About

This file contaisn behavior data for 5 months (Oct 2019 – Feb 2020) from a medium cosmetics online store.

Each row in the file represents an event. All events are related to products and users. Each event is like many-to-many relation between products and users.

Note: if this dataset is too small for you, you can try [larger dataset from multi-category store](https://www.kaggle.com/mkechinov/ecommerce-behavior-data-from-multi-category-store).

There are different types of events. See below.

Semantics (or how to read it):

User user*id* during session usersession added to shopping cart (property event*type* is equal cart) product productid of brand brand of category category*code* (categorycode) with price price at event\_time

File structure

1. **event\_time** : Time when event happened at (in UTC).
2. **event\_type**: Events can be:

* view - a user viewed a product
* cart - a user added a product to shopping cart
* remove*from*cart - a user removed a product from shopping cart
* purchase - a user purchased a product

Typical funnel: view => cart => purchase.

1. **product\_id**: ID of a product
2. **category\_id**: Product's category ID
3. **category\_code** : Product's category taxonomy (code name) if it was possible to make it. Usually present for meaningful categories and skipped for different kinds of accessories.
4. **Brand**: Downcased string of brand name. Can be missed.
5. **Price**: Float price of a product. Present.
6. **user\_id**: Permanent user ID.
7. **user\_session**: Temporary user's session ID. Same for each user's session. Is changed every time user come back to online store from a long pause. ID de session de l'utilisateur temporaire. Idem pour la session de chaque utilisateur. Est changé à chaque fois que l'utilisateur revient sur la boutique en ligne après une longue pause

Multiple purchases per session

A session can have multiple purchase events. It's ok, because it's a single order.

Many thanks

Thanks to [REES46 Marketing Platform](https://rees46.com/) for this dataset.

Using datasets in your works, books, education materials

You can use this dataset for free. Just mention the source of it: link to this page and link to [REES46 Marketing Platform](https://rees46.com/).

Data removing

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |
| event\_time | event\_type | product\_id | category\_id | category\_code | brand | price | user\_id | user\_session |
| 2019-12-01 09:52:17 UTC | cart | 5867979 | 1,48758E+18 |  | masura | 6.33 | 72062431 | 0b332fde-11b2-415b-9438-bac4831630db |
| 2019-12-01 09:55:56 UTC | remove\_from\_cart | 5867979 | 1,48758E+18 |  | masura | 6.33 | 72062431 | 0b332fde-11b2-415b-9438-bac4831630db |
| 2019-12-01 09:55:56 UTC | remove\_from\_cart | 5867979 | 1,48758E+18 |  | masura | 6.33 | 72062431 | 0b332fde-11b2-415b-9438-bac4831630db |
|  |  |  |  |  |  |  |  |  |
| 2019-12-01 10:21:57 UTC | view | 5859464 | 1,48758E+18 |  | masura | 1.73 | 72062431 | 0b332fde-11b2-415b-9438-bac4831630db |
| 2019-12-01 10:22:33 UTC | view | 5859464 | 1,48758E+18 |  | masura | 1.73 | 72062431 | 0b332fde-11b2-415b-9438-bac4831630db |
| 2019-12-01 10:25:27 UTC | purchase | 5859464 | 1,48758E+18 |  | masura | 1.73 | 72062431 | 0b332fde-11b2-415b-9438-bac4831630db |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

**Facilitating Cash-In / Cash-Out:** Facilitating cash-in / cash-out refers to the ability of customers to easily put funds into a mobile money service (i.e. convert their physical cash into electronic funds) and to withdraw funds from the service (i.e. convert their electronic funds into physical cash), at a location

and at a time convenient to them.

**Mitigating Fraud:** Fraud can refer to fraud by agents (e.g. taking cash-in or money meant for OTC transactions, but remitting it to their own personal account) or by merchants (e.g. overcharging for transactions or not delivering services promised).

La fraude peut faire référence à la fraude par des agents (par exemple, prendre de l'argent comptant ou de l'argent destiné à des transactions de gré à gré, mais le remettre sur leur propre compte personnel) ou par des commerçants (par exemple, surfacturer des transactions ou ne pas fournir les services promis).

CASH-IN is the process of increasing the balance of account by paying in cash to a merchant.

CASH-OUT is the opposite process of CASH-IN, it means to withdraw cash from a merchant which decreases

the balance of the account.

DEBIT is similar process than CASH-OUT and involves sending the money from the mobile money service

to a bank account.

PAYMENT is the process of paying for goods or services to merchants which decreases the balance of the account

and increases the balance of the receiver.

TRANSFER is the process of sending money to another user of the service through the mobile money platform.

step - maps a unit of time in the real world. In this case 1 step is 1 hour of time. Total steps 744 (30 days simulation).

type - CASH-IN, CASH-OUT, DEBIT, PAYMENT and TRANSFER.

amount -  
amount of the transaction in local currency.

nameOrig - customer who started the transaction

oldbalanceOrg - initial balance before the transaction

newbalanceOrig - new balance after the transaction

nameDest - customer who is the recipient of the transaction

oldbalanceDest - initial balance recipient before the transaction. Note that there is not information for customers that start with M (Merchants).

newbalanceDest - new balance recipient after the transaction. Note that there is not information for customers that start with M (Merchants).

isFraud - This is the transactions made by the fraudulent agents inside the simulation. In this specific dataset the fraudulent behavior of the agents aims to profit by taking control or customers accounts and try to empty the funds by transferring to another account and then cashing out of the system.

isFlaggedFraud - The business model aims to control massive transfers from one account to another and flags illegal attempts. An illegal attempt in this dataset is an attempt to transfer more than 200.000 in a single transaction.