

## - Abstract-

Puertas y Diseños is a woodwork business that has recently suffered financially from the deficiency of business. This project presents the study of such woodwork business in order to provide alternatives to improve profitability. The objective was overview all alternatives to increase 10% of the business profits by 2015. The steps to achieve the objective were: analyze the actual functionality of Puertas y Diseños, research studies made for businesses with similar situations, and recommend alternatives to help increase profitability. The study concluded that the proper alternatives to increase profits for Puertas y Diseños are: saving 2% in costs by recycling of materials and establishing an annual salary of \$36,000 to the owner. Using these alternatives at the end of the period August 2014-2015, the business will gain an equivalent of 9.7% of yearly profits, which is equivalent to \$3,724.

## - Introduction-

To build a successful business it is essential to understand the basics of business administration. Before starting a company as a sole proprietor, it is important to define the structure that better suits the business purposes. Some owners fail to maintain their businesses due to many factors, but main reason is because of the lack of business knowledge. This project focuses in the small woodwork business known as Puertas y Diseños. Currently, the business has many upscale customers and large demands in high season, but in some periods suffers deficits. To understand where small businesses lacks, this project will evaluate Puertas y Diseños and provide the necessary strategies to maintain a woodwork business. This can also help improve profitability in many other businesses with similar situations. Figure 1 shows two modern products done by Puertas y Diseños. The kitchen in the left was created by PVC plastic materials and coated with car paint. The living room shown on the right, shows an abstract television furniture made from wood and also coated with car paint.



Figure 1: Elaboration of Puertas y Diseños.

## - Puertas y Diseños-

Puertas y Diseños is a small woodwork business owned by a 30 years of experienced carpenter, Luis Gómez. The business started in 2010 and is currently giving services around the island of Puerto Rico. Puertas y Diseños designs, constructs, and installs any type of woodwork at the expense of the customer's desires and budget.

The business is currently operating with two employees. Both work in manufacturing of the products while the owner administers and manufactures. Recently, the small woodwork business of Puertas y Diseños has been struggling financially due to the limited knowledge in business management. In some low productivity periods, the owner has been unable to meet monthly expenses. In order to improve the business status, it is proposed to increase 10% of profits by the year 2015.

## How to achieve the projects objectives:

- Establish a budget in the small business.
- Create a more sustainable business by adjusting utility costs, materials, products, and construction and installation process.
- Organizational overview of the project.

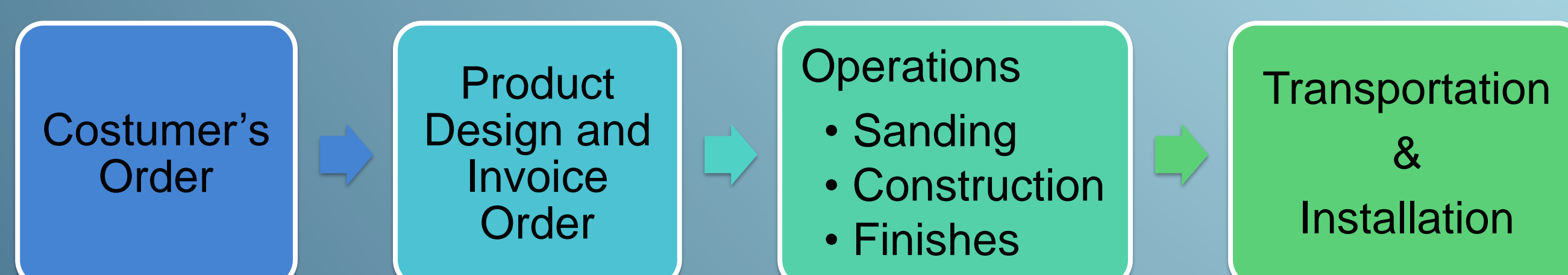


Figure 2: Puertas y Diseños Current Production Process

## - Methodology-

In order to study and determine the alternatives that could help Puertas y Diseños increase profits, a work plan was developed.

- Understand how the woodwork business currently operates.
- Visit Puertas y Diseños to observe operations and interview the owner.
- Recollect current and previous economic data of the business.
- Gather additional information from small businesses with similar situations.
- Calculate a financial analysis to understand the business status.
- Identify and analyze the business administration.
- Calculate and analyze the current financial information.
- Present possible alternatives or recommendations in order to increase 10% profit.

## - Project Limitations-

During the course of this study it was found that the financial information of Puertas y Diseños was limited. It was imperative to acquire more than two years of information to help determine the projection for 2015. It would have also helped to calculate the break-even analysis to understand if the production demand is gaining business profits.

## - Analysis-

With little business knowledge, the organization can be detrimental. The current business structure of Puertas y Diseños is affecting the generation of profits. In the administration department there is no standardized record keeping for all the income and expenses of the business.

Figure 3 is the cost and income profile gathered at Puertas y Diseños, it was found that in September 2013, March, April, and May of 2014 were the periods of deficits. This deficit can be caused by two common factors that are: the continuance of a large order or low production. The monthly income represents all sales made in that period of time. The fixed costs are costs that do not change in total as activity changes; those cost are labor and overheads. Variable costs represents all the direct materials.

Figure 4 represents the total costs, income, and profit for the year August 2013-14. The total owner's salary was found to be \$37,320. The owner receives the whole profit as his salary and this results in no emergency funding for the company.

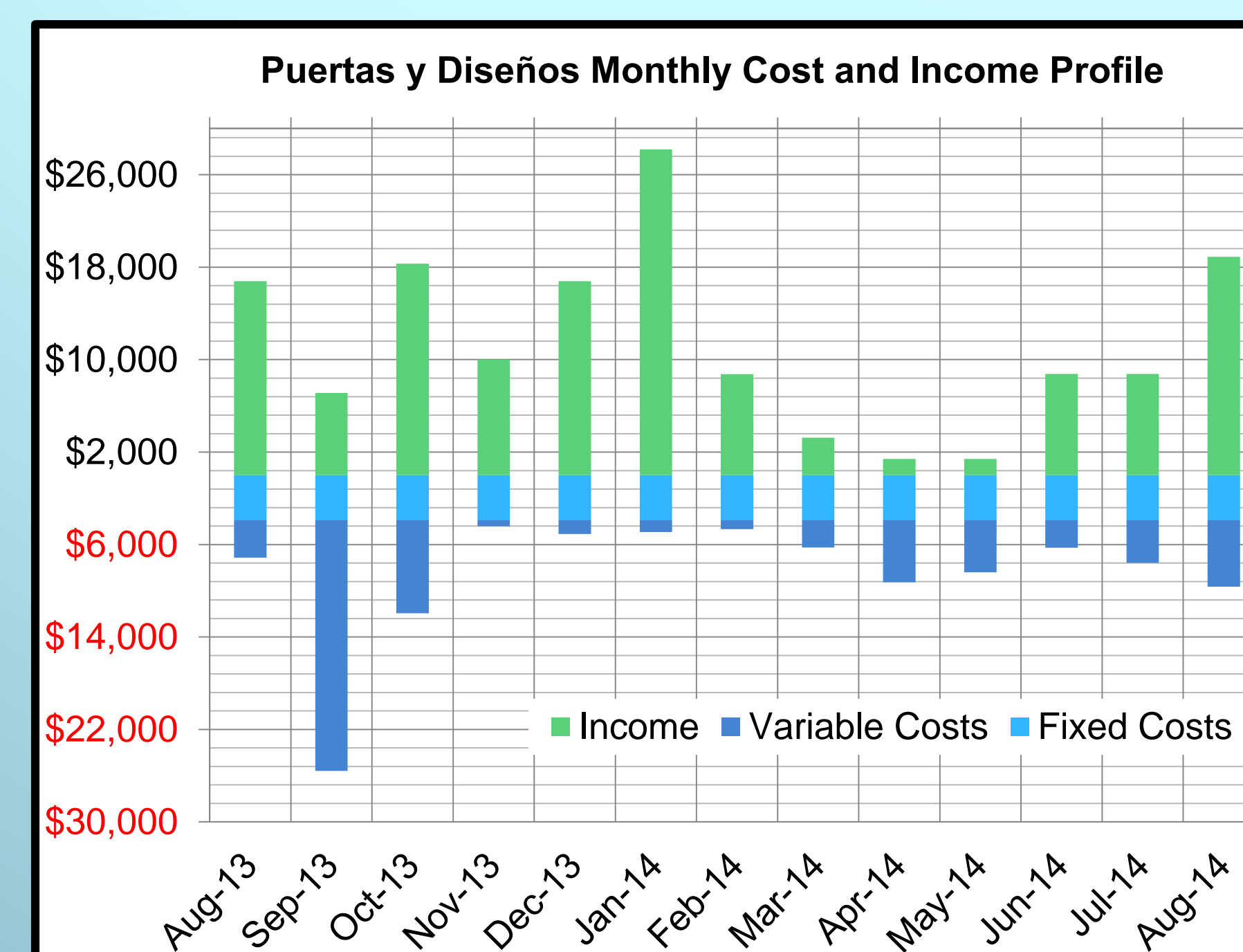


Figure 3: Current Cost and Income Profile of Puertas y Diseños.

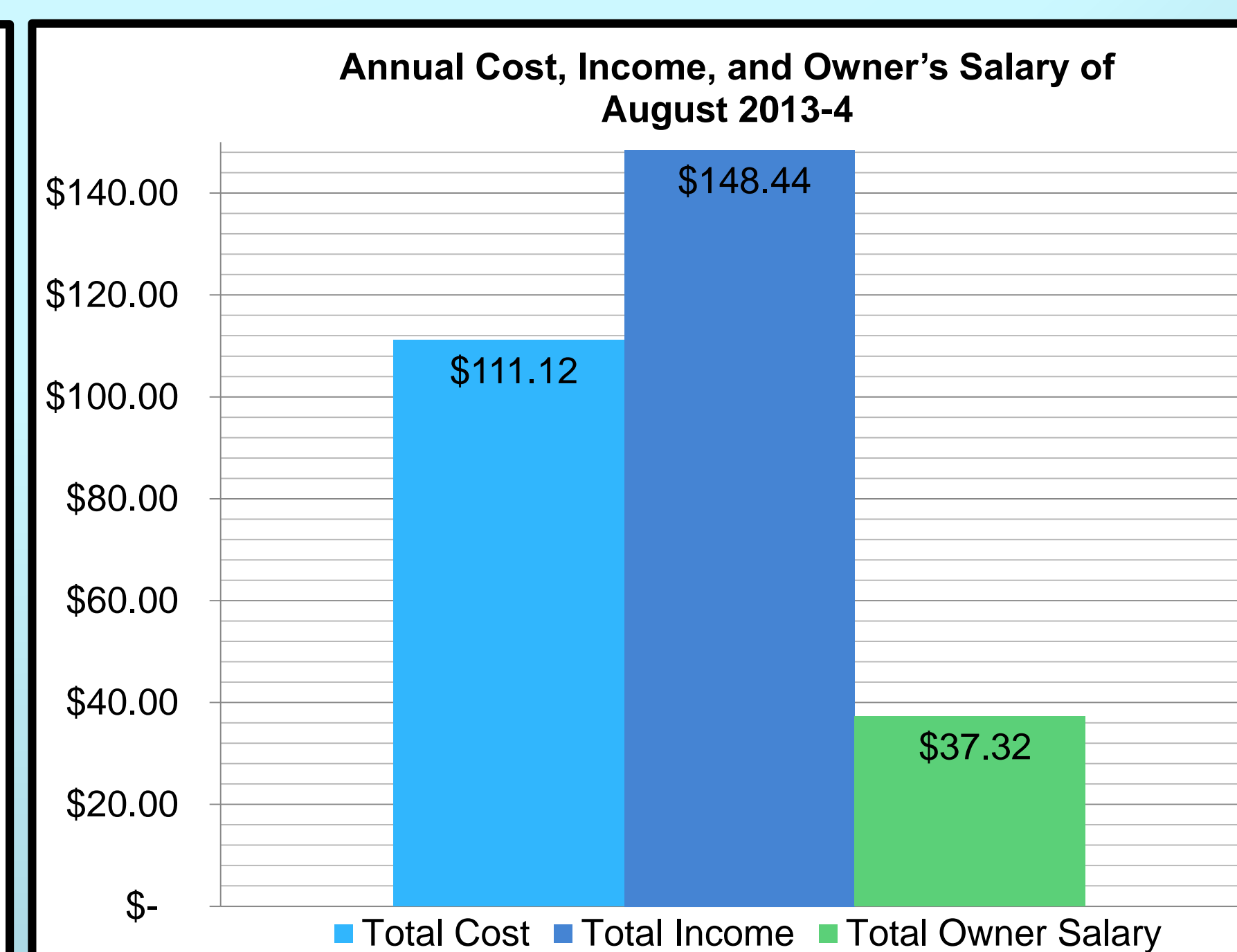


Figure 4: Annual Cost, Income, and Owner's Salary.

## - Possible Alternatives-

Some of the possible alternatives that will help improve Puertas y Diseños profits are the following:

**Alternative #1:** It is recommended to restructure the business into a more effective structure. The owner would be in charge of the administration and supervision of operations. This can reduce work for the owner and give more responsibilities to the employees.

**Alternative #2:** Reduce employee salary to the basic minimum rate of \$7.25 per hour to each employee instead of a fixed salary of \$1,400 monthly. The labor expenses would reduce \$1,160 per month for each employee and would increase annual profit for up to \$8,560. The main disadvantage of this decision is that it can affect employee's performance and consequently the finished product.

**Alternative #3:** The owner of Puertas y Diseños currently receives all the business profits as his salary. With the business with zero capital, it can suffer significantly in the periods of deficits. According to the owner, he needs to receive a minimum of \$3,000 monthly for his personal expenses. If the owner establishes his own fixed salary of \$3,000 per month, the profit would increase for \$1,324.

**Alternative #4:** In the workshop there is a minimum estimate of \$200 of raw material that is disposed off the month of September 2014. According to the owner it is very common to loose such materials because of the customers; alterations to the order. It is proposed to recycle such raw materials for many purposes including use as formwork and utilize for other products. If Puertas y Diseños implements this alternative, it can decrease an estimate of 2% in costs of raw material.

## - Conclusion-

Like many small businesses in Puerto Rico, Puertas y Diseños has financial situations when low production season occurs. This can be due to lack of the business administration knowledge. This project was focused on providing the proper strategies to help this business and business with similar situations.

To increase the company's profits it is recommend determining a fixed salary system for the owner and employees. It is also recommended the establishment of emergency fund system for low business seasons. Incorporating a sustainable business by establishing efficient construction and installation processes will also help the business grow. Finally, it will also help improve profits from the use of recycled materials as raw materials and formwork. Using these alternatives profitability will gain 9.7% a year with an emergency fund of \$3,724.

In the course of this project, the analysis was limited due to the low availability of financial information. To attain more realistic results, more information should be inquired.

## - Bibliography-

- Howe, J., & Bratkovich, S. (2005). A Planning Guide for Small and Medium Size Wood Products Companies. (Second, Ed.) USDA: Forest Service.
- Chan, I., & Chao, C.-K. (2008). Knowledge Management in Small and Medium-Sized Enterprises. *Association fo Computing Machinery*.
- Song, L. (2014). Cost Control for Small and Medium-Sized Enterprises. *Journal of Chemical and Pharmaceutical Research*, 6 (5), 409-412.
- Špičková, M. (2013). The Use of Cost Management Techniques as a Strategic Weapon in SME's. *University of Pardubice*. 1
- Metz, C., & Bannan, K. J. (2002). Taking Care of Business. *PC Magazine*, 21 (6), 110.
- Hilton, R. W. (2009). *Managerial Accounting: Creating Value in a Dynamic Business Environment* (Eighth ed.). New York, NY: McGraw-Hill Irwin.
- United States Department of Labor. (2014). *Wage and Hour Division Laws*. Link: www.dol.gov.