

How Cost of Poor Quality Factors Into Continuous Improvement Models

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ABSTRACT

This article aims to investigate the patterns of the relationship between the cost of poor quality (COPQ) and the process of continuous improvement. Methods of qualitative research are used to conduct the detailed inquiry between both variables from every critical angle. Comprehensive secondary analysis, which is comprised of a structured and unstructured literature review, is performed for this purpose. The findings of the study reveal that the cost of poor quality directly relates to the process of incremental improvement. Each business is faced with certain redundancies and other issues that cause the actual cost of a process to exceed the optimally reduced cost. The management of each organization should focus on a system that consistently identifies any loopholes, which would be followed by a method to eliminate or minimize them. These cost reductions incrementally result in the improvement of company processes. In the end, the evidence proves the research hypothesis.

KEYWORDS

Continuous Improvement, Cost, Financial Improvement, Incremental Improvement, Quality

INTRODUCTION

Fransson, Magnus, Turesson, & Klas (2009) define the cost of poor quality as the difference between the actual cost of a product or service, as well as the cost that would have incurred if a product or service is produced through an optimally efficient system and process. It implies that the deficiency of mechanisms that are used to manufacture the products result in expenses that could have been avoided. Fransson, Magnus, Turesson, & Klas (2009) believe that cost of poor quality is always burdensome for business since the primary purpose of doing business is to maximize the profitability. If a company is suffering from the high cost of poor quality, then it will have a profoundly negative impact on its gross margins. Therefore, each entity should strive to bring as much efficiency to its processes as possible to avoid unnecessary expenses.

COPQ is broadly divided into two categories, including direct and indirect indigent quality costs. A direct COPQ is the cost that directly relates to a company's total expenses, while the direct poor quality cost extends to three different categories of expenditure. These categories include controllable, resultant, and equipment cost (Fransson, Magnus, Turesson, & Klas, 2009). Furthermore, Bowhill (2014) defines manageable value as the directly controllable cost to ensure that a company only deploys acceptable and demanded products and services for its customers. Resultant costs result from

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the delivery of unacceptable products and services to the customers. On the other hand, equipment costs are the expenses that constitute investing in the equipment to measure, control, and accept the products and services.

Additionally, the controllable costs include the prevention costs and appraisal costs. Prevention costs are the sum of education, training, conducting quality planning, and conducting the design review. Appraisal costs include tests, sampling, and the expenses that relate to the auditing process (Fransson, Magnus, Turesson, & Klas, 2009). Resultant poor-quality costs are the sum of internal defect costs and external defect costs. Here, charges of internal failure include the costs that are identified through R&D or manufacturing at the internal level. These expenses mainly include the incorrect documentation of a test, testing defects, improper design, improper implementation, unclear requirements, and the errors in the process of inspection (Fransson, Magnus, Turesson, & Klas, 2009). Meanwhile, the costs of apparent failures are the expenses that customers identify, and they require corrections, modifications, and removals (Fransson, Magnus, Turesson, & Klas, 2009). Indirect costs consist of customer-incurred costs, customer dissatisfaction costs, and a business entity, as well (Mahmood & Kureshi, 2015).

Continuous Improvement Process (CIP) is defined just as the term implies. For example, the Robson (2014) holds that continuous improvement refers to a company's continuous efforts to bring improvements with its products, services, and processes. CIP refers to a path of incremental improvement in the areas of products and services. Also, the method is used as a meta-process in multiple domains of business and management, such as program management, project management, quality management, and business process management.

In CIP, a systematic approach is used to streamline the workflow within an organization. A system improvement plan is usually composed of three steps. In the first step, an idea regarding the product, service, or process is implemented as per planning. To be precise, it is the phase where the activities and operations are put in place (Robson, 2014). In the second step, a study is conducted to assess whether, and to which extent, the implemented processes succeed in addressing the objectives. In the third step, the company has to act by the previous step's findings. For example, if there are no negative gaps and the implementation has been successful in achieving the planned objectives then the company can continue with the plan without any modification. However, if the performance of the application is below the mark, then it needs some investigation into the factors contributing to the low production and act accordingly to eliminate those factors (Robson, 2014).

This paper plans to conduct an inquiry into the cost of poor quality and the process of continuous improvement. Furthermore, the study finds how both of these variables are interdependent. The goal is to assess how the concept of poor quality cost can be used to boost the performance of the continuous improvement process.

Research Objective

Although much research discusses the variables taught in this study, they do not teach the variables in combination with project management and performance. This gap is what the study here seeks to fill. By analyzing these variables in the context of project management and performance, the study suggests a structure for the current model's best features. The structure is intended to be collective and therefore applied to project management, operations, performance, and varying industries. Several other questions regarding the variables are discussed in length in this study and the ultimate findings will act as avenues for future researchers to pursue.

Research Gap

Although existing literature discusses the concepts of cost of poor quality and continuous improvement models, they do not discuss the integration of the two to lead to steady progression of services and project management. Based off existing literature, this study attempts to fill that void.

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