

INDUSTRIAL, MANUFACTURING, & SYSTEMS ENGINEERING

CAPSTONE PROJECT /INTERNSHIP SUMMARY

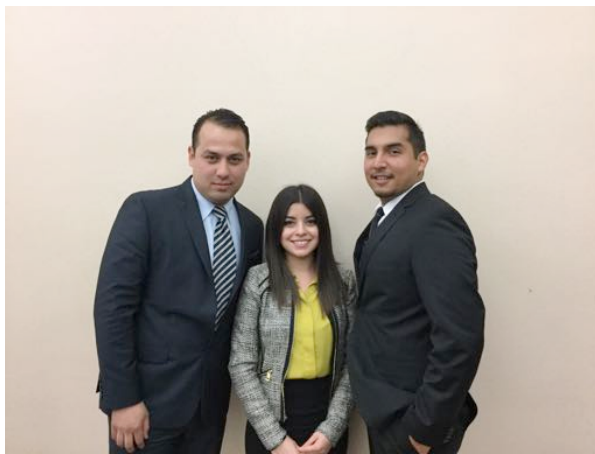


Your Name: Luisa Matamoros, Martin Moncada, Raymundo Ruiz Hernandez

Type of Capstone: Practical Application

Capstone Project Title: Reordering System Design and Warehouse Reorganization

Year and semester: Fall 2015



Raymundo Ruiz Hernandez, Luisa Matamoros, and Martin Moncada

INTRODUCTION

BYM is a hardware distributor company located in Cd. Juarez, Mexico. There are around 20,000 items stocks in their 11,000 ft² facility.

Among their products, they supply sets of tools. If a set is not available in stock, the employee is allowed to prepare the set needed using the individual parts available in stock. They will proceed to log it out at a set of tools and not as many individual parts. This creates a false report in the system. The amount of items stock in warehouse causes the need for more space.

The scope of our project consisted on analyzing their 6 bestselling items.

When concluding our project, we were able to tackle their main inventory problem. On the other hand, it was in our engineering solution not to solve their warehouse problem since the proposed inventory control system was not implemented yet. Having the system full implemented will allow the company to solve their warehouse issue.

When we first approach the company we realized that they knew they were losing money and space with their current system. However, they did not know how to address the problem.

To approach the project, the DMAIC and DMAVD tools were used.

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PROJECT OUTCOMES

Forecasting methods were used and taught to the company for their future orders. Moreover, the Economic Order Quantity was our main contribution to the solution presented to the company. Our team proposed an inventory control system that will allow the company to save time to supply an order, space in the warehouse, and money when resupplying their items.

INDUSTRIAL ENGINEERING PROGRAM ASSESSMENT

Most IE courses were enjoyable. Our professors are very knowledgeable and always looking for ways to improve our learning experience. Other than the technical aspects of the IE program learned in class, we learned to always be respectful with your professors and peers, teamwork, and above all to do what you really love.

This staff really brings out the best of you. They push you to be better and to want to be better. I never knew if engineering was for me until taking classes with the IE professors and I can now say, I couldn't have made a better choice.

We would recommend having a different approach on one of our upper level courses, Systems Simulation. This course has a lot of potential and is very helpful when trying to quantify a project's success. We believe that a class this relevant should have a different approach than what is has right now.