

## DICCIONARIO DE DATOS DE ENTRADA AL MODELO

A continuación, se muestra el nombre, tipo de datos y la descripción de las 29 variables del conjunto de datos de entrada al modelo, tras eliminar 'device\_fraud\_count', 'velocity\_6h', 'velocity\_24h', y 'velocity\_4w' y crear la variable 'mean\_velocities':

- **mean\_velocities** (numeric): Arithmetic mean of the average number of applications per hour in the last 6 hours, in the last 24 hours and in the in the last 4 weeks.
- **income** (numeric): Annual income of the applicant (in decile form). Ranges between [0.1, 0.9].
- **name\_email\_similarity** (numeric): Metric of similarity between email and applicant's name. Higher values represent higher similarity. Ranges between [0, 1].
- **prev\_address\_months\_count** (numeric): Number of months in previous registered address of the applicant, *i.e.* the applicant's previous residence, if applicable. Ranges between [-1, 380] months (-1 is a missing value).
- **current\_address\_months\_count** (numeric): Months in currently registered address of the applicant. Ranges between [-1, 429] months (-1 is a missing value).
- **customer\_age** (numeric): Applicant's age in years, rounded to the decade. Ranges between [10, 90] years.
- **days\_since\_request** (numeric): Number of days passed since application was done. Ranges between [0, 79] days.
- **intended\_balcon\_amount** (numeric): Initial transferred amount for application. Ranges between [-16, 114] (negatives are missing values).
- **payment\_type** (categorical): Credit payment plan type. 5 possible (anonymized) values.
- **zip\_count\_4w** (numeric): Number of applications within same zip code in last 4 weeks. Ranges between [1, 6830].
- **bank\_branch\_count\_8w** (numeric): Number of total applications in the selected bank branch in last 8 weeks. Ranges between [0, 2404].
- **date\_of\_birth\_distinct\_emails\_4w** (numeric): Number of emails for applicants with same date of birth in last 4 weeks. Ranges between [0, 39].
- **employment\_status** (categorical): Employment status of the applicant. 7 possible (anonymized) values.
- **credit\_risk\_score** (numeric): Internal score of application risk. Ranges between [-191, 389].
- **email\_is\_free** (binary): Domain of application email (either free or paid).
- **housing\_status** (categorical): Current residential status for applicant. 7 possible (anonymized) values.
- **phone\_home\_valid** (binary): Validity of provided home phone.
- **phone\_mobile\_valid** (binary): Validity of provided mobile phone.
- **bank\_months\_count** (numeric): How old is previous account (if held) in months. Ranges between [-1, 32] months (-1 is a missing value).

- **has\_other\_cards** (binary): If applicant has other cards from the same banking company.
- **proposed\_credit\_limit** (numeric): Applicant's proposed credit limit. Ranges between [200, 2000].
- **foreign\_request** (binary): If origin country of request is different from bank's country.
- **source** (categorical): Online source of application. Either browser (INTERNET) or app (TELEAPP).
- **session\_length\_in\_minutes** (numeric): Length of user session in banking website in minutes. Ranges between [-1, 107] minutes (-1 is a missing value).
- **device\_os** (categorical): Operative system of device that made request. Possible values are: Windows, macOS, Linux, X11, or other.
- **keep\_alive\_session** (binary): User option on session logout.
- **device\_distinct\_emails** (numeric): Number of distinct emails in banking website from the used device in last 8 weeks. Ranges between [-1, 2] emails (-1 is a missing value).
- **month** (numeric): Month where the application was made. Ranges between [0, 7].
- **fraud\_bool** (binary): If the application is fraudulent or not.