Lloyds Banking Group

Data Analyst Incubation Program

Sprint 1 : Direct Marketing Campaign – Customer Segmentation Analysis
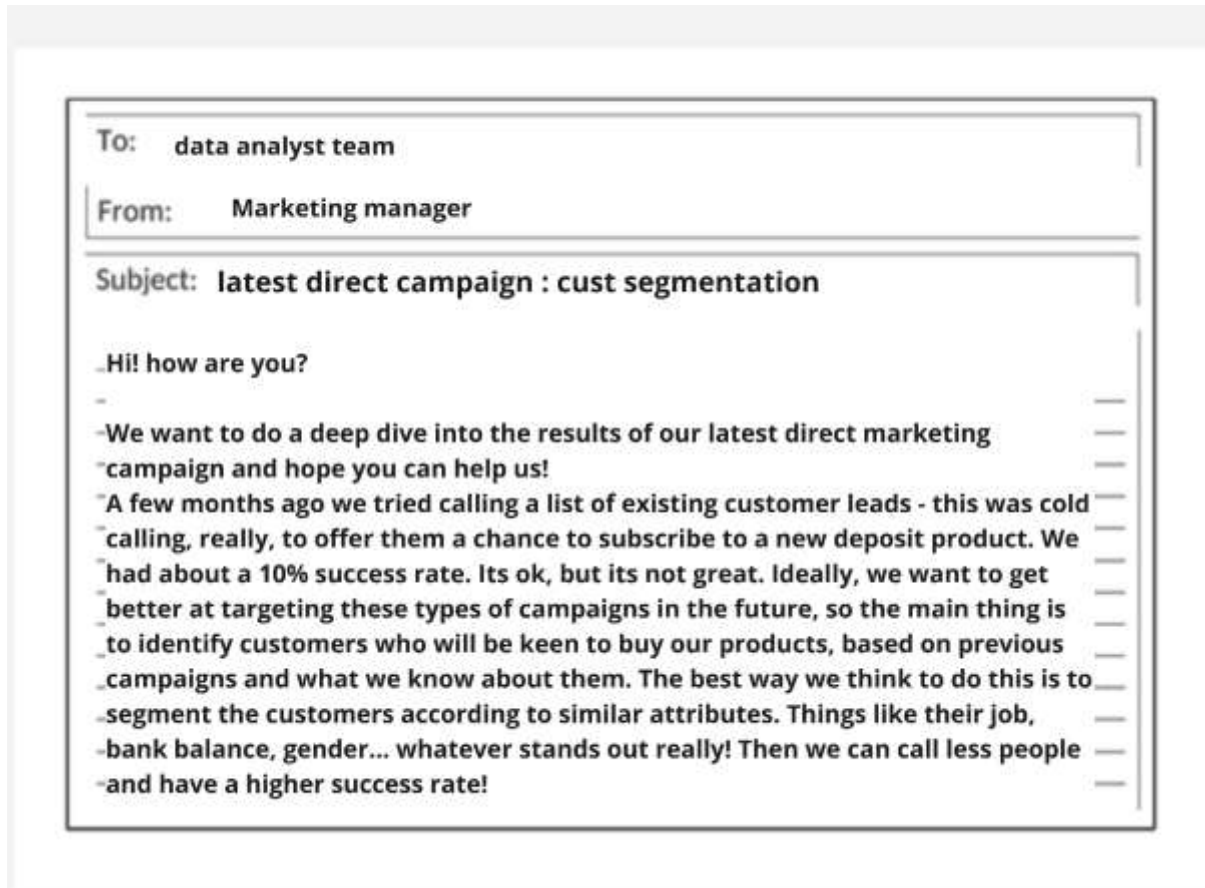
CONTENTS

Email Received (High Level Requirements)

To: data analyst team

From: Marketing manager

Subject: latest direct campaign : cust segmentation

Hi! how are you?

We want to do a deep dive into the results of our latest direct marketing campaign and hope you can help us!
A few months ago we tried calling a list of existing customer leads - this was cold calling, really, to offer them a chance to subscribe to a new deposit product. We had about a 10% success rate. Its ok, but its not great. Ideally, we want to get better at targeting these types of campaigns in the future, so the main thing is to identify customers who will be keen to buy our products, based on previous campaigns and what we know about them. The best way we think to do this is to segment the customers according to similar attributes. Things like their job, bank balance, gender... whatever stands out really! Then we can call less people and have a higher success rate!

Development Brief from Your Supervisor

We want a **Tableau dashboard** developed for this project; it should be highly interactive and enable the marketing team to explore the detail for themselves. Ideally this dashboard will be one page, but if you think it makes more sense to have a top-level dashboard and a more detailed drill-down dashboard on a second page, if both dashboards are linked together logically, that is okay.

You have until the afternoon on Wednesday to develop your dashboard. Then, you will share it with a colleague for a peer review and you will have an opportunity to **iterate and improve** your dashboard at least once based on their feedback.

The marketing folks will need an **end user guide** for the final dashboard by the way, explaining how to use the dashboard, documenting any data

you excluded from the source data you are given and explaining any ambiguous terminology that appears on the dashboard. Try to keep the navigation and interactions inside the dashboard straightforward, really intuitive – oh and make sure the dashboard looks attractive – these are marketing people after all!

As far as I can tell, the main questions the team wants to have answered are:

1) what types of customer did we contact for the campaign?

2) which customer types most frequently subscribed to the offer?

First, you should **research segmentation** methods – there might even be some specific features in tableau that work well for this, or maybe you will find some recommendations on the Tableau Forum? I think the marketing team will be interested in the most obvious segments, so you can create segments focused on demographics, behaviour, anything that we have for them in the data available. We do not have time to collect any additional data.

Next, do some design work for your dashboard. The marketing team is your audience/ stakeholders, so keeping their needs in mind should help you prioritise the data you want to share, select appropriate visuals, and sketch out a **prototype** with pen and paper or using a lo fi tool that is not connected to real data. Following this design process will allow you to discard ideas without investing too much time in them. I recommend you also use **storyboarding** to map out the interactions that you expect end users will want to follow as they explore the data.

A note on our marketing strategy – this was a cold calling campaign, but someone mentioned that we called each customer more than once – I wonder if that's a successful approach?! Maybe that's something you can look into as well.

As a stretch challenge: I wonder if you could pull together some **customer personas** on the types of people we should be calling because they have a high success rate with this type of campaign. This would certainly help the marketing team prepare a more cost-effective campaign next time. Here's the template we normally use:

persona-template.do
cx

Memo on Requirements and Data from Business Analyst:

[link to data file on GitHub]

This data comes from the marketing team and contains some useful information about the previous campaigns which targeted these same customer leads, demographic info about the leads, and data about this campaign – e.g., how many times we called them, did we get them on their home or mobile phone, how long was the call and what was the final outcome (they did or did not subscribe to the product we offered them)?

The data appears to be of a good quality from first glance but there may be some weird outliers in there you need to filter out.

The attached excel contains column definitions. It will be worth, as a first step, using this as a template because when you examine the data, you can make notes in the excel for whatever you discover.

Direct_Marketing_Col
umns.xlsx