

Where did my money go, PrivatBank?

by Tetiana Batsenko



Problem

It's super **easy to spend money**,

but **hard to understand where did it go**

Most banks offer just some plots

of your expenses grouped by category

Does it tell much about our spending behaviour?

Not really



Aim of the project

The aim of this project is
to build the expenses analyser
for the most popular bank in Ukraine, which will
show the user their spendings behaviour :

- in which part of the day
- they spend most of the money?
- which day of the week is the most expensive?
- the most is spent on a taxi ride?

And much more.



Who tried to treat the similar problem? How?

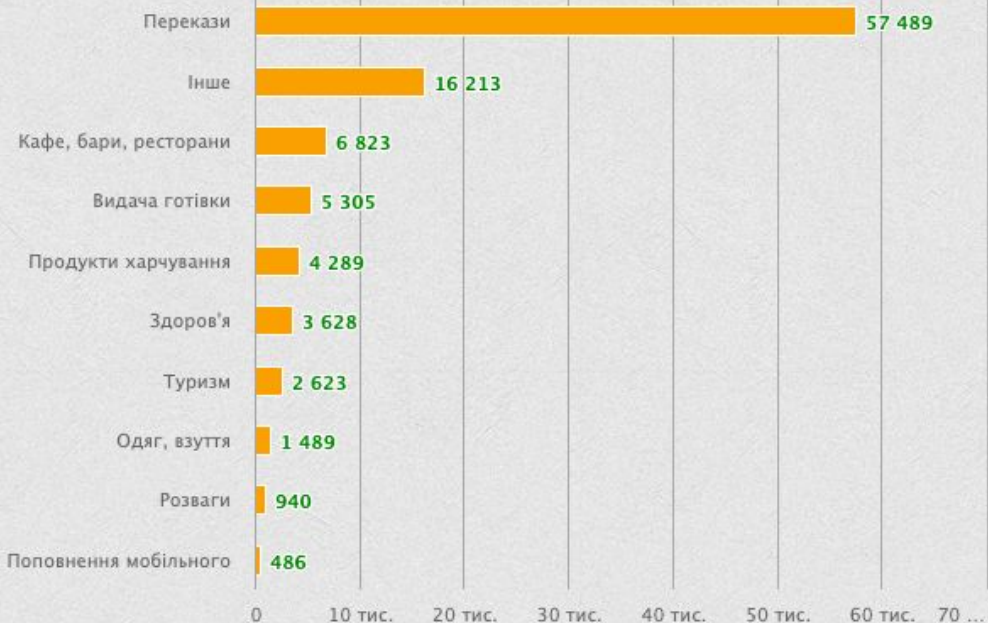
Privatbank offers you to look at the expenses grouped by category.

And that's it.

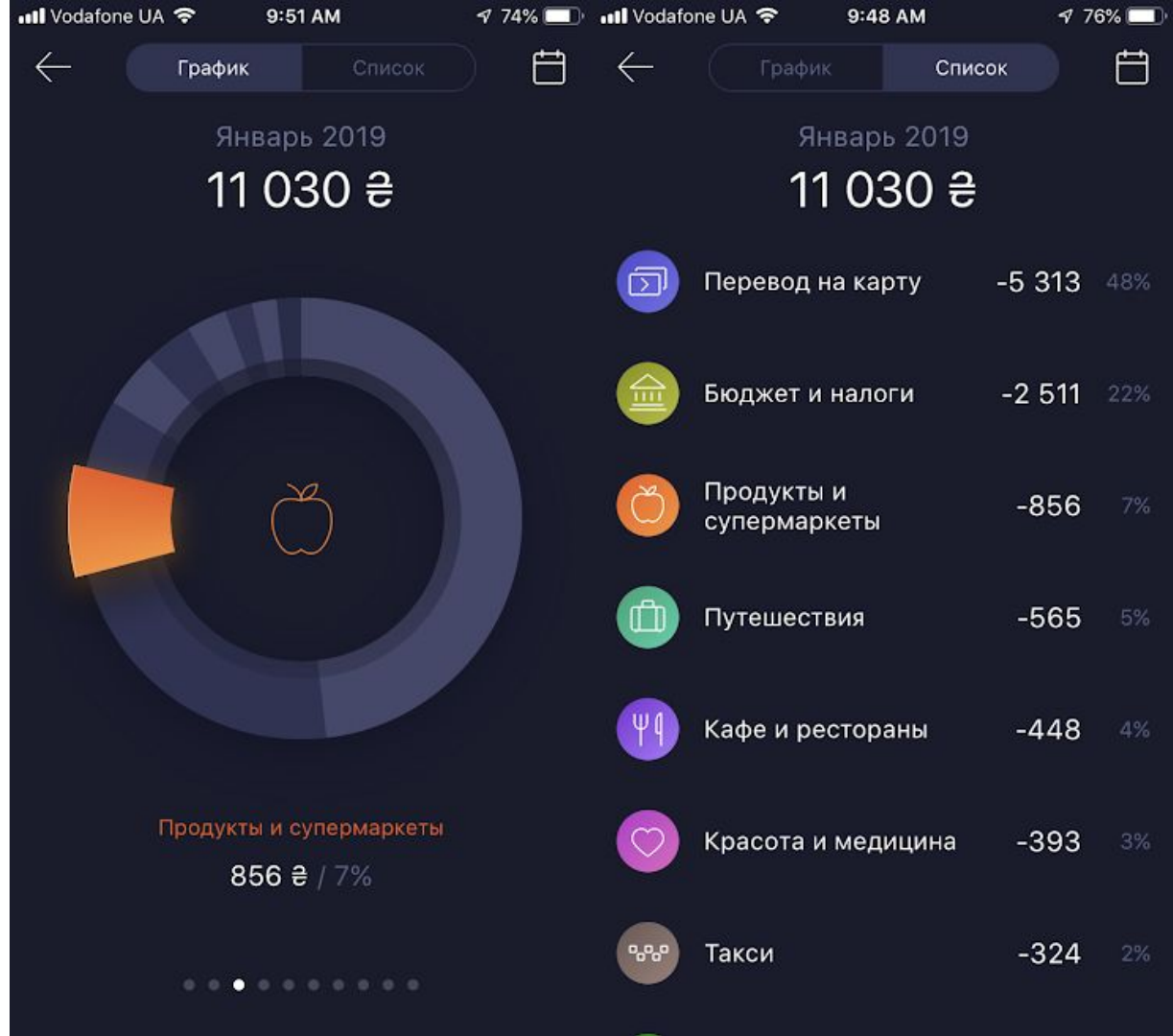
Or you can download an .xls sheet

Розподіл витрат за період

01.10.2018 - 05.12.2018



Monobank - quite popular among young generation in Ukraine, mobile-only bank offers better designs for looking at your expenses but still, these are only plots showing expenses groped by category.



And that's it.

The third solution is to use **expense tracking apps**, and log everything by yourself.

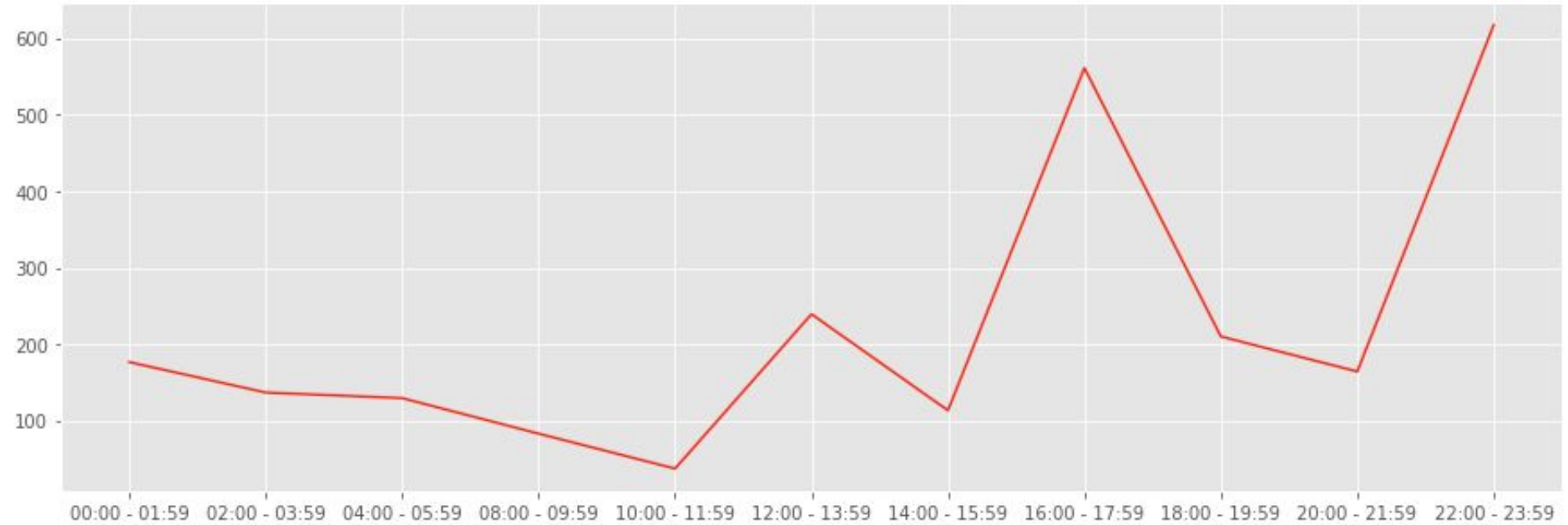
I've tried using those, but it's super hard to do that everyday.

Which steps are required to prepare the data?

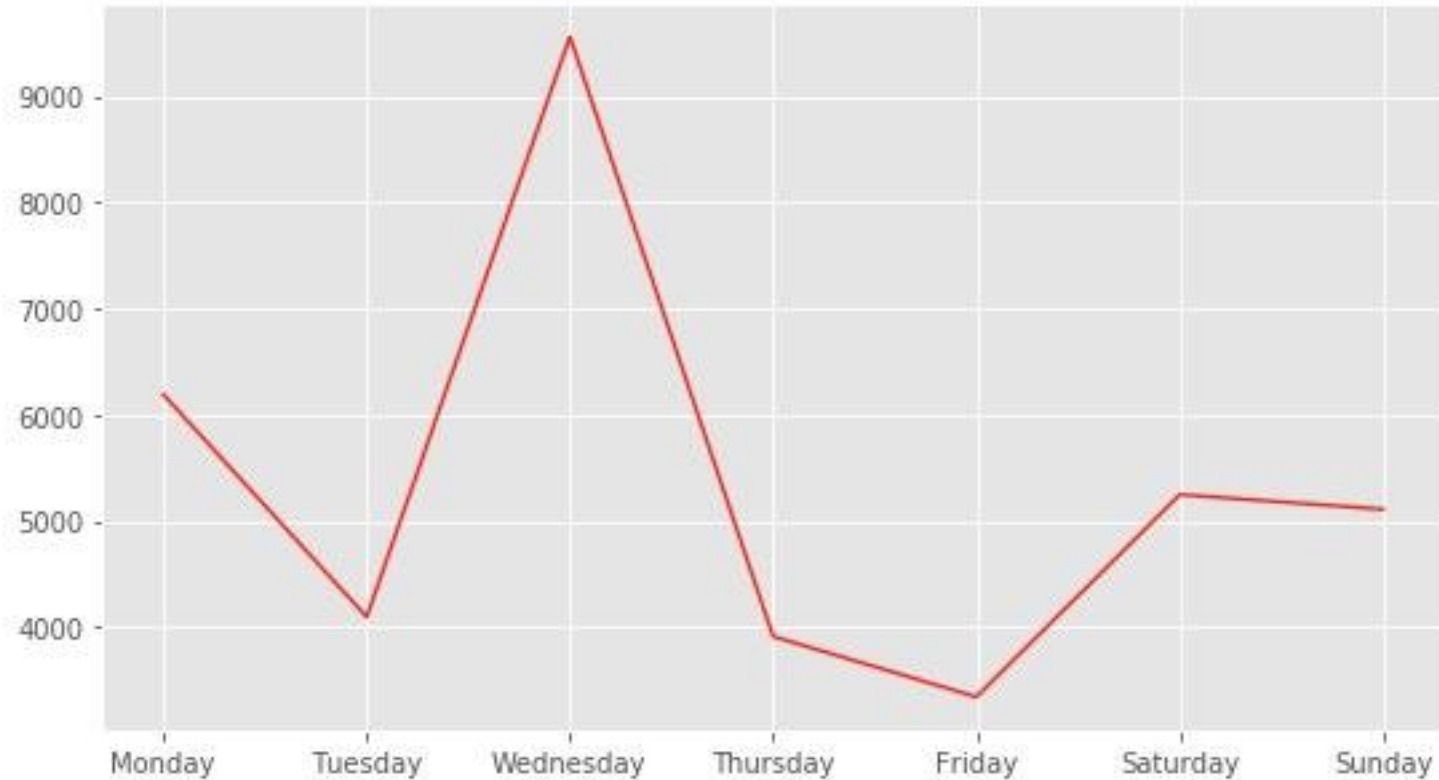
1. Collect the data, explore it
2. Decide which columns to drop
3. Renaming columns, identifying keywords
4. Classifying category for transactions that have 'Ише' (other) category
5. Append weekday column
6. Append time-range column

RESULTS

Plotting correlation between expenses and the time of the day



Plotting correlation between expenses and weekday



Understanding spending behaviour
during the day by each category -
more at [Jupyter notebook](#)

Conclusions

- the data provided by Privatbank has lots of insights, and could be presented to the user way better than they currently do
- It's easy to classify transactions initially marked with 'Інше' category: I've reduced the amount of transactions in 'Інше' category **by 60%** using simple keywords extraction
- now I know my spending behaviour: on which part of the day I spend most money for the specific category, or the most costly weekday
- Trained **LinearSVC** that predicts the category by given description which can be used for other users data

Thanks!