

## Credit One Project

#### CARLOS E PENA

Data Scientist

### Define the Goal



- ✓ Credit One is at risk of losing business because its <u>credit score service</u> is getting less effective:
  - Increase of customers who have defaulted on loans

✓ Credit One needs to improve its understanding on how much credit is allowed to someone to use.



### Data Science Framework



- ✓ The framework to be followed for this project will be (BADIR):
  - From clear understanding of the issue to the recommendations, following step by step

1.
Business Question

2. Analysis Plan 3. Data Collection

4.
Build Model /
Derive Insights

Recommendations

### **Collect Data**



- ✓ Historical data has been collected:
  - ➤ Amount of the given credit, between \$10K and \$1,000K
  - ➤ Gender, 60% female 40% male
  - Education, High school, University, Graduated school and other
  - Marital Status, married, single, divorce, other
  - > Age, goes from 21 to 79 years old
  - History of past payments
  - Amount of previous payment
  - Customer behavior, default and not default



# **Manage Data**



- ✓ Data is in well shape although some work need to be done:
  - Check on missing data
  - Handling inconsistent data
  - Delete duplications
  - Data reduction
  - Check relationship between data



### Potential issues with Data



- ✓ There are some concerns with the given data:
  - Relationship between variables
  - Information need to be numeric, therefore some text data need to be changed
  - > Too much data
  - What information will be meaningful for the analysis



# **Initial Insights**



- ✓ Glean from quick look at the data:
  - Divorce people is less likely to default
  - ➤ People less than 30 years old, high school degree with high amount of credit
  - Customer behavior, 22% of people expected to default
  - From those 22%, 55% has a credit lower or equal to \$100K and 37% lower or equal than \$50K

