

# CHURN PREDICTION AND OPTIMISATION— 8 JAN 2025



### **AGENDA**

- Introduction of project team (MSF, ESMT)
- 2. Introduction to MSF Flaminia
- 3. Introduction to Fundraising Loyalty Management in MSF Nicole
- 4. Overview of project scope Zankar
- 5. Project cadence and next steps Rania
- 6. Q&A



## **PROJECT TEAM - INTRODUCTION**

#### **MSF**

| Name                | Role   |
|---------------------|--|
| Flaminia Sabrie     | Head of Strategy & Organisational Development Department |
| Nicole<br>Huwendiek | Officer Loyalty<br>Management (FR)                       |
| Markus Kopf         | Head of IT Strategy<br>Unit                              |
| Zankar Koli         | Data Engineering<br>& Analytics<br>Specialist            |
| Rania Aboueid       | IT Project Support<br>Officer                            |

#### **ESMT**

| Name   | Role   |
|--|--|
| Dr. Vlada<br>Pleshcheva                        | MAAI - Analytics<br>Consulting<br>Project<br>Coordinator |
| Djordje Pevcevic                               | Mentor   |
| Giovanna<br>Mariotto<br>Whitaker<br>Cavalcanti | Student  |
| Stanislas<br>Koralewski                        | Student  |
| Youssef Ouidani                                | Student  |
| Zakaria Belehri                                | Student  |

## **ABOUT MSF**

#### When was MSF founded?

Médecins Sans Frontières (MSF) was founded in 1971 in France by a group of doctors and journalists in the wake of war and famine in Biafra, Nigeria. Their aim was to establish an independent organization that focuses on delivering emergency medicine aid quickly, effectively and impartially.

MSF is a private international association. The association is made up mainly of doctors and health sector workers and is also open to all other professions which might help in achieving its aims.

Three hundred volunteers made up the organization when it was founded: doctors, nurses and other staff, including the 13 founding doctors and journalists. Today, MSF is a worldwide movement of over 69,000 people.

#### Who we are?

#### Where do we Work?

In more than 70 countries, Médecins Sans Frontières provides medical humanitarian assistance to save lives and ease the suffering of people in crisis situations.

#### Full list of countries



## **ABOUT MSF**

MSF was created in the belief that all people should have access to healthcare regardless of gender, race, religion, creed or political affiliation, and that people's medical needs outweigh respect for national boundaries. MSF's principles of action are described in our charter, which established a framework for our activities.

#### The MSF Charter:

- ✓ Médecins Sans Frontières provides assistance to populations in distress, to victims of natural or man-made disasters and to victims of armed conflict. They do so irrespective of race, religion, creed or political convictions.
- ✓ Médecins Sans Frontières observes neutrality and impartiality in the name of universal medical ethics and the right to humanitarian assistance and claims full and unhindered freedom in the exercise of its functions.
- Members undertake to respect their professional code of ethics and to maintain complete independence from all political, economic, or religious powers.
- ✓ As volunteers, members understand the risks and dangers of the missions they carry out and make no claim for themselves or their assigns for any form of compensation other than that which the association might be able to afford them



#### What is Fundraising in MSF

The task of the fundraising department is to secure funding for international projects, so that emergency medical aid can be organized and implemented independently, professionally, quickly and effectively.

#### MSF-Germany is financed by:

- Donations from private individuals and companies
- Grants from various foundations
- Fines imposed
- Legacies

Our aim is to retain donors and win them for long-term project support - through honesty, openness and transparency.



Our regular donors are particularly important for the predictable income.

At the beginning of 2025 we have about 272.000 RD, of whom

- Ca. 238.000 can be reached by postal mailings (3 donor magazines, 1 annual receipt, 1 Letter from the project, eventually an upgrade appeal per year)
- Ca. 51.500 can be reached by emailings with opt-in (approx. one or two every month) and about 77.000 without opt-in (approx. 6-8 emailings a year)
- Ca. 45.000 can be reached by telephone (with opt-in) for upgrade and reactivation campaigns
- Income share of all generated income: 27%



#### **Overview of materials**



In 2024 we gained

- 20.884 new regular donors
  - 8.357 via online (e. g. Website, E-Mailings)
    With an average yearly donation of 461 €/donor
  - 8.210 via F2F (at the stand or door-to-door)
    With an average yearly donation of 123 €/donor
  - 3.345 via postal mailings (mostly mailings to existing donors)
    With an average yearly donation of 273 €/donor
  - 877 via Telephone (Inbound and Conversion Calls)
    With an average yearly donation of 240 €/donor



Within the target group of regular donors, there are two programs for special donors:

#### Friends of sponsorship

- all regular donors with a minimum donation of € 300 a year
- Number: about 62.000
- Average donation per year: € 579
- Benefit: MSF wall calendar at the end of the year
- New in 2024: 8.305
- Lost in 2024: 3.996

#### **Doctors for Doctors**

- Medical doctors with a minimum donation of € 360 a year
- Number: about 5.800
- Average donation per year: € 620
- Benefit: e.g. an appointment diary for patients, certificate, a medical version of the donor magazine



But, in 2024 we also lost

- 15.021 regular donors
- with an annual contribution of over € 5 million

#### This is how this initiative will help MSF

If we could only retain 2-5% of the cancellers each year, it would have a huge impact on our revenue.

If we could predict which donors are about to cancel their donation, we could improve our attrition rate and increase our income year on year through targeted measures (mailings, newsletters or possibly no mailings at all) and tests.



# OVERVIEW OF DATA LIST TO USE FOR THIS PROJECT

- 1. We will be sharing list of available data with the project team members on 14<sup>th</sup> Jan 2025
- 2. We request students to come up with a proposed selection of data from this list which can help in focusing on the selected data for this project
- 3. According to the requested list of data from the students, we will share data in batches end of January/beginning of February



# INSIGHTS FROM OTHER EU COUNTRY DONOR RETENTION INITIATIVE

- Separate machine learning models created for Face to face and Direct Marketing acquisitions
- 2. Separate models created for churn in last 3 month, 6 month and 12 month with the 6-month model being selected for best segmentation differentiations
- 3. Analysis done to determine relation of churn with different moments in donor/prospect lead journey e.g. between first donation date, last donation date, days since first donation and churn, tenure with MSF as donor and churn
- 4. Segmentation model to better understand relation between churn and different initiatives like marketing loyalty management
- 5. Understand Relation between recent contact and churn
- 6. Split of pilot and full rollout implementation performed for testing accuracy of model in pilot and then launching evolved campaigns in full rollout



## PROJECT SCOPE (1/3)

#### **Research Title:**

"Optimizing Donor Retention and Lifetime Value Strategies: Predictive Analytics and Segmentation for Enhanced Donor Engagement"

#### Research Objective:

To develop data-driven strategies for reducing donor churn and identifying new donor segments by leveraging predictive analytics, market segmentation, and effective data visualization.



## PROJECT SCOPE (2/3)

#### **Research Questions:**

- 1. What are the key factors contributing to donor attrition, and how can predictive models help in identifying probable donors?
- 2. How can the existing donor data be segmented to better understand future donor lifetime value and enhance targeted communication and improve donor retention?
- 3. How can the findings from donor behavior analysis be effectively visualized to support decision-making and stakeholder engagement?
- 4. Which external data sources can be utilized to better predict the donor lifetime value?

## PROJECT SCOPE (3/3)

#### Research Design Overview:

- Phase 1: Understanding project scope, Data selection, Data Collection
  & Preparation
  - No Personally identifiable information to be made available to maintain donor data confidentiality e.g. email address, contact number, home address, donor name
- Phase 2 & 3: Predictive Analysis & Segmentation Understanding, segmenting and predicting donor lifetime value and predicting churn
- Phase 4: Data Visualization Design of dashboard, visualization with samples
- 4. Phase 5: Strategic Recommendation Data driven ideas to improve donor engagement

## PROJECT CADENCE AND NEXT STEPS

January 2025

- Project Kickoff meeting
  - 8 Jan
- Data transfer list sharing
  - 14 Jan

February – March 2025

- Regular Progress Meetings (every 3 weeks)
  - 29 Jan
  - 19 Feb
  - 12 Mar
  - · 2 Apr
  - 9 Apr (closing iteration before submission in Moodle on 13 Apr 2024)

April 2025

- Share final Project deliverables and final presentation with MSF-Germany
  - 16 Apr



### PROJECT CADENCE AND NEXT STEPS

#### **Expected Outcome:**

- 1. A validated predictive model to identify highly probable donors and aim to reduce churn
- Segmentation report, including profiles of existing and mapped potential new donors to lifetime value segments
- 3. Data visualizations that effectively communicate findings and support stakeholder decision-making
- 4. Recommendations for targeted communication and donor engagement to enhance retention efforts









