

**BUSINESS CASES WITH DATA SCIENCE**

**MASTER DEGREE PROGRAM IN DATA SCIENCE AND ADVANCED ANALYTICS – MAJOR IN BUSINESS ANALYTICS**

**Business Case 1 – Wonderful Wines of the World**

Group H

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# INTRODUCTION

This project we were designated to analyze a wine company dataset named Wonderful Wines of the World (WWW). WWW is a 7-year-old enterprise, which sells wine through three channels: catalogs, web site and physical stores (10 branches). The purchase can be done in the physical stores, telephone or online.

Into this moment, WWW keep your clients engaged by sending them a newsletter with the updates of wine world. Even that the database of WWW has only 4-year-old, the company recently organized a marketing activity which aggressively increased the database. One of the currently pain points is a lack of cross selling strategies which support the recurrent profit.

This project was developed with a 10.000 sample of the currently WWW’s database of customers that purchased in the last 18 months. And the report was adjusted in four main parts based in CRISP-DM methodology [X].

# BUSINESS UNDERSTANDING

At this step were defined the essential business guide lines to garante a good result of the project. In order to develop the best solution to WWW the business understanding were based in the currently reality of the company presented on the introduction.

## Business Objectives

The goals of WWW are:

* Improve the familiarity of the database by create a classification for each client to develop marketing strategies by profile;
* Be able to classify the new customers;
* Improve the Return on Investment by understanding the client value (ROI).

## Business Success criteria

Based on the business objectives describe, were defined two main results to guarantee the success of this project: identify the profile of the new customers since the first purchase, develop marketing strategies to reach all classification profiles and recurrent profit to the company.

## Determine Data Mining goals

Based on the business goals we translated to Data Mining language as shown in the table below (Table X).

|  |  |
| --- | --- |
| Business Goal | Data Mining Goal |
| Classify the currently clients by profile | Clustering the clients |
| Ranking the clients to understand the ROI | Apply the recency, frequency and monetary value (RFM) |
| Identify the new customer profile | Apply a predictive model |

# PREDICTIVE ANALYTICS PROCESS

Describe only the major steps involved in the process. Do not replicate what is already described in the Notebook. If necessary reference the reader to the Notebook.

## Data understanding

Bla, bla.

## Data preparation

Bla, bla.

## Modeling

Bla, bla.

## Evaluation

Results described in technical terms (e.g., reached an Accuracy of 95%).

# RESULTS EVALUATION

Describe the degree to which the model meets the business objectives. If that cannot be done without the application of the model in a real environment, describe how could that be done.

Assess the data mining results in respect to the business success criteria.

# CONCLUSIONS

Final remarks on the project.

## Considerations for model improvement

Bla, Bla

# REFERENCES

Author, A. A., Author, B. B., & Author, C. C. (Year). Title of article. *Title of Periodical, volume number* (issue number), pages.

# APPENDIX (OPTIONAL)