

Insight Hackers Project Charter

Date: 18 March 2025

Team Members:

1. Lincoln Chanakira
2. Learnmore Mawisire
3. Julian Fernandez
4. Samir Bonetti
5. Nasheen Abdullah

Project Name:Bank Marketing

Dataset Description

<https://archive.ics.uci.edu/dataset/222/bank+marketing>

This dataset was found on the UC Irvine Machine Learning Repository and is related with direct marketing campaigns of a Portuguese banking institution. The collection of data that they performed was done via phone calls. Often a client would be contacted more than once, in order to assess whether or not they had put in a bank term deposit. The data set has 41,188 records and 20 inputs which are ordered by date, beginning from May 2008, to November 2010. A few key attributes of the data set are age, job, marital, education, default, balance, housing, and loan and y which is a binary variable that shows whether the client has subscribed a term deposit.

Project Objectives

Effectiveness of Marketing Campaign

Our goal is to examine the prior campaigns' success rate. Analyse the effect of call time on client reactions and choose the optimal month and contact technique for increased conversions.

Customer Segmentation & Targeting

We would like to determine which client segments are most likely to sign up for a term deposit and examine consumer demographics that affect subscription rates, such as age, occupation, marital status, and educational attainment. This would help us determine which factors make it more probable that one signs up for a deposit.

Financial Information & Probability of Subscription

We are going to examine the relationship between consumer behaviour and credit defaults, housing loans, and personal loans. Particularly, we want to find out if customers with larger balances are more likely to subscribe.

Analysis of economic and social factors affecting banking product adoption

To analyze how macroeconomic indicators (employment rates, consumer confidence) and social factors (education, occupation, housing status) influence customers' likelihood to subscribe to term deposits, identifying key predictors for optimizing future marketing campaigns.

Start Date: 02/19/2025

Target Finish Date: 05/07/2025

Deliverables (with deadlines):

- Team formation (02/19/2025)
- Team project charter (03/19/2025)
- Team final report (05/07/2025)
- Team presentation (05/07/2025)

Roles and Responsibilities

Team Member	Roles and Responsibilities	Estimated work hours
Learnmore Mawisire	Oversees the project's schedule and completion dates, cleans, organizes, and evaluates information and makes suggestions for enhancements to increase accuracy.	10 hours per week as required
Lincoln Chanakira	Statistical analysis, predictive modeling, and interpretation of economic and social factors affecting term deposit adoption. Develops methodology for analyzing relationships between macroeconomic indicators and customer behavior.	10 hours per week as required

Julian Fernandez	Edits and in charge of the writing of information and evaluations, evaluation of data, writing of conclusions.	Variable depending on workload.
Samir Bonetti	Helping with data cleansing, analysis, and insights.	
Nasheen Abdullah	Helping with MS Excel, Power BI, and PowerPoint slide making	Variable depending on workload

Team Communication

Weekly Zoom meetings are used by our team to discuss and report progress, with ad hoc meetings held as needed. Google Drive will make collaboration easier, and WhatsApp can be used for sharing quick updates. Formal team communications are conducted via email. Our team uses WhatsApp to conduct regular progress reviews and updates to make sure we are on pace to accomplish project objectives. This modality is adaptable in that it accommodates team member schedules while promoting consistent project development.

Charter Sign-Off

Name 1: Learnmore Mawisire

Name 2: Lincoln Chanakira

Name 3: Julian Fernandez

Name 4: Samir Bonetti

Name 5: Nasheen Abdullah

Feedback from the Professor: The professor will provide brief feedback here:

Professor Sign-Off

Professor Gwanhoo Lee: Electronic signature here