Management

#### INTRODUCTION

Continuous improvement (CI) models are explained and used in different perspectives and different environments; some researchers explain continuous improvement as kaizen (i.e. change for the better), business processes-engineering, and total quality management. The most frequent questions asked by researchers are about what to do with continuous improvement and why it is needed (Galli, 2018b; Parast, 2011). The different CI models are all rooted in the scientific method, but the essence of these different models lies in their applications and the objectives of each activity of these models.

An organization is not looking to improve competitive equity. Christensen illustrates the theory of disruptive innovation and discontinuous improvement, which provides alternates of the applicable business model (Galli & Kaviani, 2018; Kumar, Antony, & Tiwani, 2011). Different studies show the ideas of the new business model or discontinuous improvement, which are analyzed alongside traditional business models. The point is that an organization needs to concentrate on enhancing meaningful improvement to remain competitive, rather than focusing on orders.

Kumar et al. (2011) appeal to the reason behind continuous improvement; they state that the "basic motivation for continuous improvement is the organization's desire to eliminate waste." The

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organization can help to achieve its strategic and operational goals by using continuous improvement models and concepts. Hence, the research discovers three types of process: a) reduction and valueless time b) valueless activity, and c) valueless variance. The researchers addressed that continuous improvement is a society of maintained improvement, which targets the eradication of waste among all systems and functions of an organization (Kumar et al., 2011). Hence, an organization's culture is focused on the ongoing elimination of wasted time, activities, or variance in processes.

The main aim of each organization is to generate profit from a service or product. Recently, the use of constant improvement technologies, such as Lean, Six Sigma, and others, are the widely used techniques for service and manufacturing companies to maintain or increase profit margins. By utilizing most of these techniques, companies try to overcome increased cost pressures attempted for their existence, while others can raise their financial profit margins for outstanding results. Another negative point is that all businesses are not fully adopting these techniques; hence, a majority of businesses cannot achieve the most optimal results (Oakland, 2014). The reason behind this is that many businesses do not understand or have the knowledge or resources to get these tools, nor do they know how to use them. Therefore, the opportunities are not fully utilized. So, in every business, there is a common opportunity available for continuous improvement strategy, which will ultimately assist in establishing, enhancing, or maintaining the margins of financial profits.

#### BACKGROUND

Continuous improvement has been at the center of human progress throughout history. Overall, there has been a significant rise in continuous improvement conducts at the organizational level, but some researchers insist that applying continuous improvement is being emphasized. Rijinders and Boer's study in 2004 focused on the theory of continuous improvement's development "in its inception" (Goetsch & Davis, 2014).

After two generations of experiencing continuous improvement in the West, we approach a third generation that will yield many accomplishments. During the 1920s through the 1970s in the U.S., the first improvement generations created constant improvement. This improvement was then exported for the reconstruction of Japan in post-World War II. The second improvement originated from the 1980s until the present. The change resulted from Japan's breakthrough automotive industry in the U.S., which caused competition. Additionally, the second generation resulted from the continuation of the paintball of constant process of improvement sic (Galli, 2018a; Wang, Chen, & Chen, 2012). After that the latest anaemic recovery and meltdown affected the major part of Lean Six Sigma enterprises, this made constant improvement off point. Six Sigma and Lean Sigma are the most commonly used continuous improvement tools, so this has become problematic.

For efficiency, organizations make use of continuous improvement strategy while giving thought to their cost for this effort is barely available; they only concentrate on enhancing performance measures (Galli, 2018a; Wang et al., 2012). Various managers feel that need and attainment of performance metrics must drive consistent improvement efforts. However, organizations are uncertain about the value of such tasks. This study seeks to identify the factors determining value in continuous improvement. All businesses are not fully adopting these techniques for a wide variety of different reasons; some are using the wrong approaches/models for the wrong applications, and some are using the models incorrectly; hence, a majority of businesses are unable to achieve most optimal results (Oakland, 2014). The reason behind this is that many businesses do not understand or have the knowledge or resources to get these tools, nor do they know how to use them. Therefore, the opportunities are not fully utilized. So, in every business, there is a common opportunity available for continuous improvement strategy, which will ultimately assist in establishing, enhancing, or maintaining the margins of financial profits. Therefore, this study sought to identify the appropriate applications and areas for each common CI approach/model.

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