**US Consumer Financial Protection Bureau Complaints**
Documentation

## Step 1: Load App

The app will load the *Histogram of Sentiments* and *Top Words per Topic* plot for the initial settings of all *Products*, all *Consumer Compensated* and two topics. As seen in Figure 1, the grey block on the left hand side of the page contains the input controls which can be changed by the user. The output is on the right hand side of the page.



Figure 1

**Step 2: Change Product and Consumer Compensation**

There are three levels of input and three levels of output. Each level of input builds on the previous input level, and each level of input is related to an output on the same level and higher.
Input levels: *Product and Consumer Compensated > Number of Topics > New Complaint*
Output levels: *Histogram of Sentiments > Top words per Topic > New Complaint Data*

As seen in Figure 2, when changing either *Product* or *Consumer Compensated* updates the *Histogram of Sentiments* and the *Top Words per Topic*.
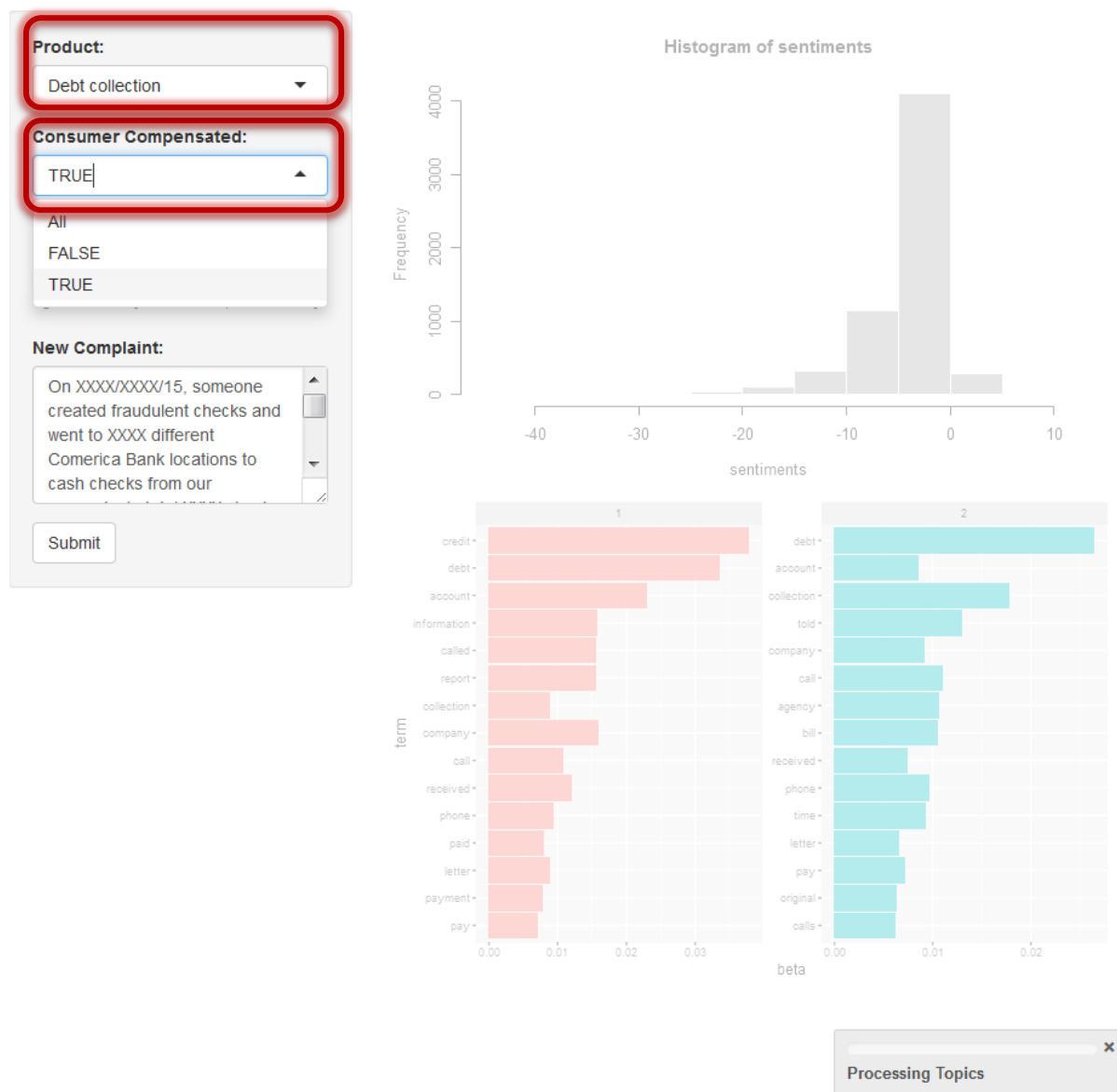


Figure 2

## Step 3: Change Number of Topics

Figure 3 shows that updating the *Number of Topics* does not change the *Histogram of Sentiments*, but just changes the *Top Words per Topic*.

The new *Top Words per Topic* plot will be worked out for the current selection of *Product* and *Consumer Compensated*. Figure 4 shows the loaded page with the new *Top Words per Topic*.



Figure 3

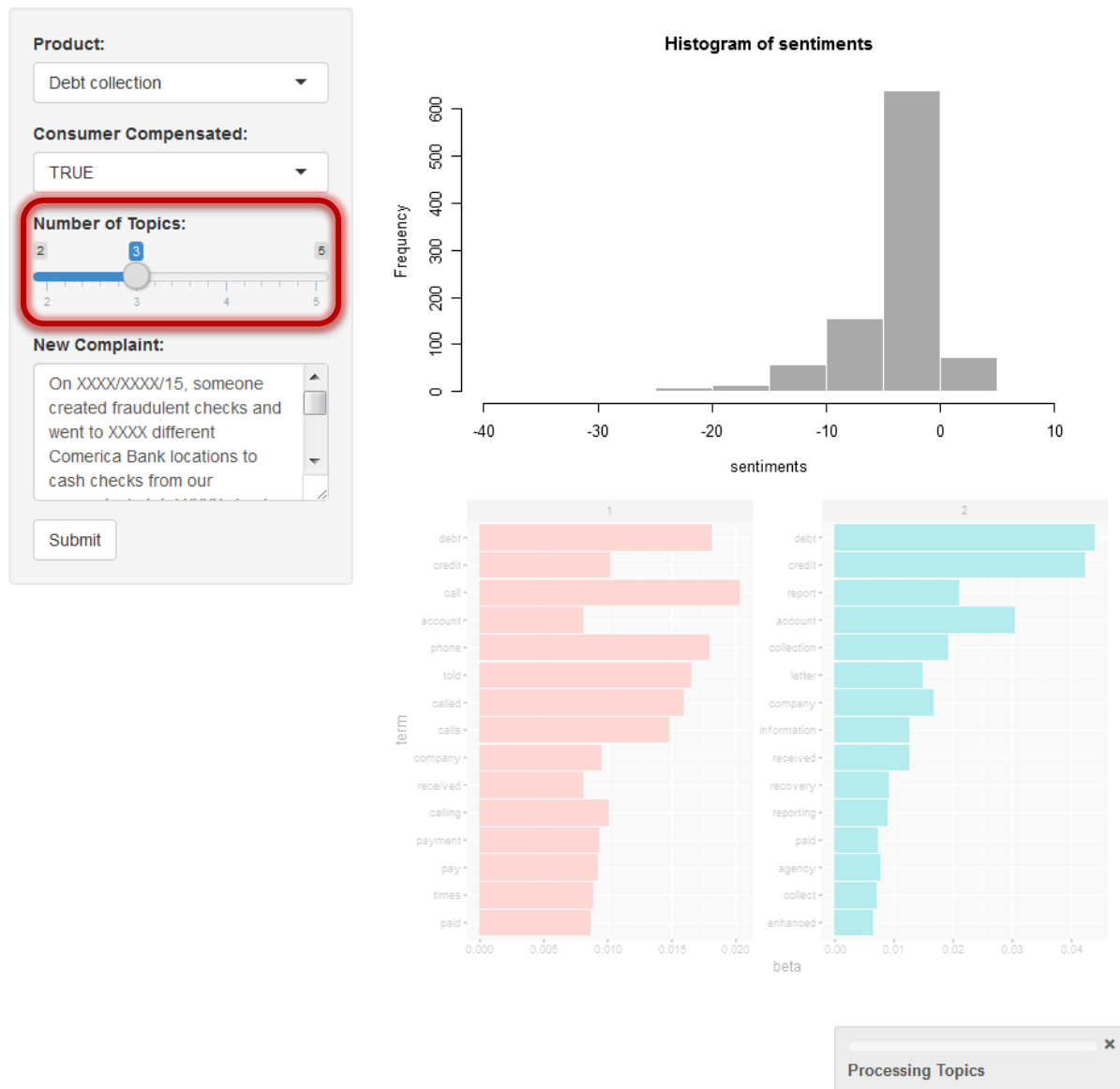# US Consumer Financial Protection Bureau Complaints

**Product:**

Debt collection ▾

**Consumer Compensated:**

TRUE ▾

**Number of Topics:**

2    3    5

2    3    4    5

**New Complaint:**

On XXXX/XXXX/15, someone
created fraudulent checks and
went to XXXX different
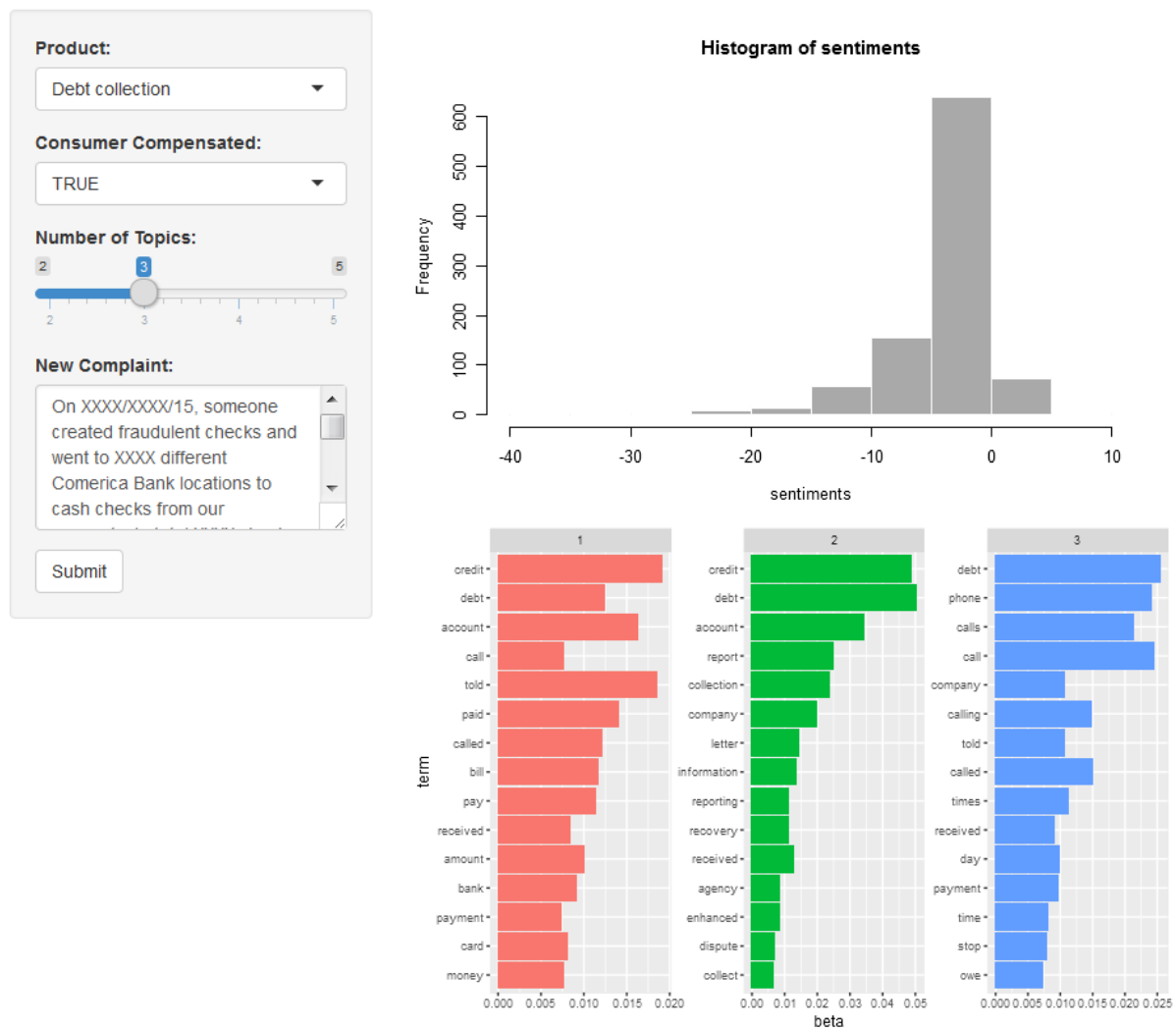Comerica Bank locations to
cash checks from our

Submit



Figure 4

## Step 4: Submit New Complaint

The *New Complaint* textbox is prepopulated with a new complaint, but can be changed to anything and submitted. The *New Complaint Data* will be reviewed in the light of the current selected *Product, Consumer Compensated* and *Number of Topics*.
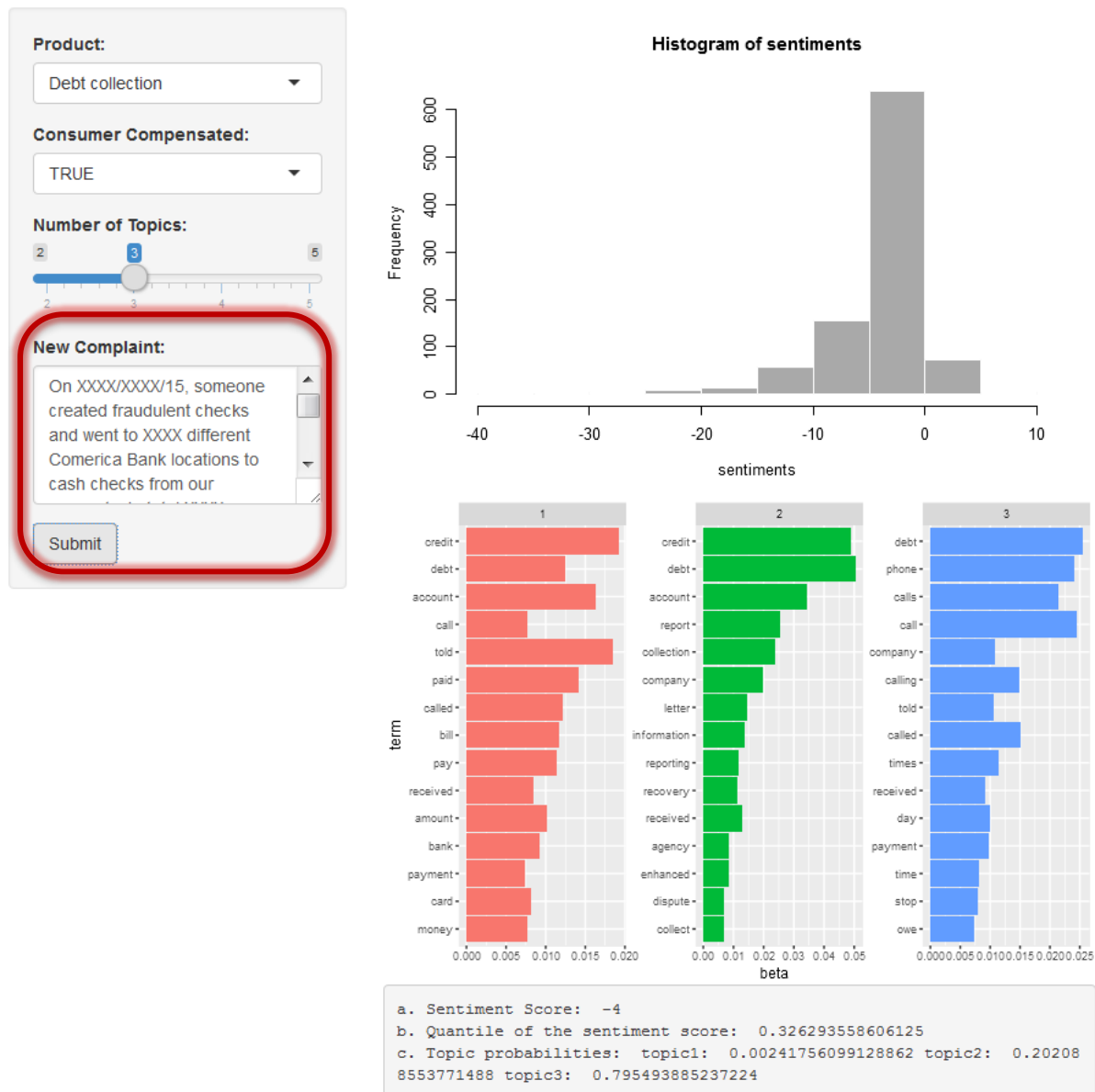


Figure 5

## Step 5: Change Product, Consumer Compensated or Number of Topics

Changing the *Product, Consumer Compensated* and *Number of Topics* now will result in the *Histogram of Sentiments* and *Top Words per Topic* output to be updated, but **not** the *New Complaint Data*; as this needs to be submitted again.
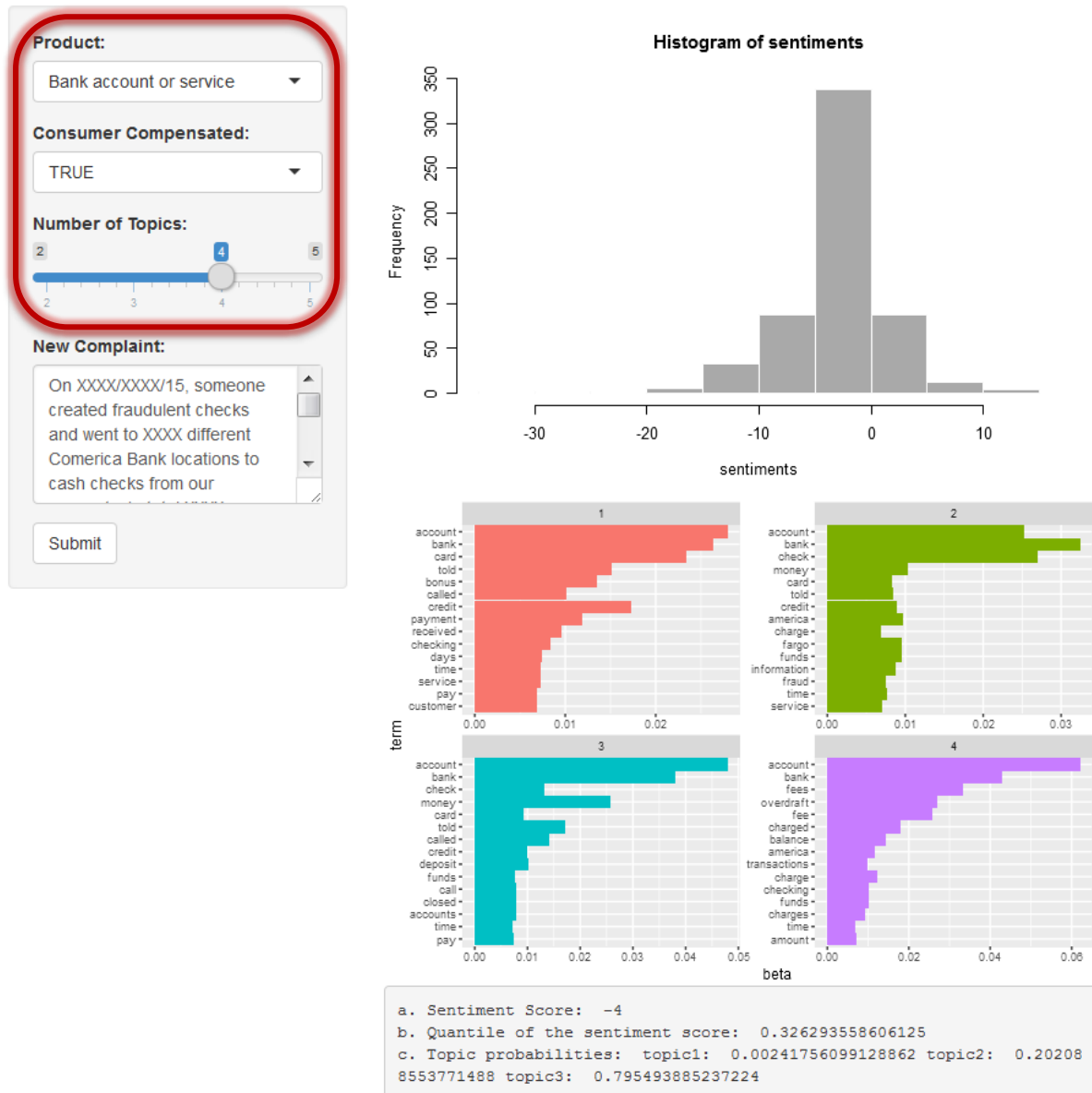


Figure 6

## Step 6: Resubmit New Complaint

Submitting the *New Complaint* again for the updated criteria, will now calculate the *New Complaint Data* for the new selection.



Figure 7