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Computerized Platform to Evaluate Profitability of Small Businesses in Puerto Rico

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Yolianna Hernández-Torres, Efraín Santiago-García, and José Soto-Martínez are Industrial Engineering undergraduate students with expected graduation dates in 2017 and 2018.

Abstract: This research project is a continuation of the efforts of the previous two semesters for small businesses in Puerto Rico. Two case studies were previously developed by three undergraduate industrial engineering students; one for frappés businesses and the other one for a barbershop. The case studies were focused on understanding how these small businesses were managed by considering the details of the products or services they offered with their respective costs, selling prices, and profitability. Based on the finding for these kinds of businesses and considering the similarities among small businesses, a computerized platform was created. The results obtained in both case studies were used to verify the general model and validate it to have it available for entrepreneurs. The main objective of the program is to allow small business owners to understand how they are using its resources to improve their business' ability to generate profit by doing a thoroughly profitability analysis of their business. With the purpose of guiding business proprietors to understand the impact their daily decisions have on their profit margin; the standardized computerized platform was created. The analysis tool for entrepreneurs was made in Microsoft Excel with a user-friendly interface that allows business owners to evaluate in detail their selling prices and the different costs incurred in each of their products or services, thus performing a profitability analysis. Thinking in small businesses owners that do not necessarily have knowledge on how to successfully manage a business nor the required previous experience, the result of this research project is a validated easy-to-use tool for this kind of entrepreneurs.

Keywords: Small business, Profitability, Entrepreneurs