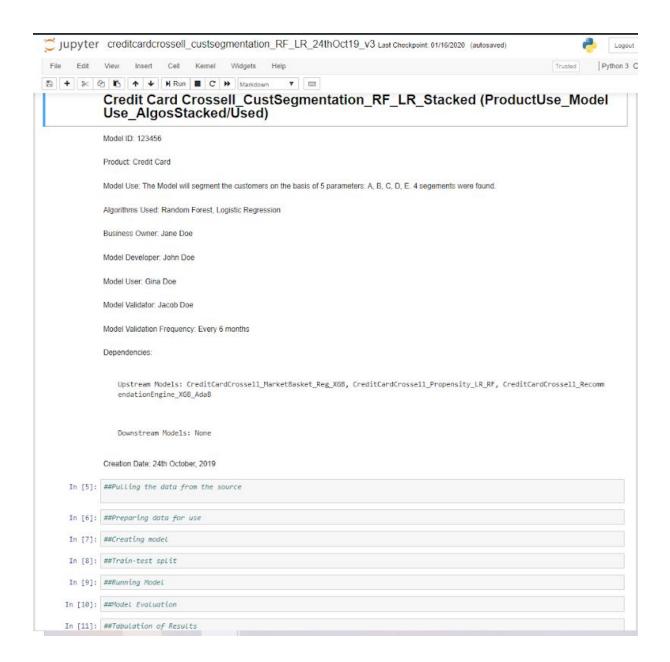
# **Model Governance Policy**

## 1. Model Development:

- 1.1. Definition of a model.
- 1.2. Definition of model risk.
- 1.3. Types of models.
- 1.4. Steps of Model Development and Best Practices:
  - 1.4.1. Model Objective:
  - 1.4.2. Requirements:
  - 1.4.3. Data Preparation:
  - 1.4.4. Exploratory Data Analysis:
  - 1.4.5. Variable Selection:
  - 1.4.6. Missing Value Treatment:
  - 1.4.7. Variable Derivation:
  - 1.4.8. Feature Engineering:
  - 1.4.9. Removal of Highly Associated Variables:
  - 1.4.10. Normalization of Numerical Variables:
  - 1.4.11. Outlier Removal:
  - 1.4.12. Sampling Data for Modeling:
  - 1.4.13. Train-Test Split:
  - 1.4.14. Selection of Baseline Models and Hyper-parameters Estimation:
  - 1.4.15. Variance Estimation of Baseline Models:
  - 1.4.16. Model Training:
  - 1.4.17. Output Evaluation:
  - 1.4.18. Documentation: <u>Credit Card Cross Sell: Customer Segmentation</u> **AND**<u>Modeling Documentation</u>
  - 1.4.19. Python file templates:



# 2. Model Implementation:

2.1. Template: Model Implementation

#### 3. Model Use:

- 3.1. Defined use:
- 3.2. Assumptions and limitations:
- 3.3. Controls and approvals for stakeholders:

#### 4. Model Validation:

- 4.1. Elements and scorecards:
  - 4.1.1. Data Import:
  - 4.1.2. Discrimination metrics: Python templates

- 4.1.3. PSI metrics:
- 4.1.4. Variable quality metrics:
- 4.1.5. Collated Results:
- 4.1.6. Compare development vs validation cohort:
- 4.1.7. Export metric datasets and graphs:
- 4.1.8. Visualisation:

https://gargi.invisionapp.com/console/Risk-Monitoring-ck3sdy01i0d8f018b5shi9pda/ck3sdy76g07gh016hazghnfu2/play

- 4.2. Benchmarks:
- 5. Model Inventory:
  - 5.1. Template: Model Inventory
- 6. Model Governance:
  - 6.1. Organisational Structure:
  - 6.2. Roles and Responsibilities:
  - 6.3. Policies and Procedures:
  - 6.4. Escalation Matrix:
  - 6.5. Reporting Templates:

### 7. Model Materiality and Risk Appetite Setting:

- 7.1. Materiality setting: Model Materiality
- 7.2. Prioritization and validation frequency:
- 7.3. Risk Appetite Setting:

#### **FURTHER:**

- 1. Model maturity framework.
- 2. Organisational structure, visualisation, some integrated framework.