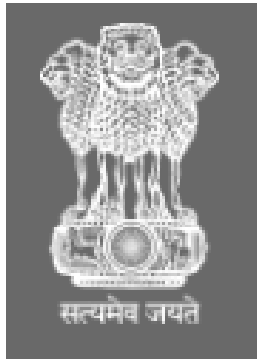




Tom Sabo
Principal Solutions Architect
SAS Institute



We're on your side

We are the Consumer Financial Protection Bureau, a U.S. government agency that makes sure banks, lenders, and other financial companies treat you fairly.

We're

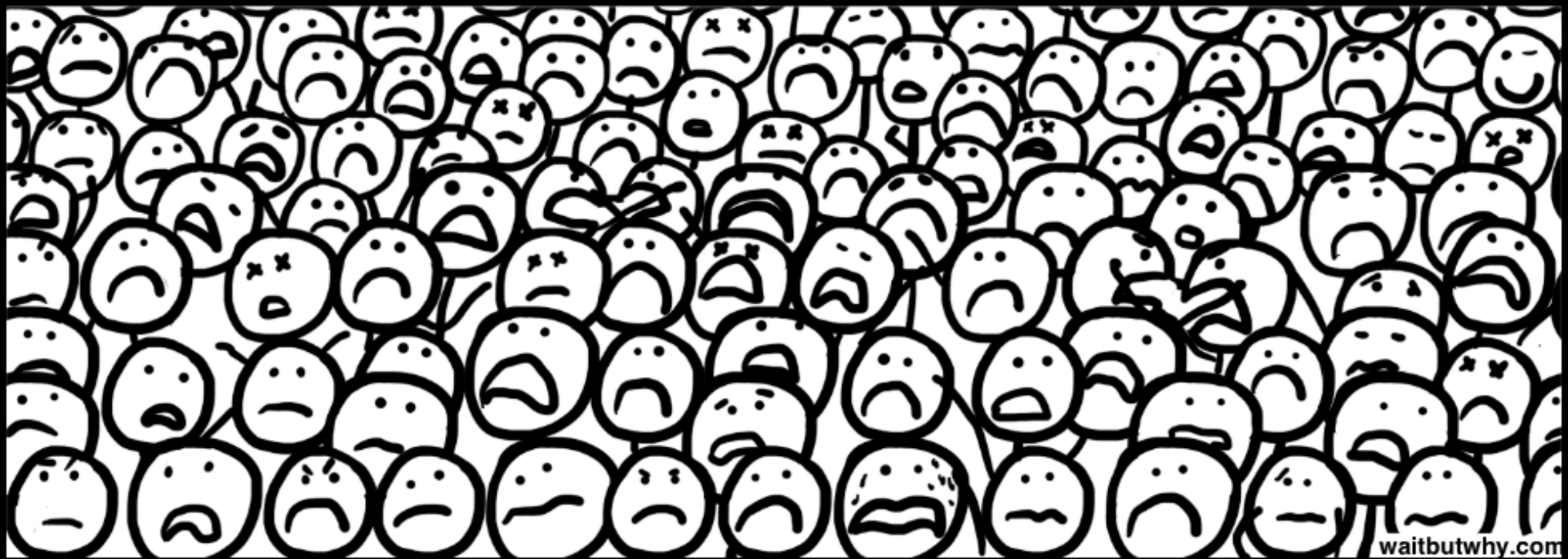
We are the
U.S. government
lenders, and



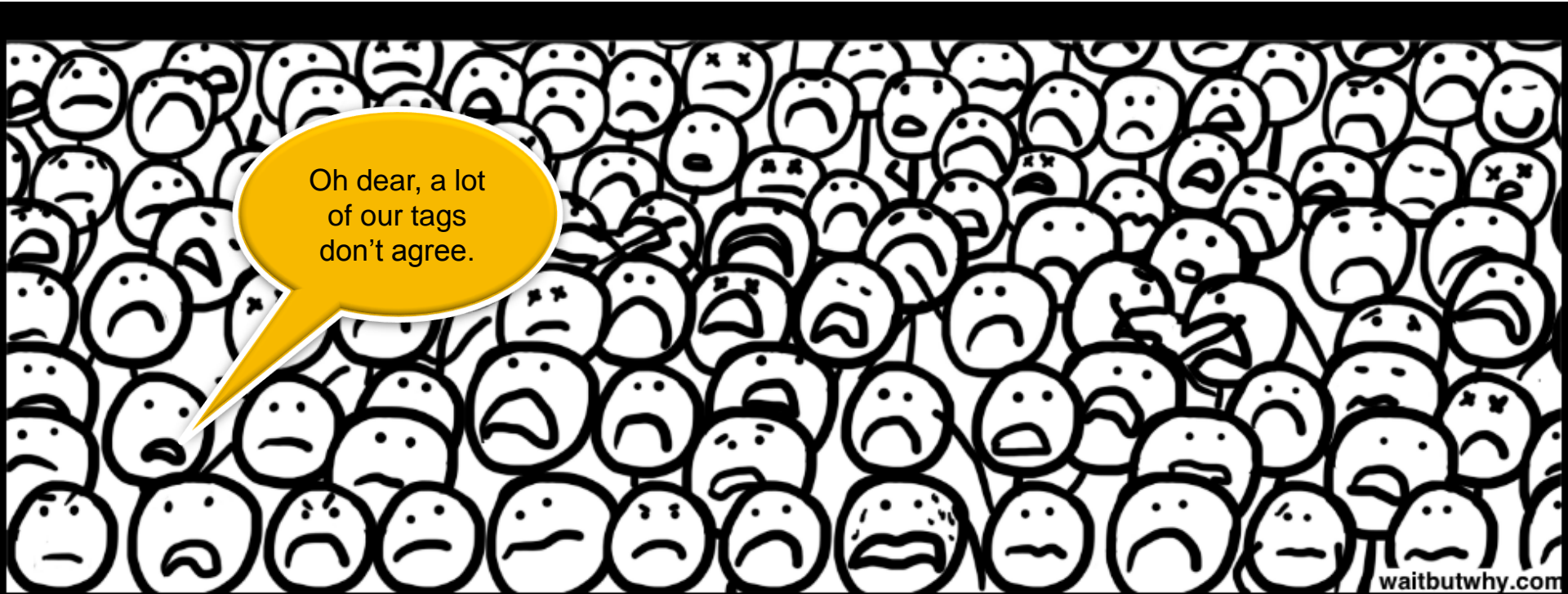
Bureau, a
banks,
at you fairly.



HELP! WE NEED MORE READERS



HELP! WE NEED MORE READERS



Subjectivity & Bias

HELP! WE NEED MORE READERS



Subjectivity & Bias

Reader Fatigue / Error

HELP! WE NEED MORE READERS



Oh dear, a lot
of our tags
don't agree.

Uh, I *may*
have missed
some stuff. My
reading quota is
really high...

What do you
mean "they
changed the
definitions!?"

Subjectivity & Bias

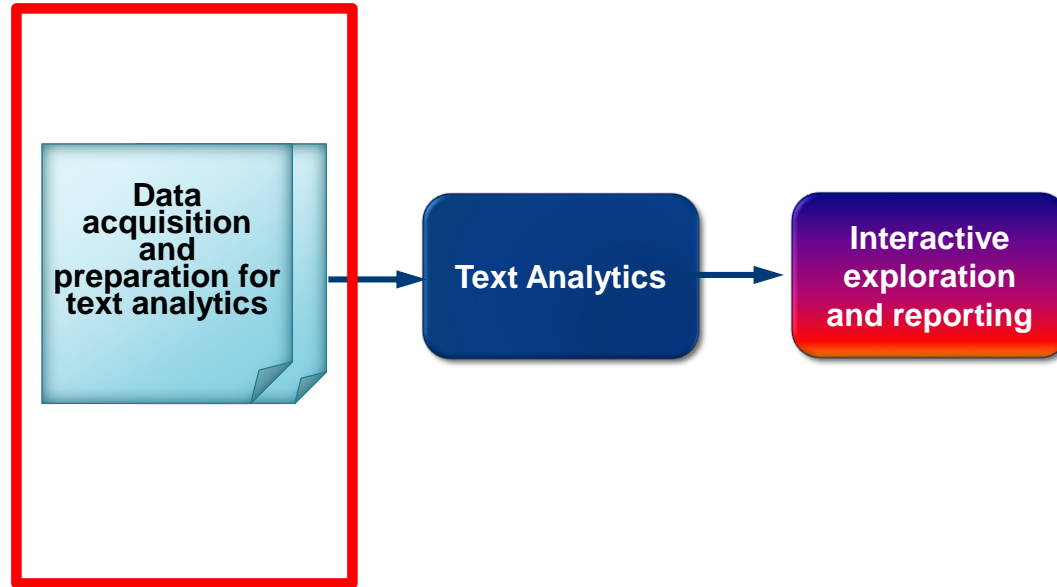
Reader Fatigue / Error

Moving Targets

CONSUMER COMPLAINT ANALYSIS SOLUTION



STEP 1: DATA ACQUISITION AND PREPARATION FOR TEXT ANALYTICS



SAS Enterprise Guide

FileEditViewTasksProgramToolsHelp

Process Flow

Project Tree

Process Flow

cfpb_15k

Server List

RefreshDisconnectStop

Servers

Private OLAP Servers

Filter and SortQuery BuilderDataDescribeGraphAnalyzeExportSend To

	ISSUE	SUB_ISSUE	CONSUMER_NARRATIVE	COMPANY_PUBLIC_RESPONSE	S	ZIP	SU	DATE_SE	COMPANY_RESPONSE_TC
4	Other fee		-- Price gauging with foreign transaction fees at	Company chooses not to provide a pu...			Web	31MAY2015	Closed with monetary relief
5	Account opening...		To receive the {\$300.00} bonus, you must open a	Company chooses not to provide a pu...	CA	935XX	Web	25AUG2015	Closed with monetary relief
6	False statements...	Attempted to colle...	- XX/XX/2015 due to an XXXX condition I had the urgent need to g...		CT	061XX	Web	07JUL2015	Closed with explanation
7	Cont'd attempts c...	Debt was paid	XXXX " from XXXX " keeps ca...		NY	114XX	Web	30MAR2015	Closed with explanation
8	False statements...	Impersonated an...	XXXX " stated he was a process server serving a law suit and to r...	Company can't verify or dispute the fa...	WA	989XX	Web	12JUN2015	Closed
9	Account opening...		XXXX. Research, legal process and requests for information " on...		OR	972XX	Web	16AUG2015	Closed with explanation
10	Loan servicing, pa...		# 1 - continually wrongly asserts that I am behind in my p...		OR	975XX	Web	15JUL2015	Closed with explanation
11	Making/receiving...		# 1 - where as XXXX transactions were...	Company believes it acted appropriat...	PA	170XX	Web	03APR2015	Closed with monetary relief
12	Settlement proces...		# 1 No pay-off statement related to old loan and/or escrow. Unable...	Company chooses not to provide a pu...	WI	532XX	Web	21OCT2015	Closed with explanation
13	Communication ta...	Frequent or repea...	# 1.FALSE REPORT : untrue and not correct. reported on my credi...	Company disputes the facts presente...	TN	370XX	Web	15SEP2015	Closed with explanation
14	Disclosure verifica...	Not given enough...	# 1Original bill was with the XXXX, XXXX XXXX XXXX XXXX date...	Company chooses not to provide a pu...	MD	207XX	Web	09SEP2015	Closed with explanation
15	Credit reporting co...	Problem with state...	# XXXX XXXX is reported as a closed collection account and mark...	Company chooses not to provide a pu...	CA	926XX	Web	19JUN2015	Closed with explanation
16	Problems when yo...		# XXXX XXXX XXXX XXXX XXXX, TX XXXX My name i...		CA	906XX	Web	28JUL2015	Closed with explanation
17	Settlement proces...		(1) XXXX XXXX XXXX (XXXX) XXXX /XXXX XXXX-Prop Taxes...		FL	341XX	Web	08APR2015	Closed with explanation
18	Disclosure verifica...	Not given enough...	(Below is the last correspondence I sent to that explains t...	Company believes it acted appropriat...	CA	921XX	Web	16MAY2015	Closed with explanation
19	Cont'd attempts c...	Debt is not mine	(The choices above do not accurately describe this situation, I sel...	Company believes it acted appropriat...	CA	935XX	Web	13JUL2015	Closed
20	Loan servicing, pa...		(To preface this may be nothing but it is from and I do n't t...		MP	486XX	Web	28APR2015	Closed with explanation
21	Incorrect informati...	Information is not...	*** This is not a duplicate ***I have been a victim of Identity Theft a...	Company chooses not to provide a pu...	TX	773XX	Web	05AUG2015	Closed with non-monetary relief
22	Incorrect informati...	Account terms	*** This is not a Duplicate ***My mortgage company lack of securit...	Company chooses not to provide a pu...	TX	773XX	Web	03APR2015	Closed with explanation
23	Credit decision / U...		*** This is not a Duplicate***On XXXX XXXX, XXXX on correspond...		TX	773XX	Web	03AUG2015	Closed with explanation
24	Credit decision / U...		***This is not a duplicate***This case is pertaining the harm		TX	773XX	Web	16JUL2015	Closed with explanation
25	Incorrect informati...	Account terms	**This is n't a duplicate request please read as I have loaded supp...		AZ	850XX	Web	15JUN2015	Closed with non-monetary relief
26	Arbitration		"I read the below today on XXXX. Below is the copy and pasted art...	Company chooses not to provide a pu...	MD	217XX	Web	22JUL2015	Closed with monetary relief
27	Taking out the loa...		"I was a XXXX XXXX under my company (XXXX) when got in agr...		CO	801XX	Web	02SEP2015	Closed with explanation
28	Loan servicing, pa...		"Since XXXX, I am still fighting " with regarding this mo...		GA	300XX	Web	23AUG2015	Closed with explanation
29	Loan servicing, pa...		"THIS IS NOT A DUPLICATE" I believe that my mortgage account...		CA	958XX	Web	02JUN2015	Closed with explanation
30	Identity theft / Fra...		. Since late XXXX, I was trying to resolve my cre...	Company chooses not to provide a pu...	CA	925XX	Web	05SEP2015	Closed with monetary relief
31	Credit decision / U...		. I am currently having issues with my lender, XXXX, XXXX Weich...	Company believes it acted appropriat...	NJ	078XX	Web	08AUG2015	Closed with explanation
32	Account opening...		. I entered the bank Saturday morning XXXX XXXX, 2015 to cash...		OH	432XX	Web	22SEP2015	Closed with explanation
33	Incorrect informati...	Information is not...	. I have tried to have the following item investigated by H...	Company chooses not to provide a pu...	TX	785XX	Web	19JUL2015	Closed with non-monetary relief
34	Fraud or scam		. Under fake identify card she got money vi...			103XX	Web	02SEP2015	Closed with explanation
35	Cont'd attempts c...	Debt is not mine	... A company called XXXX ", which only shows a P.O.Box as addr...		CA	923XX	Web	29MAY2015	Closed with explanation
36	Loan modification...		{ Case number : XXXXH! This is my second time contacting you. I...	Company chooses not to provide a pu...	MN	553XX	Web	22OCT2015	Closed with explanation
37	Loan servicing, pa...		(\$5900.00) owed for fee/other has showed up again on pa...		AZ	853XX	Web	16JUL2015	Closed with explanation
38	Unauthorized tran...		(\$810.00) was fraudulently charged on my XXXX XXXX prepaid vis...	Company chooses not to provide a pu...	KY	405XX	Web	09SEP2015	Closed with explanation
39	Identity theft / Fra...		~ (\$7000.00) in debt has been reported on a credit card that I neve...		NC	282XX	Web	16AUG2015	Closed with non-monetary relief
40	Loan modification...		is my loan company , this company rejecte...		TX	750XX	Web	15JUN2015	Closed with explanation
41	Application, origin...		1) At the XXXX time home buyer class, I was told that the One-mo...		MA	021XX	Web	21JUL2015	Closed with explanation
42	Loan servicing, pa...		not send me the actual signed modification agreeme...		CA	908XX	Web	25SEP2015	Closed with explanation

111

SAS Enterprise Guide

File Edit View Tasks Program Tools Help

Project Tree

Server List

cfpb_15k

Filter and Sort Query Builder Data Describe Graph Analyze Export Send To

	ISSUE	SUB_ISSUE	CONSUMER_NARRATIVE	U	DATE_SE	COMPANY_RESPONSE_TC
4	Other fee				31MAY2015	Closed with monetary relief
5	Account opening...				25AUG2015	Closed with monetary relief
6	False statements...	Attempted to colle...	-- Price gauging with foreign transaction fees at		07JUL2015	Closed with explanation
7	Cont'd attempts c...	Debt was paid	To receive the {\$300.00} bonus, you must open a new		30MAR2015	Closed with explanation
8	False statements...	Impersonated an...			12JUN2015	Closed
9	Account opening...		- XX/XX/2015 due to an XXXX condition I had the urgent need to g...		16AUG2015	Closed with explanation
10	Loan servicing, pa...				15JUL2015	Closed with explanation
11	Making/receiving...		XXXX " from		03APR2015	Closed with monetary relief
12	Settlement proces...				21OCT2015	Closed with explanation
13	Communication ta...	Frequent or repea...	XXXX " stated he was a process server serving a law suit and to r...		15SEP2015	Closed with explanation
14	Disclosure verifica...	Not given enough...			09SEP2015	Closed with explanation
15	Credit reporting co...	Problem with state...	XXXX. Research, legal process and requests for information " on...		19JUN2015	Closed with explanation
16	Problems when yo...		# 1 -		28JUL2015	Closed with explanation
17	Settlement proces...				08APR2015	Closed with explanation
18	Disclosure verifica...	Not given enough...	# 1 -		16MAY2015	Closed with explanation
19	Cont'd attempts c...	Debt is not mine	# 1 --		13JUL2015	Closed
20	Loan servicing, pa...				28APR2015	Closed with explanation
21	Incorrect informati...	Information is not...	# 1 No pay-off statement related to old loan and/or escrow. Unable...		05AUG2015	Closed with non-monetary relief
22	Incorrect informati...	Account terms	# 1.FALSE REPORT : untrue and not correct. reported on my credi...		03APR2015	Closed with explanation
23	Credit decision / U...				03AUG2015	Closed with explanation
24	Credit decision / U...				16JUL2015	Closed with explanation
25	Incorrect informati...	Account terms	# 1Original bill was with the XXXX, XXXX XXXX XXXX XXXX date...		15JUN2015	Closed with non-monetary relief
26	Arbitration				22JUL2015	Closed with monetary relief
27	Taking out the loa...		# XXXX XXXX is reported as a closed collection account and mark...		02SEP2015	Closed with explanation
28	Loan servicing, pa...		# XXXX XXXX XXXX XXXX XXXX, TX XXXX My name i...		23AUG2015	Closed with explanation
29	Loan servicing, pa...				02JUN2015	Closed with explanation
30	Identity theft / Fra...		(1) XXXX XXXX XXXX (XXXX) XXXX /XXXX XXXX-Prop Taxes...		05SEP2015	Closed with monetary relief
31	Credit decision / U...				08AUG2015	Closed with explanation
32	Account opening...				22SEP2015	Closed with explanation
33	Incorrect informati...	Information is not...	(Below is the last correspondence I sent to that explains t...		19JUL2015	Closed with non-monetary relief
34	Fraud or scam				02SEP2015	Closed with explanation
35	Cont'd attempts c...	Debt is not mine	(The choices above do not accurately describe this situation, I sel...		29MAY2015	Closed with explanation
36	Loan modification...				22OCT2015	Closed with explanation
37	Loan servicing, pa...		(To preface this may be nothing but it is from Seterus and I do n't t...		16JUL2015	Closed with explanation
38	Unauthorized tran...				09SEP2015	Closed with explanation
39	Identity theft / Fra...		*** This is not a duplicate ***I have been a victim of Identity Theft a...		16AUG2015	Closed with non-monetary relief
40	Loan modification...		*** This is not a Duplicate ***My mortgage company lack of securit...		15JUN2015	Closed with explanation
41	Application, origin...				21JUL2015	Closed with explanation
42	Loan servicing, pa...		*** This is not a Duplicate***On XXXX XXXX, XXXX on correspond...		25SEP2015	Closed with explanation

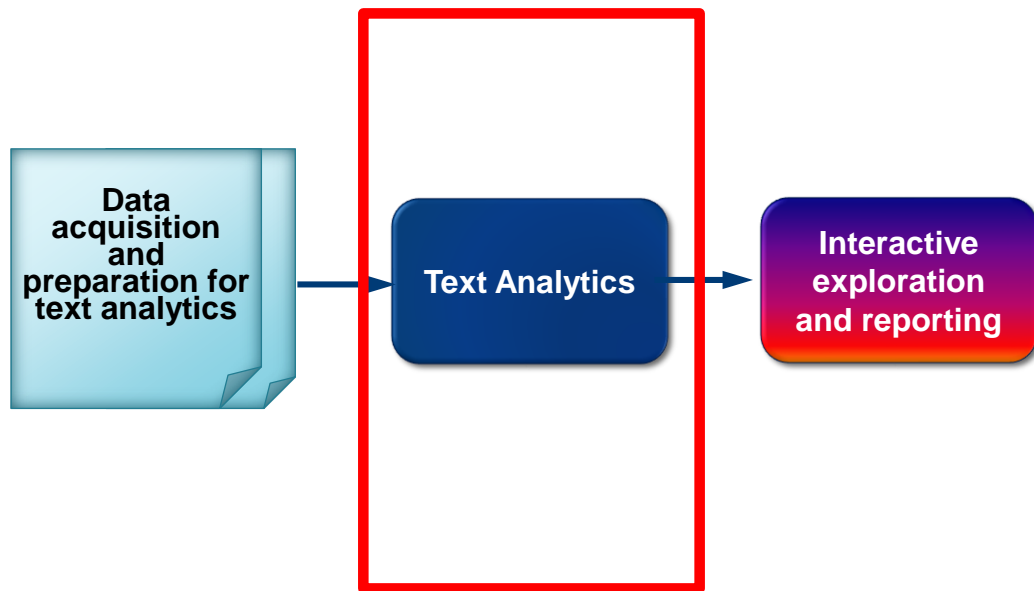
SAS Enterprise Guide									
File Edit View Tasks Program Tools Help									
Process Flow									
Project Tree									
cfpb_15k									
Process Flow									
cfpb_15k									
Server List									
Refresh Disconnect Stop									
Servers									
Private OLAP Servers									
Filter and Sort Query Builder Data Describe Graph Analyze Export Send To									
	ISSUE	SUB_ISSUE	CONSUMER_NARRATIVE				COMPANY_PUBLIC_RESP	COMPANY_RESPONSE_TO	
4	Other fee		Price gauging with foreign transaction fees at				Company chooses not to provide	Closed with monetary relief	
5	Account opening...		To receive the (\$300.00) bonus, you must open a				Company chooses not to provide	Closed with monetary relief	
6	False statements...	Attempted to colle...	-XX/XX/2015 due to an XXXX condition I had the urgent need to g...					Closed with explanation	
7	Cont'd attempts c...	Debt was paid	XXXX " from XXXX) keeps ca...					Closed with explanation	
8	False statements...	Impersonated an...	XXXX " stated he was a process server serving a law suit and to r...				Company can't verify or dispute	Closed	
9	Account opening...		XXXX. Research, legal process and requests for information " on...					Closed with explanation	
10	Loan servicing, pa...		# 1 XXXX continually wrongly asserts that I am behind in my p...					Closed with explanation	
11	Making/receiving...		# 1 XXXX where as XXXX transactions were...				Company believes it acted appr	Closed with explanation	
12	Settlement proces...		# 1 No pay-off statement related to old loan and/or escrow. Unable...				Company chooses not to provide	Closed with explanation	
13	Communication ta...	Frequent or repea...	# 1.FALSE REPORT : untrue and not correct. reported on my credi...				Company disputes the facts pres	Closed with explanation	
14	Disclosure verifica...	Not given enough...	# 1Original bill was with the XXXX, XXXX XXXX XXXX XXXX date...				Company chooses not to provide	Closed with explanation	
15	Credit reporting co...	Problem with state...	# XXXX XXXX is reported as a closed collection account and mark...				Company chooses not to provide	Closed	
16	Problems when yo...		# XXXX XXXX XXXX XXXX XXXX, TX XXXX My name i...					Closed with explanation	
17	Settlement proces...		(1) XXXX XXXX XXXX (XXXX) XXXX /XXXX XXXX-Prop Taxes...					Closed with explanation	
18	Disclosure verifica...	Not given enough...	(Below is the last correspondence I sent to XXXX that explains t...				Company believes it acted appr	Closed with explanation	
19	Cont'd attempts c...	Debt is not mine	(The choices above do not accurately describe this situation, I sel...				Company believes it acted appr	Closed with explanation	
20	Loan servicing, pa...		(To preface this may be nothing but it is from XXXX and I do n't t...					Closed with explanation	
21	Incorrect informati...	Information is not...	*** This is not a duplicate ***I have been a victim of Identity Theft a...				Company chooses not to provide	Closed with explanation	
22	Incorrect informati...	Account terms	*** This is not a Duplicate ***My mortgage company lack of securit...				Company chooses not to provide	Closed with monetary relief	
23	Credit decision / U...		*** This is not a Duplicate***On XXXX XXXX, XXXX on correspond...					Closed with explanation	
24	Credit decision / U...		***This is not a duplicate***This case is pertaining the harm XXXX					Closed with explanation	
25	Incorrect informati...	Account terms	**This is n't a duplicate request please read as I have loaded supp...					Closed with explanation	
26	Arbitration		"I read the below today on XXXX. Below is the copy and pasted art...				Company chooses not to provide	Closed with explanation	
27	Taking out the loa...		"I was a XXXX XXXX under my company (XXXX) when got in agr...					Closed with explanation	
28	Loan servicing, pa...		"Since XXXX, I am still fighting " with XXXX regarding this mo...					Closed with explanation	
29	Loan servicing, pa...		"THIS IS NOT A DUPLICATE" I believe that my mortgage account...					Closed with explanation	
30	Identity theft / Fra...		. Since late XXXX, I was trying to resolve my XXXX cre...				Company chooses not to provide	Closed with explanation	
31	Credit decision / U...		. I am currently having issues with my lender, XXXX, XXXX Weich...				Company believes it acted appr	Closed with explanation	
32	Account opening...		. I entered the bank Saturday morning XXXX XXXX, 2015 to cash...					Closed with explanation	
33	Incorrect informati...	Information is not...	. I have tried to have the following item investigated by XXXX H...				Company chooses not to provide	Closed with explanation	
34	Fraud or scam		. Under fake identify card she got money via XXXX					Closed with explanation	
35	Cont'd attempts c...	Debt is not mine	... A company called XXXX ", which only shows a P.O.Box as addr...					Closed with explanation	
36	Loan modification...		[Case number : XXXXH! This is my second time contacting you. I...				Company chooses not to provide	Closed with explanation	
37	Loan servicing, pa...		(\$5900.00) owed for fee/other has showed up again on XXXX pa...					Closed with explanation	
38	Unauthorized tran...		(\$810.00) was fraudulently charged on my XXXX XXXX prepaid vis...				Company chooses not to provide	Closed with explanation	
39	Identity theft / Fra...		~ (\$7000.00) in debt has been reported on a credit card that I neve...					Closed with explanation	
40	Loan modification...		XXXX is my loan company , this company rejecte...					Closed with explanation	
41	Application, origin...		1) At the XXXX time home buyer class, I was told that the One-mo...					Closed with explanation	
42	Loan servicing, pa...		XXXX not send me the actual signed modification agreeme...					Closed with explanation	
							CA 908XX Web	25SEP2015 Closed with explanation	

COMPANY RESPONSE TO

Closed with monetary relief
Closed with monetary relief
Closed with explanation
Closed with explanation
Closed
Closed with explanation
Closed with explanation
Closed with monetary relief
Closed with explanation
Closed with explanation
Closed with explanation
Closed with explanation
Closed with explanation
Closed with explanation
Closed with explanation

CA 908XX Web 25SEP2015 Closed with explanation

STEP 2: TEXT ANALYTICS



Properties
Lists
Predefined Concepts
Data Source
Run

Select a representative data source to help identify analysis topics and to test the accuracy of your analysis model. ?

- ☐ Select a data source later
- ☒ Select variables from within a data set
- ☐ Use files in a directory

Select a data set and variables:

Data set: * SCA CFPB_15K Browse

Text variable: * CONSUMER_NARRATIVE +

☐ Text variable contains a file reference ?

Category variables: ?



COMPANY_RESPONSE_TO_CONSUMER

1 category variable

Previous

Next

Finish

Cancel

Edit Project ×

Data Source Step 4 of 5

Properties
Lists
Predefined Concepts
Data Source

Select a representative data source to help identify analysis topics and to test the accuracy of your analysis model. ?

☐ Select a data source later


☒ Select variables from within a data set


Select a data set and variables:

Data set: * SCA CFPB_15K Browse

Text variable: * CONSUMER_NARRATIVE +

☐ Text variable contains a file reference ?

Category variables: ? + 

 COMPANY_RESPONSE_TO_CONSUMER

1 category variable

Previous Next Finish Cancel

SAS® Contextual Analysis

File Help

Sign Out

CFPB

Categories Run View

Categories

Categories	Document Proportion	Number of Docume...
▼ All Categories		8498
▼ COMPANY_RESPONSE_TO_CONSUMER		8498
▶ Closed		933
▶ Closed with explanation		4405
▼ Closed with monetary relief		1556
account & ~report & ~debt & ~loan & overdraft		193
account & ~report & ~debt & ██████████		61
atrn		108
bank & ~loan & ~foreclosure & ~debt & gift		15
██████████		6
card & ~debt & interest		347
card & refund		237
card & statement & interest & additional		23
charge & ~collection & ~debt & transaction		297
charge & ~collection & ~loan & ~report & ~mortgage & late		317
charge & ~debt & overdraft		192
check & ~report & account & ~threaten & balance & ██████████		32
fee & ~modification & bank & steal		46
gfe		25
interest & ~loan & ~mortgage & ~debt & mistake		28
██████████		55
██████████		44
month & ~proof & ~foreclosure & ██████████		28
month & waive		66

Edit Rules Documents Test Rules

Documents (25 of 15,000)

Category > COMPANY_RESPONSE_TO_CONSUMER > Closed with monetary relief > gfe

1. On Friday, XX/XX/XXXX XXXX we sent an inquiry to the CFPB regarding XXXX XXXX ██████████ steering us into a loan from their mortgage company, XXXX XXXX Mortgage (XXXX) under the guise of incentives while their XXXX loan originator steered us into their most expensive loan with exorbitant rates, fees and junk fees. That inquiry contains more than the XXXX characters...

Acquired a mortgage in XXXX through XXXX XXXX at ██████████ in XXXX, CT. XXXX rarely responded to emails after he and his staff demanded we get documentation in by a certain day. We needed our lawyer to request XXXX extensions from the seller's attorney as a result of XXXX dropping the ball several times. He told us he would try to float down our rate, then neve...

Dear officer, I was provided a very competitive 30 yr fixed mortgage quote b ██████████ when I first started searching for lender. We were given GFE and numbers and interest rate shown on the GFE were very promising. Based on those numbers we decided to proceed with ██████████. During the loan process interest rates went up and I asked ██████████ to provide both 30 yr and 15 y...

During my first attempt to refinance with with cash out from my current mortgage holder, my information was submitted incorrectly to underwriting. I did not have access to neither was I able to view/authorize any of the information submitted on my behalf. I have no idea if my application was submitted for a FHA or a Conventional loan. Upon being denied after a more tha...

Have applied for a refinance on a mortgage, got a GFE letter, had a closing date setup bank change the date for closing, stating more paper need to be signed and they send a paper work which had a higher interest rate. I have requested for an explanation on the rate change. waiting for the response.

I applied for a FHA/ HUD loan with ██████████ XXXX, TN. I submitted all paperwork and documentation to receive a pre-approval, GFE, and loan was sent to underwriting after submitting a letters and other documents to processor. I was called on XXXX XXXX by loan officer XXXX XXXX and was told that loan was denied because of statement in letter regarding why "I...

Progress: User: SAS Demo User

CFPB

Categories Run View

Categories



Categories

Document Proportion

Number of Docume...



Edit Rules

Documents

Test Rules



Category > COMPANY_RESPONSE_TO_CONSUMER > Closed with monetary relief > gfe

Documents (25 of 15,000)

▼ Closed with monetary relief

account & ~report & ~debt & ~loan & overdraft



1556

account & ~report & ~debt & [REDACTED]



193

atm



108

bank & ~loan & ~foreclosure & ~debt & gift



15

card & ~debt & interest



347

card & refund



237

card & statement & interest & additional



23

charge & ~collection & ~debt & transaction



297

charge & ~collection & ~loan & ~report & ~mortgage & late



317

charge & ~debt & overdraft



192

check & ~report & account & ~threaten & balance & [REDACTED]



32

fee & ~modification & bank & steal



46

gfe



25

steering us into a loan from their
eir XXXX loan originator steered us
tains more than the XXXX characters...



rely responded to emails after he and
request XXXX extensions from the
d try to float down our rate, then neve...



first started searching for lender. We
Based on those numbers we
of [REDACTED] to provide both 30 yr and 15 y...



my information was submitted
my of the information submitted on my
Upon being denied after a more tha...



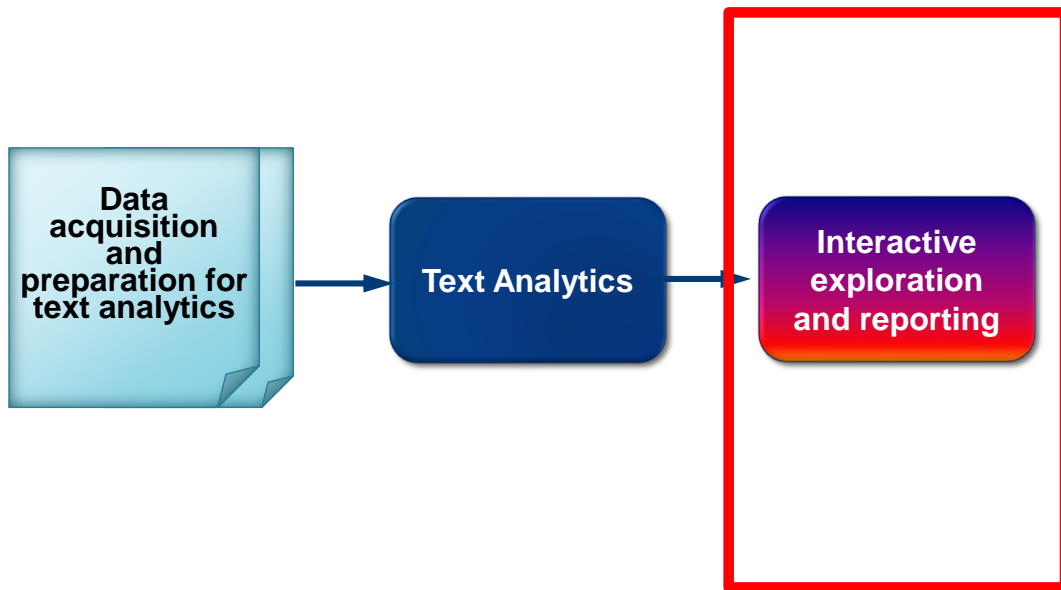
bank change the date for closing,
interest rate. I have requested for an

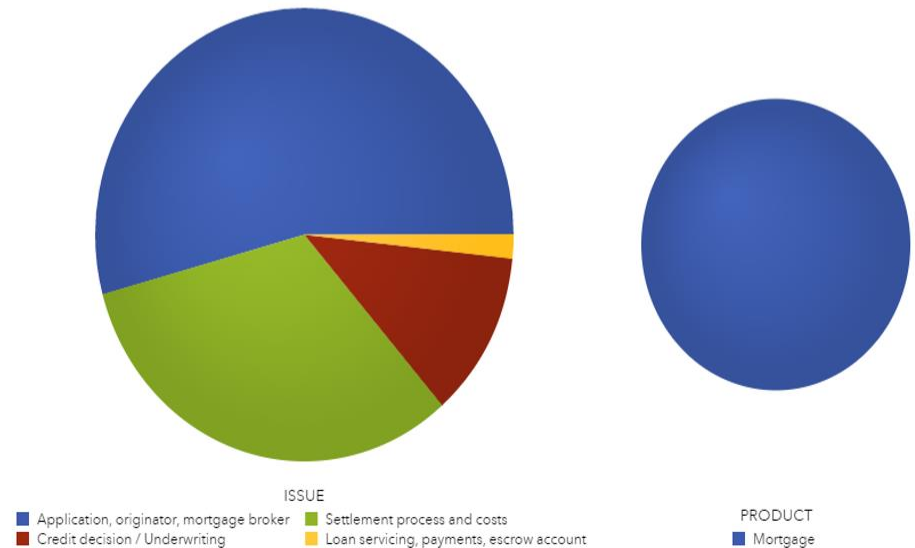
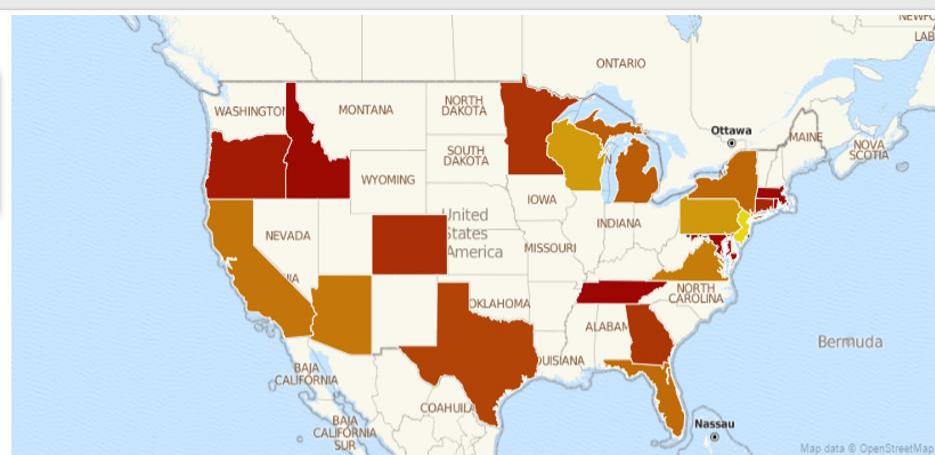
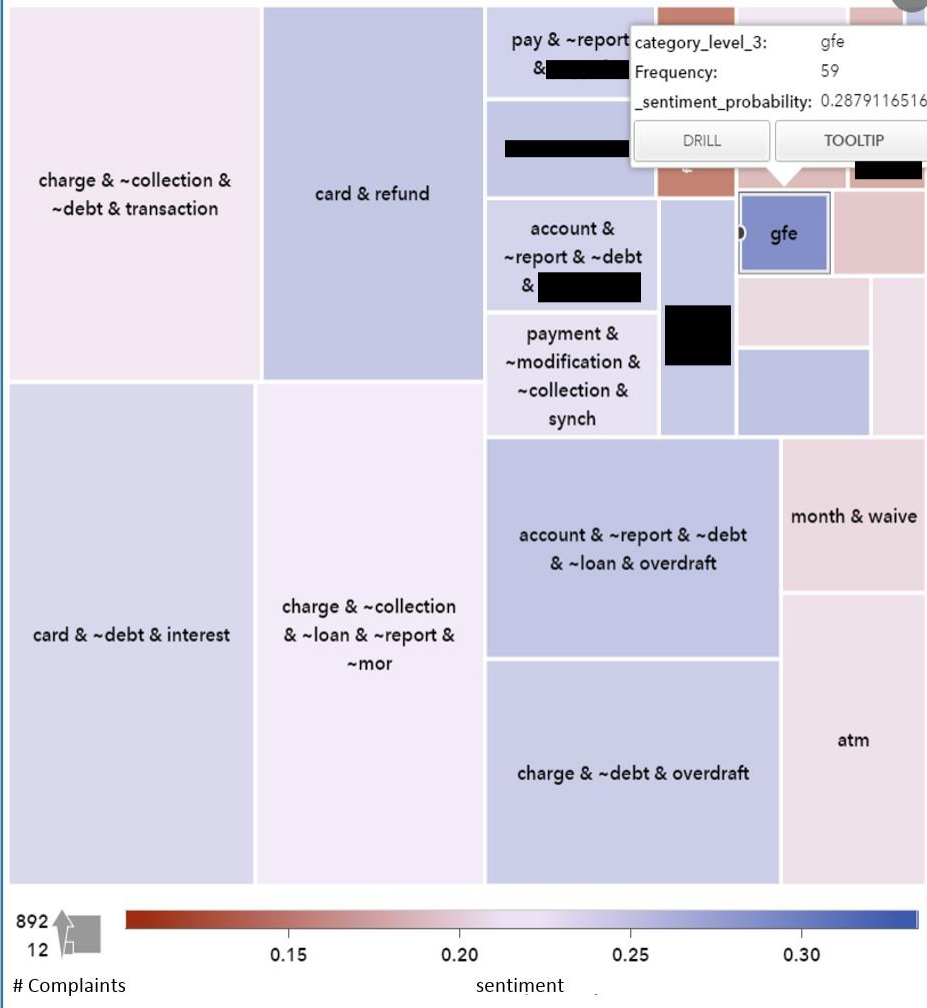


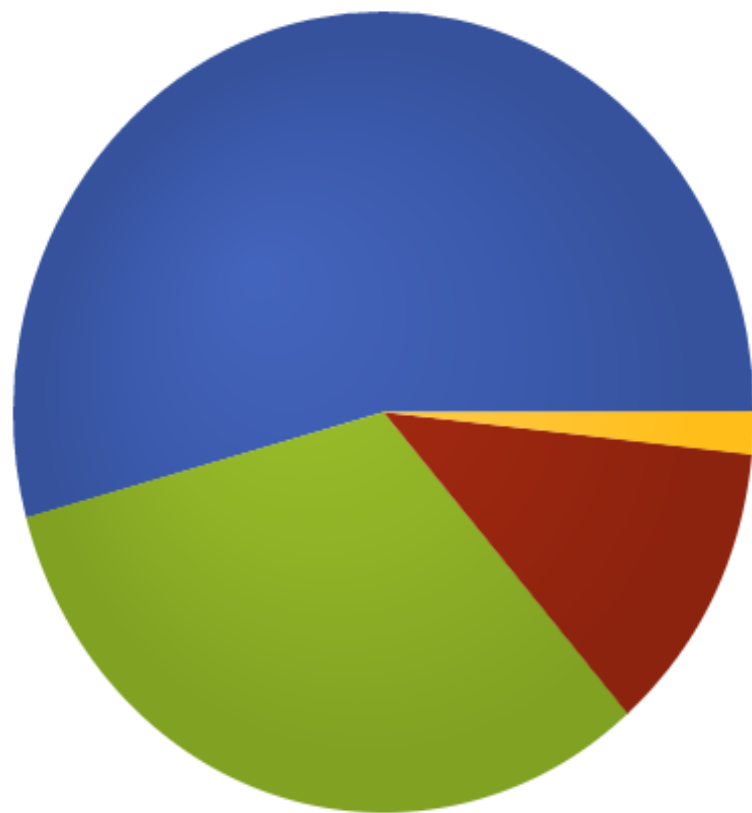
and documentation to receive a pre-
cuments to processor. I was called
statement in letter regarding why "I..."



STEP 3: INTERACTIVE EXPLORATION AND REPORTING







ISSUE

- Application, originator, mortgage broker
- Settlement process and costs
- Credit decision / Underwriting
- Loan servicing, payments, escrow account



PRODUCT

- Mortgage

category_level_3	COMPANY_RESPONS E_TO_CONSUMER ▲	PRODUCT	CONSUMER_NARRATIVE	
gfe	Closed with monetary relief	Mortgage	<p>changed the amount of transfer taxes on the day of settlement. was disclosed the proper amount on the original purchase and sales agreement and only listed 1 % on the GFE rather than the 2 % listed on the purchase and sales agreement. On the day of settlement, they changed the amount to 2 % increasing my closing cost. There was never any change to the transfer tax amount through the entire process. is stating they were allowed to make this change.</p>	
gfe	Closed with monetary relief	Mortgage	<p>On XXXX XXXX, 2015 I made contact with P Doing Business As as through the web site XXXX. I agreed to apply for a mortgage to refinance my personal residence. The mortgage terms were to be 30 year fixed at an interest rate of 3.375 %, origination fees of (\$350.00) and a 30 day rate lock. After multiple delays on their part, on XXXX XXXX, 2015, two days prior to closing, they informed me that instead of paying origination fees of (\$350.00) as originally stated in the Good Faith Estimate (GFE) dated XXXX XXXX, 2015, if I wanted the loan at the original terms I would have to pay origination fees of (\$2700.00) as a rate lock extension charge. When I pointed out that the bulk of the delays were on their side and that on two occasions I was told by representatives that if I was timely in my production of documents I would not have to pay for a rate lock extension, I was told by XXXX XXXX, XXXX XXXX XXXX, to take it or leave it. Given that rates had increased 84 % from the 3.375 % to around 4.0 % in the intervening 67 days and the XXXX is assumed to start raising rates in XXXX, I could do nothing but take it and pay the increase in fees.</p>	
gfe	Closed with monetary relief	Mortgage	<p>On XXXX XXXX 2014 I asked for a GFE and they gave me Closing Costs Worksheet with Estimated Closing Costs of almost XXXX and an interest rate of XXXX for 180 months. After that, they sent me a letter dated XXXX XXXX 2014 with additional closing costs totaling XXXX. I then spoke to XXXX XXXX and XXXX XXXX and XXXX assured me of the XXXX if the appraisal comes in okay. XXXX also acknowledged that the property was a duplex. On XXXX XXXX 2014, the settlement statement (HUD-1) showed XXXX due for closing costs that I rolled into my loan, which originally was XXXX less discounts ended up being XXXX. I ended up closing the loan due to the amount of time that had passed.</p> <p>I Refi'd XXXX loans XXXXVA, XXXXFHA with closing the funds sttd in</p>	



Before

Initial TIL disclosure + Good Faith Estimate



Initial Truth in Lending Disclosure Statement form. It includes fields for lender information, loan details, and a table for comparing different loan offers. The table has columns for 'Loan 1', 'Loan 2', and 'Loan 3' with rows for 'Annual Percentage Rate (APR)', 'Finance Charge', and 'Total Amount Financed'.



Good Faith Estimate form. It includes fields for lender information, loan details, and a table for comparing different loan offers. The table has columns for 'Loan 1', 'Loan 2', and 'Loan 3' with rows for 'Annual Percentage Rate (APR)', 'Finance Charge', and 'Total Amount Financed'.



Good Faith Estimate form. It includes fields for lender information, loan details, and a table for comparing different loan offers. The table has columns for 'Loan 1', 'Loan 2', and 'Loan 3' with rows for 'Annual Percentage Rate (APR)', 'Finance Charge', and 'Total Amount Financed'.



Initial Truth in Lending Disclosure Statement form. It includes fields for lender information, loan details, and a table for comparing different loan offers. The table has columns for 'Loan 1', 'Loan 2', and 'Loan 3' with rows for 'Annual Percentage Rate (APR)', 'Finance Charge', and 'Total Amount Financed'.



Good Faith Estimate form. It includes fields for lender information, loan details, and a table for comparing different loan offers. The table has columns for 'Loan 1', 'Loan 2', and 'Loan 3' with rows for 'Annual Percentage Rate (APR)', 'Finance Charge', and 'Total Amount Financed'.

[View these two forms as a PDF](#)

After

Loan Estimate

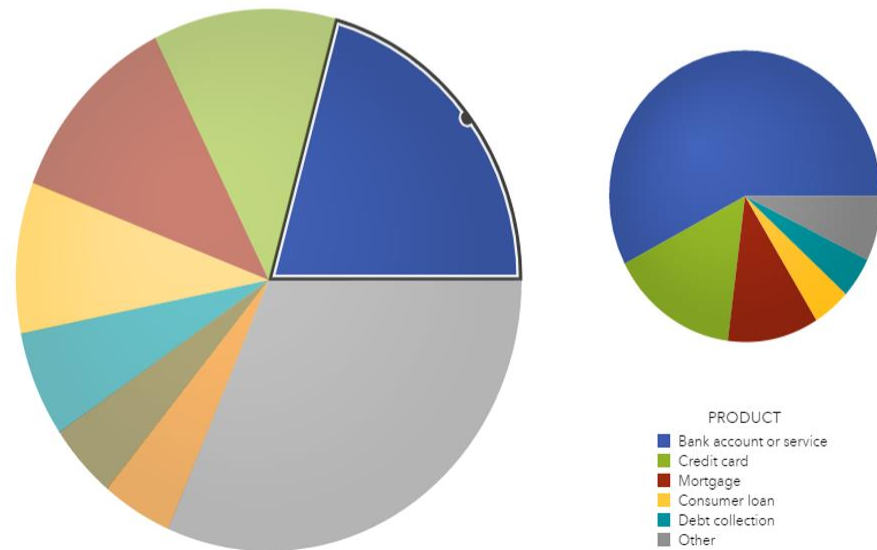
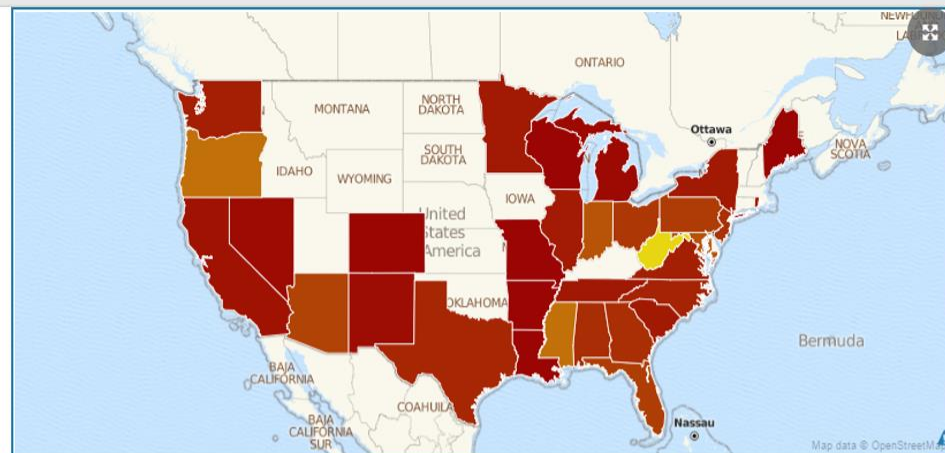
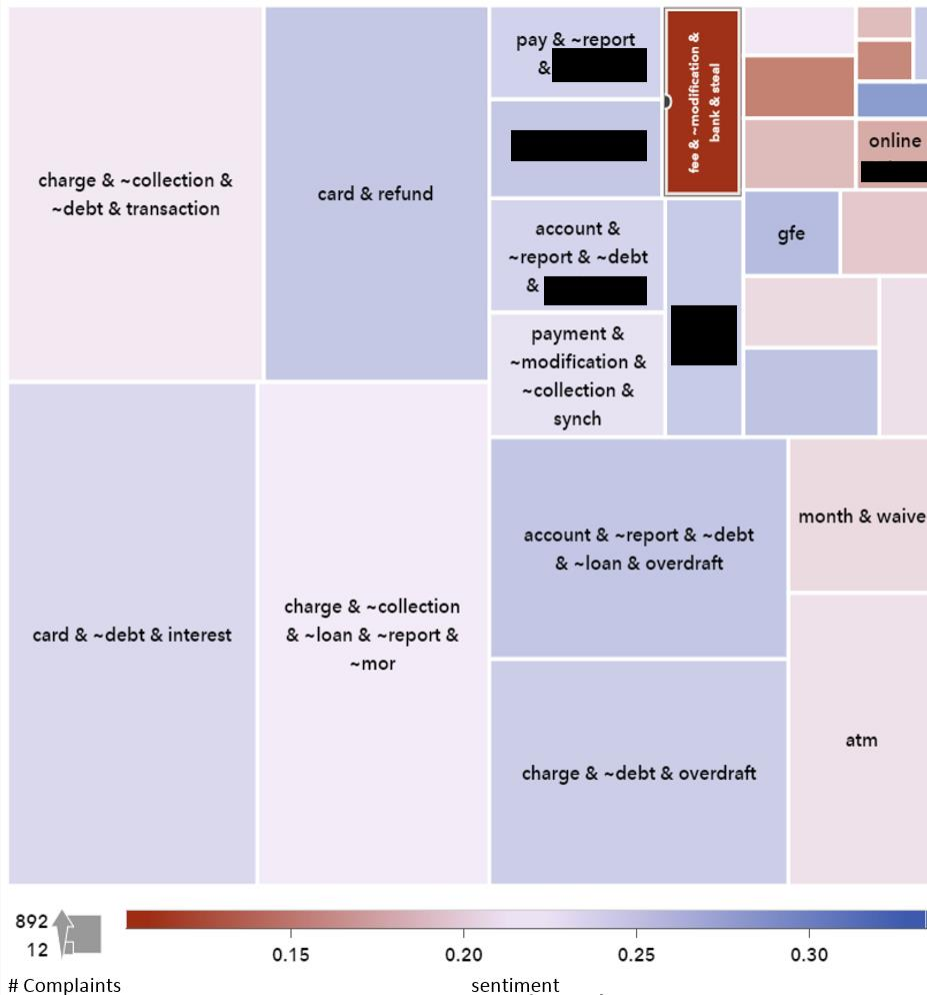


Loan Estimate form. It includes fields for lender information, loan details, and a table for comparing different loan offers. The table has columns for 'Loan 1', 'Loan 2', and 'Loan 3' with rows for 'Annual Percentage Rate (APR)', 'Finance Charge', and 'Total Amount Financed'.



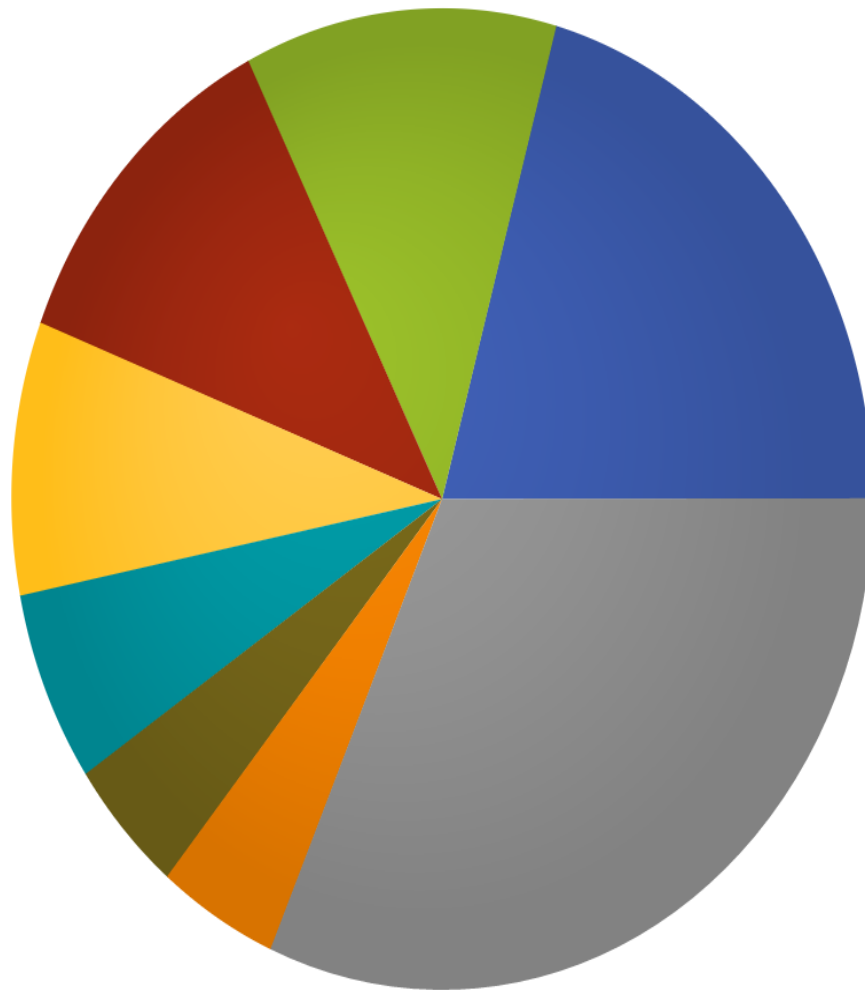
Loan Estimate form. It includes fields for lender information, loan details, and a table for comparing different loan offers. The table has columns for 'Loan 1', 'Loan 2', and 'Loan 3' with rows for 'Annual Percentage Rate (APR)', 'Finance Charge', and 'Total Amount Financed'.

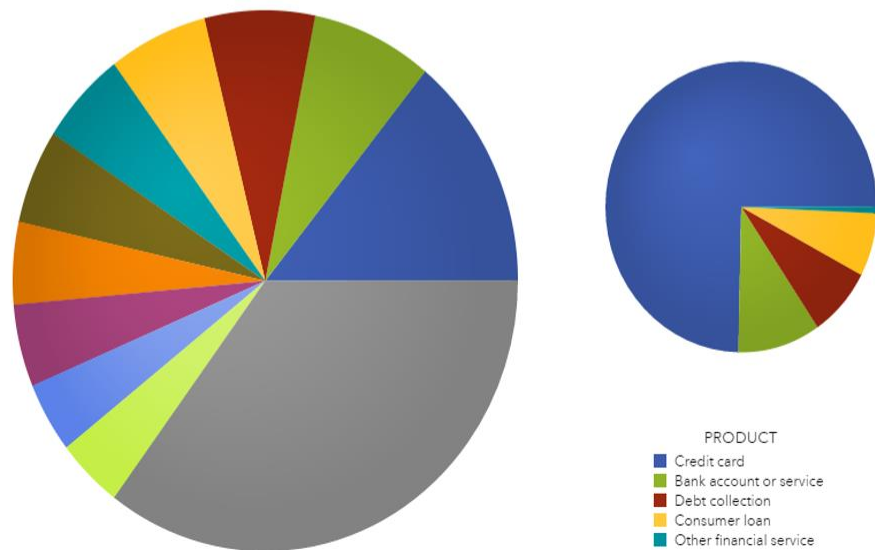
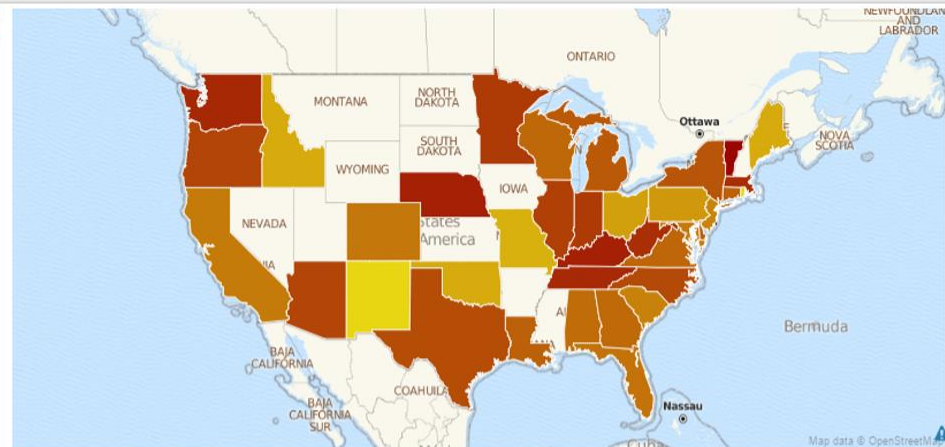
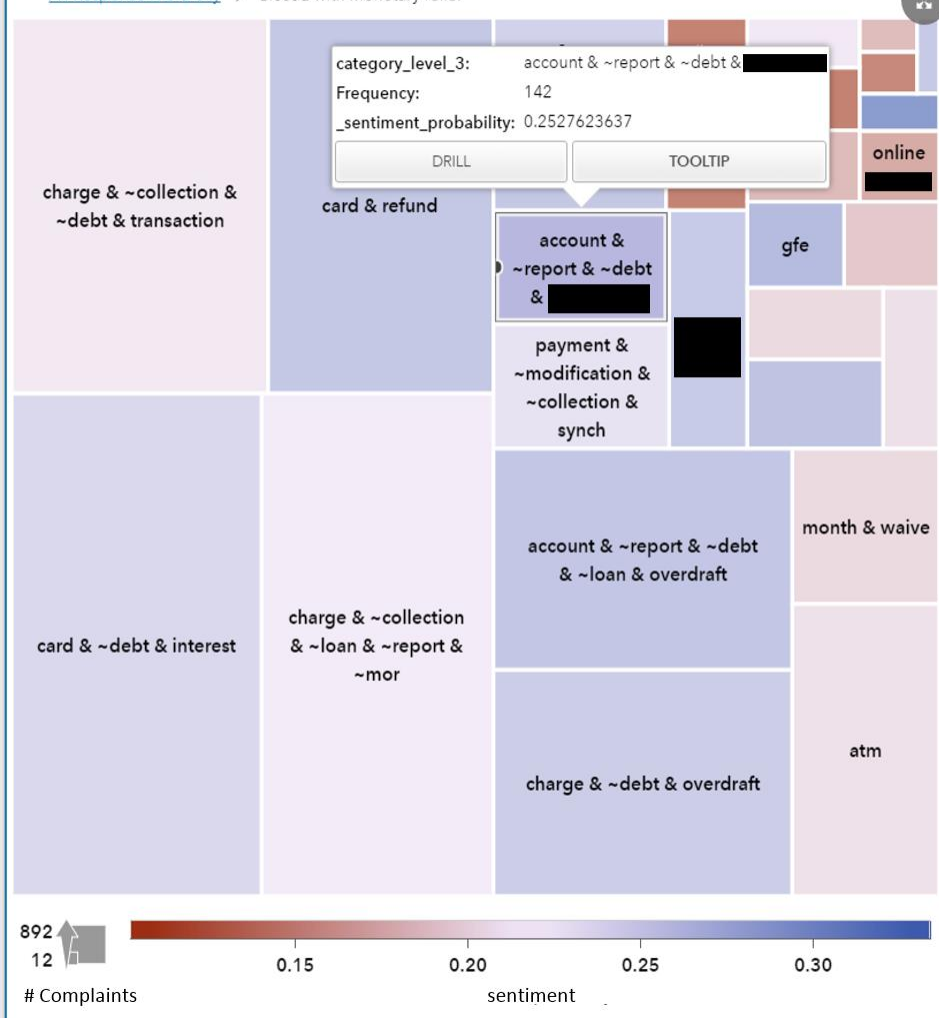
[View the Loan Estimate as a PDF](#)



ISSUE

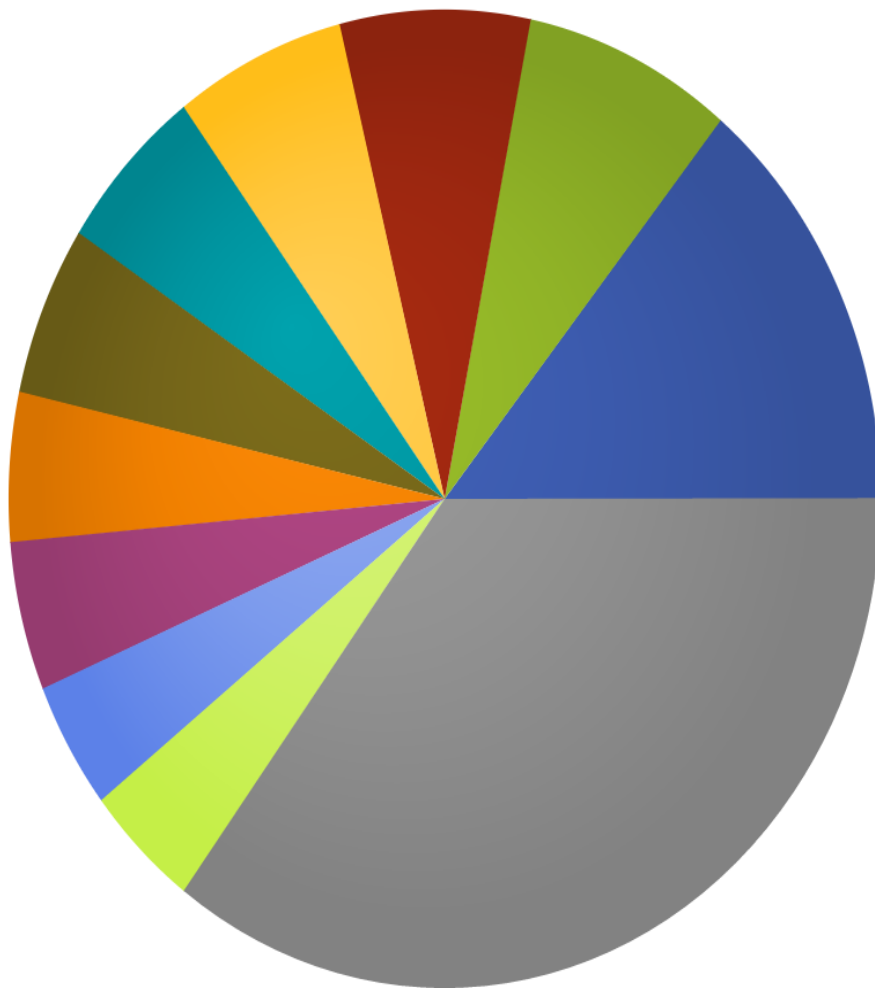
- Account opening, closing, or management
- Deposits and withdrawals
- Problems caused by my funds being low
- Using a debit or ATM card
- Loan servicing, payments, escrow account
- Making/receiving payments, sending money
- Managing the loan or lease
- Other

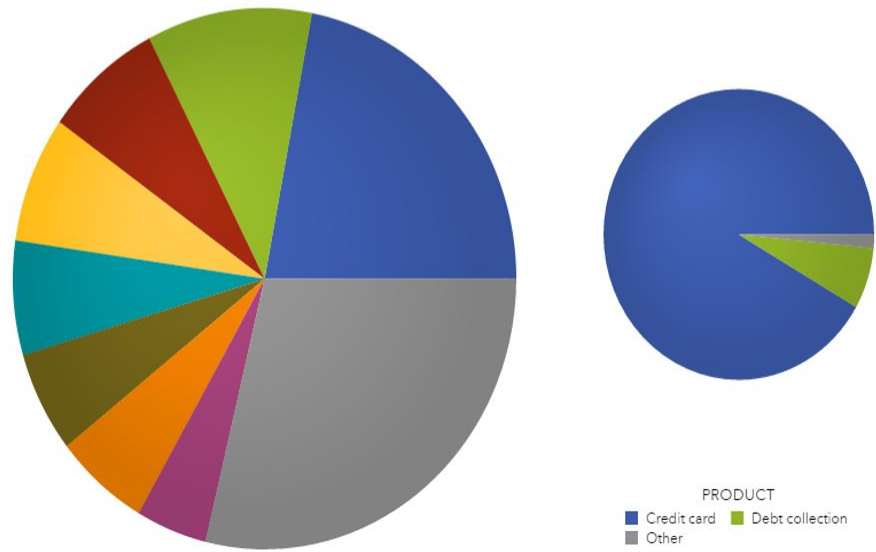
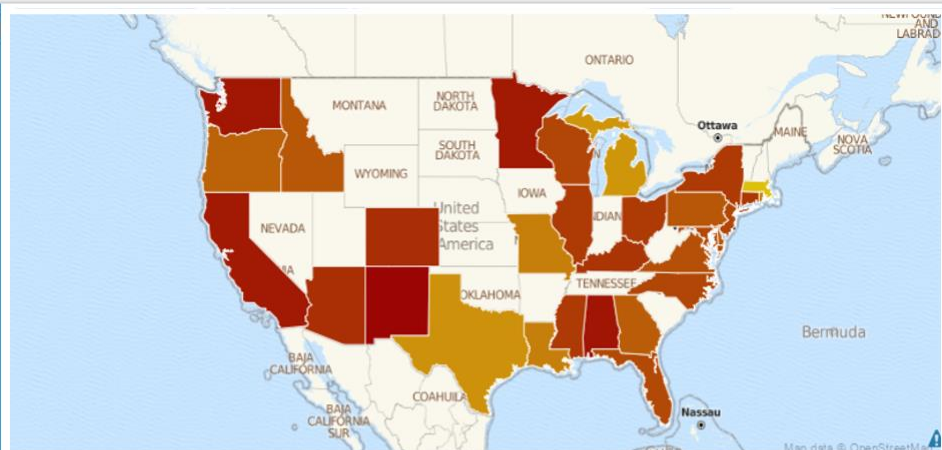
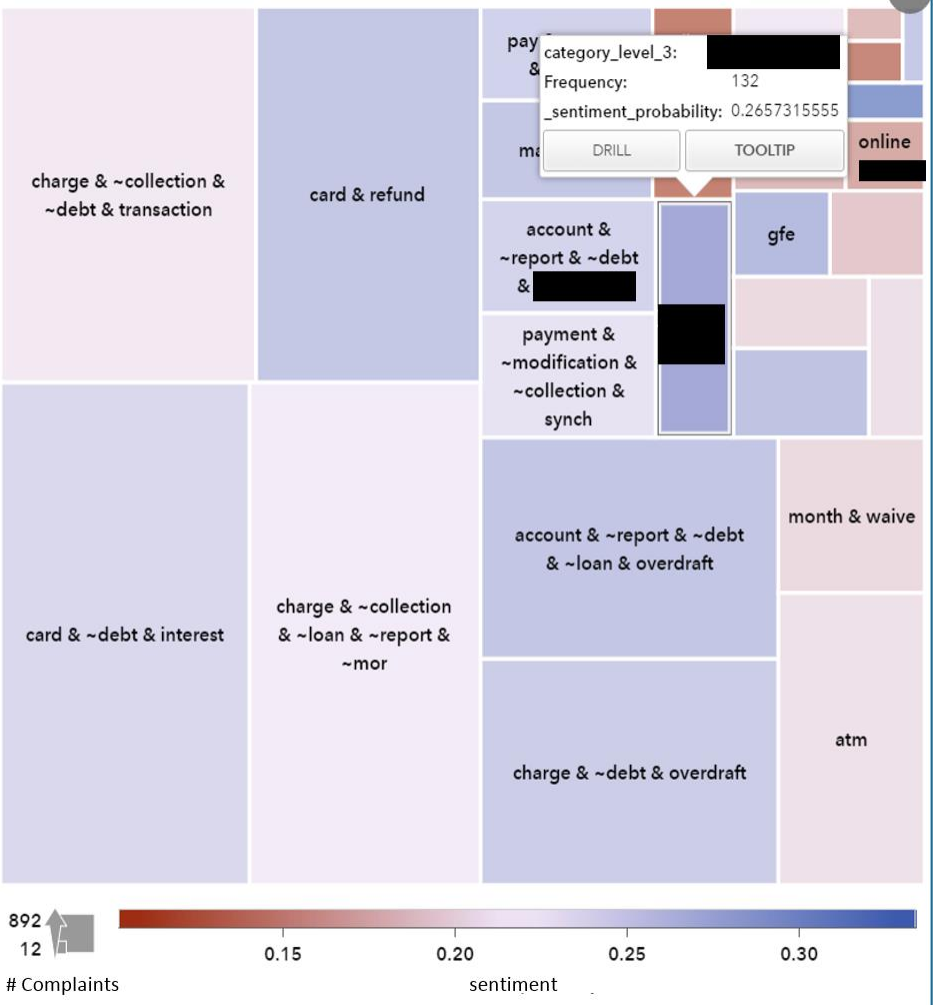




ISSUE

- Billing disputes
- Late fee
- Other
- Closing/Cancelling account
- Account opening, closing, or management
- Managing the loan or lease
- Payoff process
- Transaction issue
- Communication tactics
- Customer service / Customer relations
- Other





DISCUSSION

- Widely applicable methodology
 - 500+ rows, target variable associated to the text
 - Tip lines, surveys, medical encounters, peer reviews, intelligence
- Who should care?

Resources

- White Paper (January 2014): *Text Analytics for Government*
- Conclusions Paper (September 2013): *Applications of Text and Social Media Analytics*
- SAS Global Forum Paper (March 2014): *Uncovering Trends in Research with Text Analytics with Examples from Nanotechnology and Aerospace Engineering*
- SAS Global Forum Paper (April 2015): *Show me the Money! Text Analytics for Decision-Making in Government Spending*
- SAS Global Forum Paper (April 2016): *Extending the Armed Conflict Location and Event Data Project with SAS® Text Analytics*

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