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The Implementation of the Lean Six Sigma Production Process in a Telecommunications Company in Brazil

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Abstract: The implementation of the lean six sigma methodology aims to implement practices to systematically improve processes by eliminating defects, making them cheaper. The implementation of projects with the methodology uses a division into five phases: definition, measurement, analysis, implementation, and control. In this process, it is understood that the implementation of said methodology generates benefits to organizations that adhere through the improvement of their processes. In the case of a telecommunications company, it was realized that the implementation of a lean six sigma project contributed to the improvement of the presented process, generating a financial return with the avoided cost. However, such study has limitations such as a specific segment of performance and procedure, i.e., it can not be defined that return under other circumstances will be the same. It is also concluded that lean six sigma projects tend to contribute to improved processes evaluated due to their methodology that is based on statistical analysis and quality management tools and can generate a financial return. It is hoped that the present study can be used to provide a clearer view of the methodology for entrepreneurs who wish to implement process improvement actions in their companies, as well as to provide a foundation for professionals working with lean six sigma projects. After the review of the processes, the completion of the project stages and the monitoring for three months in partnership with the owner of the process to ensure the effectiveness of the actions, the project was completed with the objective reached. There was an average of 60% reduction with the issuance of undue invoices generated after the deactivation and it was possible to extend the project to other companies, which allowed a reduction well above the initially stipulated target.

Keywords: quality, process, lean six sigma, organization

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