Systems Thinking and Systems Analysis in Six Sigma: A Relational Review

Brian J. Galli, Long Island University, Brookville, USA

ABSTRACT

Systems thinking are a gateway to actualize all ideologies in Six Sigma within the IE/EM profession and research fields. Furthermore, systems thinking is an alternative that can generate a better research and/or project management platform. It can aid in planning, implementing, and optimizing strategies that can collaborate with project completion and accessibility. A different style of tasks accomplishment and goal attainment is made possible by generating better results. As indicated by the resources, there is a significant correlation between services that are given by managers and the performance of required results when a project is completed. Each process for systems thinking and systems analysis is a vital component to Six Sigma for the optimization of necessary methods in the best way possible.

KEYWORDS

Continuous Improvement, Six Sigma, System Analysis, System Thinking

1. INTRODUCTION

1.1. Background

Developing different systems on a specific platform allows one to recognize specific ideologies, but one must also develop a plan that is used to develop resultant factors. The only issue in developing a strategy is in using the right-thinking framework, as any approach would be that in accordance with the necessary systems. Principally, one can create useful developmental structures to recognize what is necessary when a platform concludes. Different management and leadership goals are defined by the use of certain essential systems that can identify strategies for any decision-making processes (Al-Kadeem et al., 2017b; Mitchell, 1993).

It is required to integrate certain particular thinking mechanisms when using what is necessary for the specific area of interest. Specifically, systems of thinking need to be managed in a way that focuses on the formation of any required cycle. This platform is a vital factor in realizing all sets of ideas that need to be implemented (MacGregor, 2013). Furthermore, it concerns using any necessary segments for strategic management ideologies to succeed, so systems thinking offers a guideline for decision-making concepts.

When integrated with Six Sigma, systems thinking offers a better resolution for all integrated issues when using relevant strategies in project management (González & Salvador, 2014; MacGregor, 2013). The only way to produce a more definite idea of realizing goals in any given platform is by
applying assigned targets of benefit to the system, which would abandon those that cannot offer the necessary frameworks. Clearly developing all required means is needed to know how best to understand the methods of importance (Kasser, 2016). When integrated with Six Sigma, systems thinking allows one to easily solve some persisting problems in an organization, as systems thinking strongly correlates ideologies with perfecting the necessary solutions. Primarily, the goal is to generate a more specific option for decision-making mechanisms to succeed.

Professionals can initiate the platform of systems thinking. It is best to create a better way of realizing required results by ensuring that all outcomes are necessary for a project’s structural systems (Kasser, 2016). A way to help come up with the necessary strategies is through impact-oriented thinking, where the root of a problem is defined and solved in accordance with the given ideologies. Adhering to the platform ensures better results, as the organizational framework is accessed and a new process, with a significant focus on required protocols, is maintained (MacGregor, 2013).

It is most practical to use systems thinking to ensure that any necessary strategy is attained when a policy begins, but the strategies need to focus on each stage. Most systems thinking initiatives offer a better platform to generate an attainable goal (Noori & Latifi, 2017). Technical processes that can be launched at any time are creating a goal-oriented service delivery strategy that presents a more sensible method of integrating results and processes.

The benefit of systems thinking is that one can analyze the system to recognize a fault. One can then initiate a new way to regulate the given processes to create the best way to generate policies that improve system performance (Prashar, 2014). The only way to create better strategies that conform to the required ideas is by using thinking developed in accordance with the systematic infrastructure. Systems thinking incorporates structural ideas about using easily attainable structures, which are easy to map and help to localize all possible strategies (Prashar, 2014).

All required services are easily achieved if there is a framework that integrates the most dynamic ideologies. Action group members not only can sustainably optimize given processes, but they also can attain possible results at large. The developmental frameworks that are needed in managing better processes facilitate accomplishing any strategies more smartly.

1.2. Problem Statement
In reference to managing processes in the IE/EM profession and research fields, systems thinking is a dilemma to stakeholders. Using the model is a platform that most professionals in this field need to better complete processes.

1.3. Research Hypothesis
Systems thinking, as well as analysis in Six Sigma, are important tools in different areas of daily projects and process administration.

1.4. Originality
The purpose of this study is to contribute to existing literature regarding the effectiveness of systems engineering and project management in Six Sigma projects. Moreover, it seeks to compare systems engineering and project management in Six Sigma projects by focusing on their assessment tools. Data is derived from different studies and combined in a well-mannered approach. This paper is based on original research conducted to check the hypotheses.

This paper employs different research viewpoints to recommend new ways to resolve existing issues. It utilizes a design-science-investigate strategy to identify reasonable and hypothetical applications and develop a valid assessment model of systems engineering and project management in Six Sigma environments. The study suggests development models that can benefit the question this research addresses.

Overall, this study contributes to the profession by adding more knowledge to the application of systems engineering and project management in Six Sigma projects. The research identifies
Related Content

Simultaneous Tolerance Synthesis for Manufacturing and Quality using Evolutionary Algorithms
[www.igi-global.com/article/simultaneous-tolerance-synthesis-manufacturing-quality/54344?camid=4v1a](www.igi-global.com/article/simultaneous-tolerance-synthesis-manufacturing-quality/54344?camid=4v1a)

Evolutionary Growth and Control in User Tailorable Systems
[www.igi-global.com/chapter/evolutionary-growth-control-user-tailorable/4213?camid=4v1a](www.igi-global.com/chapter/evolutionary-growth-control-user-tailorable/4213?camid=4v1a)

Evaluating User Interface Adaptation using the Context of Use
[www.igi-global.com/article/evaluating-user-interface-adaptation-using-the-context-of-use/165535?camid=4v1a](www.igi-global.com/article/evaluating-user-interface-adaptation-using-the-context-of-use/165535?camid=4v1a)
Systems Thinking and Systems Analysis in Six Sigma: A Relational Review

[www.igi-global.com/article/systems-thinking-and-systems-analysis-in-six-sigma/213925?camid=4v1a](www.igi-global.com/article/systems-thinking-and-systems-analysis-in-six-sigma/213925?camid=4v1a)