Pa004 – Solution Planning

## Company: Insurance All

**Business problem:** Insurance All is analyzing the possibility of offering insured people a new product: Car insurance.

## 1.Projects steps: Business Challenge -> Business Understanding -> Data Collect -> Data Cleaning -> Data Exploration -> Data Modeling -> Machine Learning Algorithms -> Algorithms Measurement -> Model in Production.

## 1. 1 Machine Learning Project

**Goal :** Build a model that predicts whether or not the customer would be interested in car insurance, prioritizing customers that has the greatest interest in the new product and thus optimize the campaign.

* + 1. Business Challenge

1. **Key Insights into the most relevant attributes of customers interested in acquiring car insurance.**
2. **What percentage of customers interested in acquiring car insurance, will the sales team be able to contact by making 20,000 calls?**
3. **And if the capacity of the sales team increases to 40,000 calls, what percentage of customers interested in acquiring car insurance will the sales team be able to contact?**
4. **How many calls does the sales team need to make to contact 80% of customers interested in acquiring car insurance?**
   * 1. Business Understanding

* **Record list with all customers interested on Car insurance, grouped by the greatest interests.**
* **A Streamlit App with all insight analysis.**
* **A separated Streamlit App with all customers interested on Car insurance, grouped by the greatest interests, area and name.**
  + 1. Tools

**- SQL**

**- Python 3.10.0**

**- Jupyter Notebook**

Plan

Sprint 01 – 05/09

Business Challenge -> Business Understanding -> Data Collect

* **Solution plan:** define witch the best solution has been founded to solve the business problem, and also plan how the project is going to be started and how it is going to be finished.
* **Collect to the database:** Connect to database and collect all data I need to build the Machine Learning Modeling Project.

Sprint 02 – 05/16

-> Data Cleaning

* **Descriptive Analysis:** Check how are the data, clean and change whatever has to be changed on data.
* **Business Research:**

Sprint 03 – 05/23

-> Data Exploration

* **Mind Map:** Create a mind map to help find the best the hypothesis.
* **Exploratory Data Analysis** : Explore the data to valid all of hypothesis list, finding the most relevant business insights.
* **Insights Reporting:** Report all of validated hypothesis.

Sprint 04 – 05/30

-> Data Modeling

* **Data Preparation:** Prepare data to Machine Learning Modeling.

Sprint 05 – 06/06

-> Machine learning Algorithms

* **Modeling Implement:** Choose and implement the prediction model.

Sprint 06 – 06/13

-> Algorithms Measurement

* **Business Metrics:**
* **Translator for Business:**

Sprint 07 – 06/20

-> Model in Production

## - Deploy of Modeling in Production:

Sprint 08 – 06/20

* **Access to The Data in Production:**

Sprint 09 – 06/27

* **Presentation to the team.**

Sprint 10 – 07/04

* **Write a Article:**
* **Lessons Learned:**