# GE VIOLATION PREVENTION GROUP 5

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Cavallo

# PURPOSE OF DASHBOARD

- Detect trends and patterns of the data
- Find out the origins and connection of data
- Predict the likelihood of violations

## **BUSINESS QUESTIONS**

## A. Timeseries Analysis

- 1. Number of records by months of years
- 2. Number of records by days of months
- Rshiny: Number of records by days of years

## B. Spatial Analysis

- 3. Number of records by countries
- 4. Number of records in US by GUID

#### **GE VIOLATION PREVENTION**

#### Class

- ✓ (AII) ✓ Null
- ✓ Egress
- ✓ High use
- ✓ Probing for limits

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#### Person\_Type

- ✓ (AII)
- ✓ CONTRACTOR
- ✓ CUSTOMERSUPPLI...
- ✓ EMPLOYEE
- **✓** FUNCTIONAL
- ✓ NON GE
- ✓ OFFICER

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#### SSO\_Status

- (AII)A
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(AII)

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#### **GE VIOLATION PREVENTION**

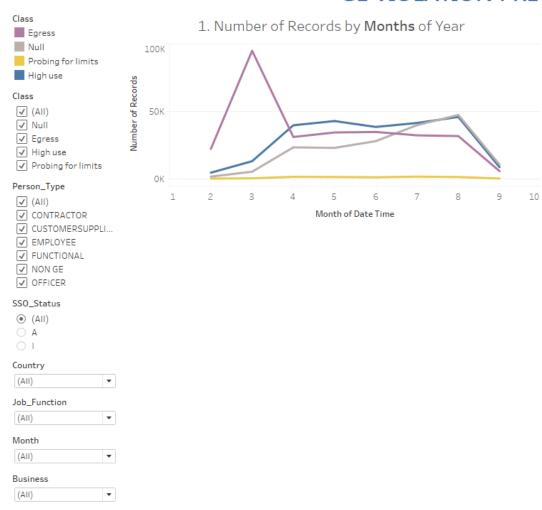
#### Class ✓ (AII) ✓ Null ✓ Egress ✓ High use ✓ Probing for limits Person\_Type ✓ (AII) ✓ CONTRACTOR ✓ CUSTOMERSUPPLI... ✓ EMPLOYEE **✓** FUNCTIONAL ✓ NON GE ✓ OFFICER SSO\_Status (AII) ○ A $\bigcirc$ I Country (AII) • Job\_Function Month (AII) \*

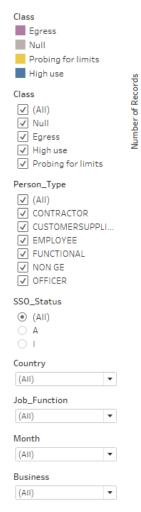
#### **GE VIOLATION PREVENTION**

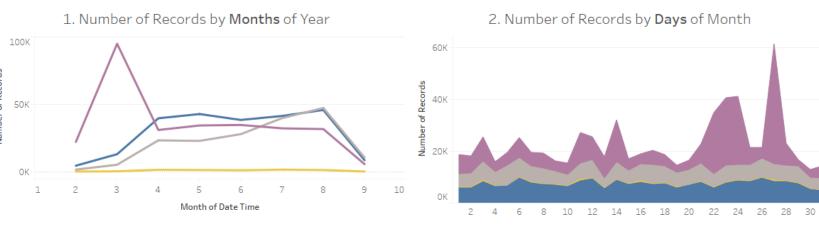
#### Class ✓ (AII) ✓ Null ✓ Egress ✓ High use ✓ Probing for limits Person\_Type ✓ (AII) ✓ CONTRACTOR ✓ CUSTOMERSUPPLI... ✓ EMPLOYEE **✓** FUNCTIONAL ✓ NON GE ✓ OFFICER SSO\_Status (AII) ○ A $\bigcirc$ I Country (AII) • Job\_Function \* (AII) Month • (AII) Business

#### **GE VIOLATION PREVENTION**

#### Class Egress Null Probing for limits High use Class ✓ (AII) ✓ Null ✓ Egress ✓ High use ✓ Probing for limits Person\_Type ✓ (AII) ✓ CONTRACTOR ✓ CUSTOMERSUPPLI... ✓ EMPLOYEE ✓ FUNCTIONAL ✓ NON GE ✓ OFFICER SSO\_Status (AII) ○ A $\bigcirc$ I Country (AII) • Job\_Function (AII) • Month • (AII) Business



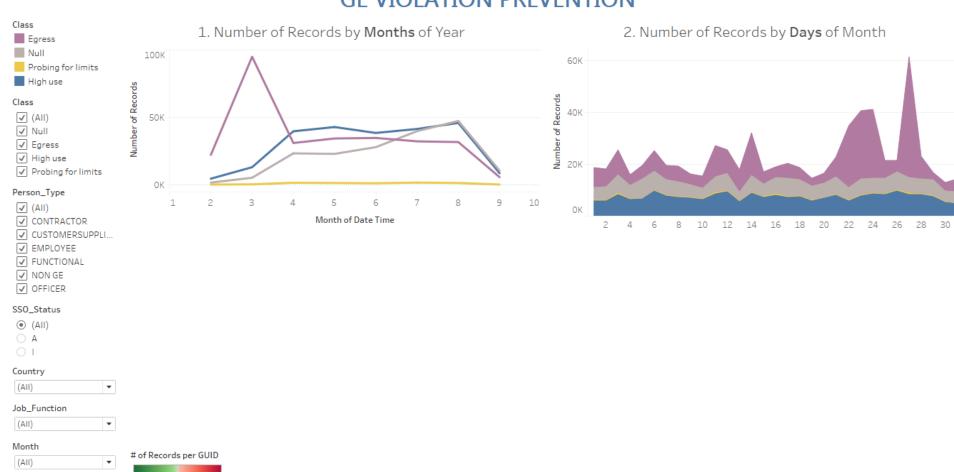




1.00

Business (AII)

80.60

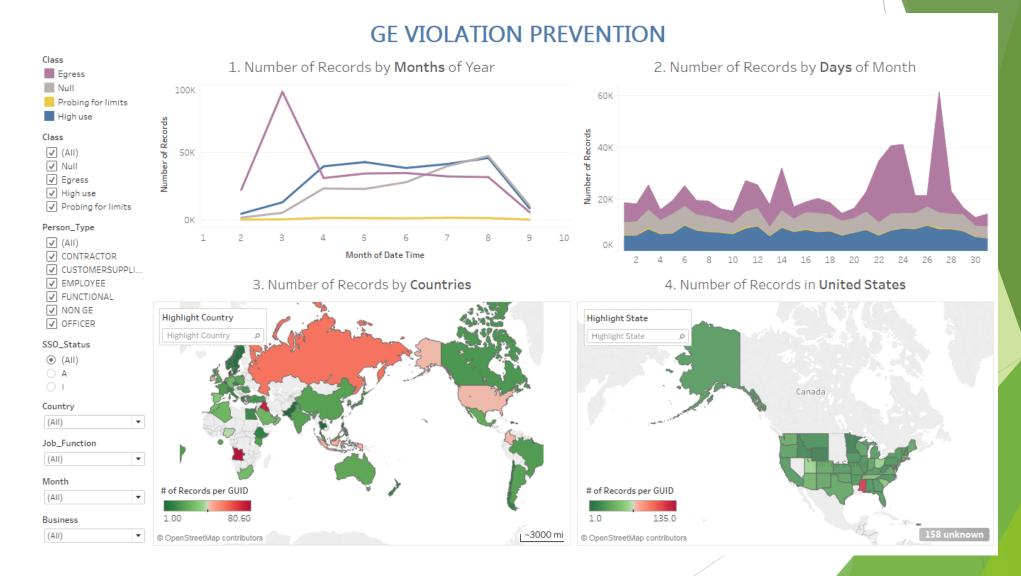


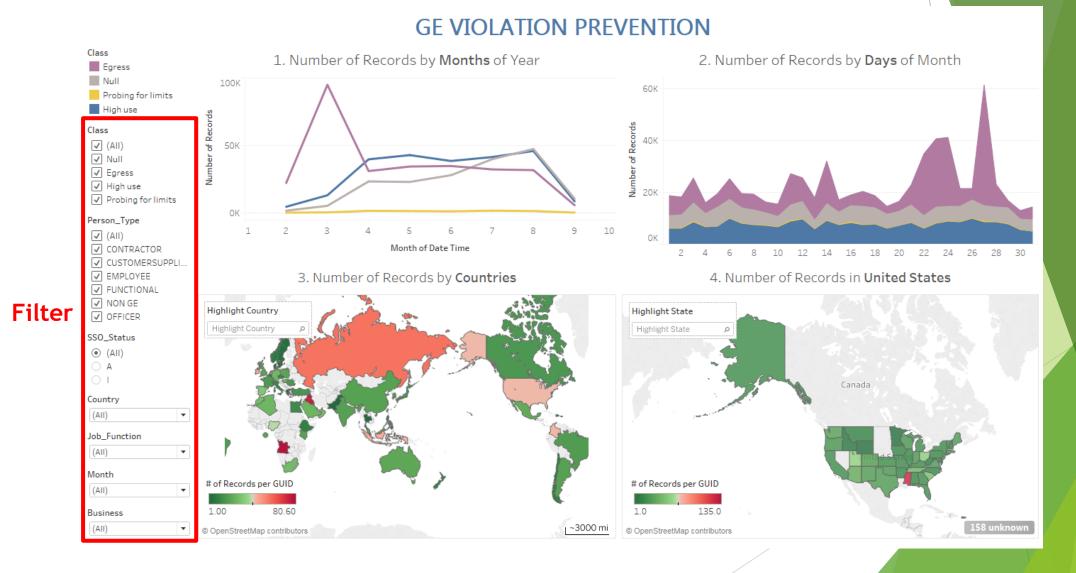
#### **GE VIOLATION PREVENTION**

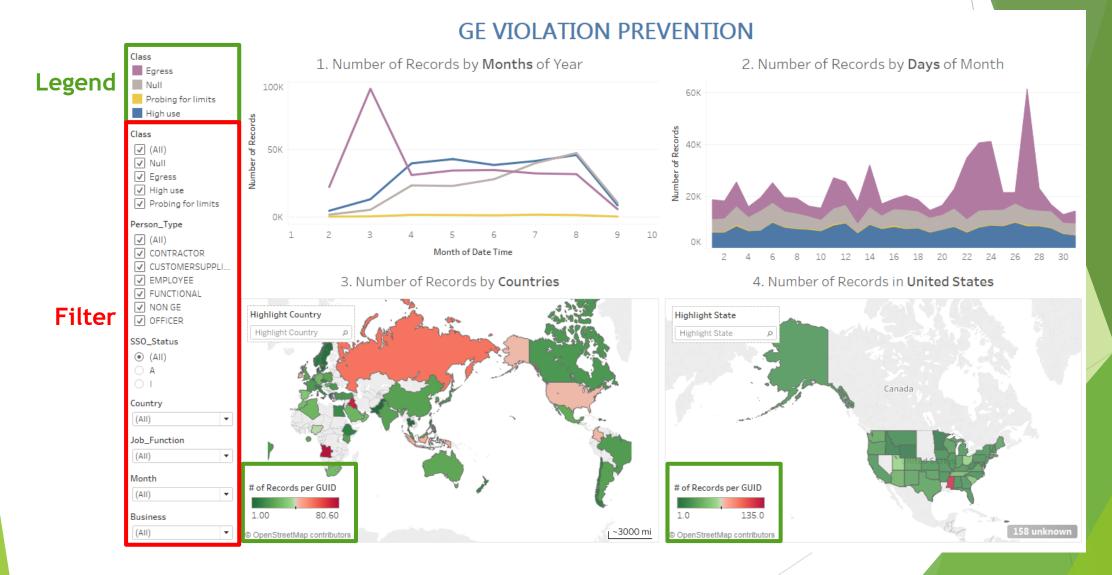
2. Number of Records by **Days** of Month

6 8 10 12 14 16 18 20 22 24 26 28 30





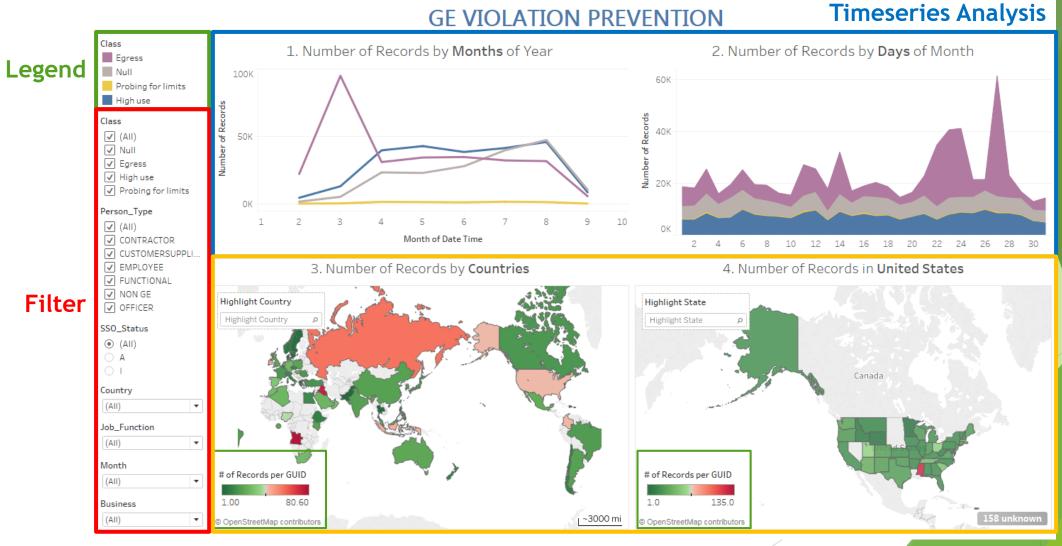




#### **GE VIOLATION PREVENTION**

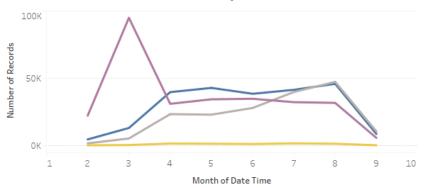
#### **Timeseries Analysis**



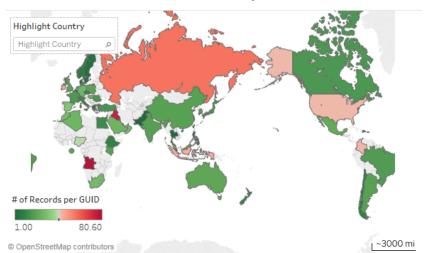


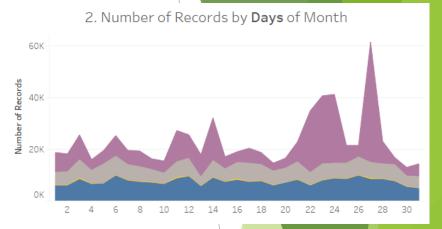
**Spatial Analysis** 

#### 1. Number of Records by Months of Year



#### 3. Number of Records by Countries

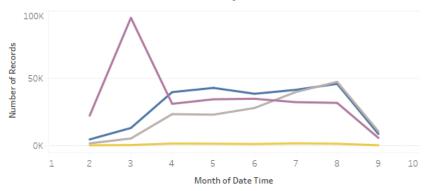




#### 4. Number of Records in **United States**

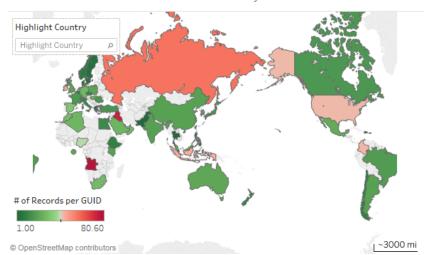


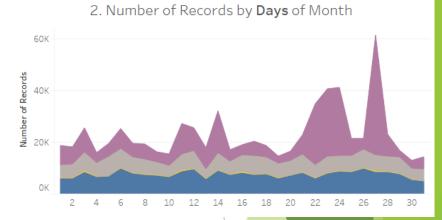
1. Number of Records by Months of Year



What to do next?

3. Number of Records by Countries

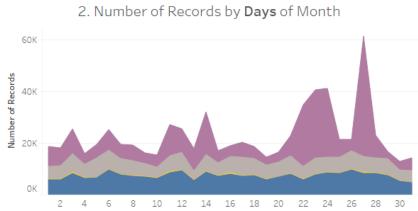




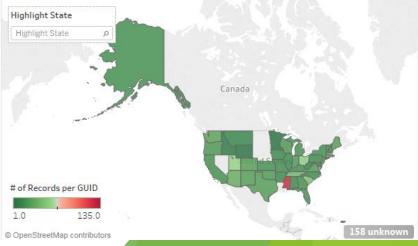
4. Number of Records in United States

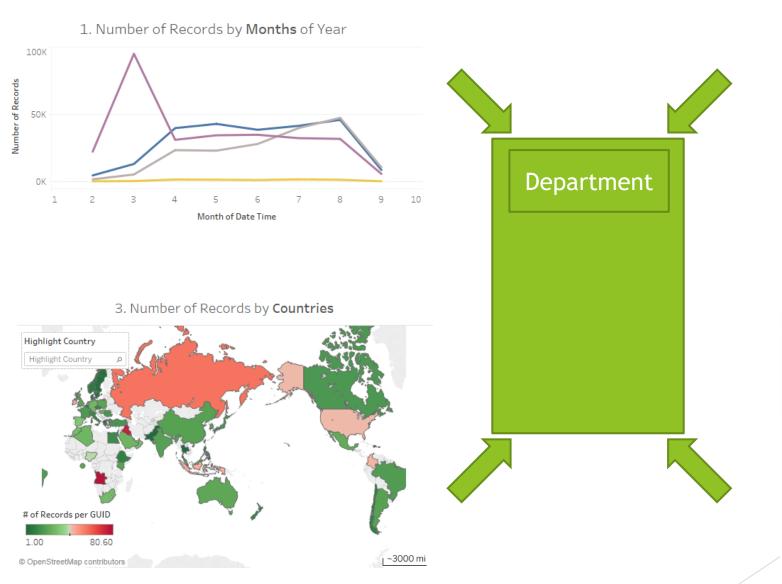


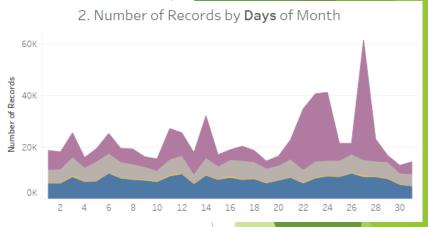




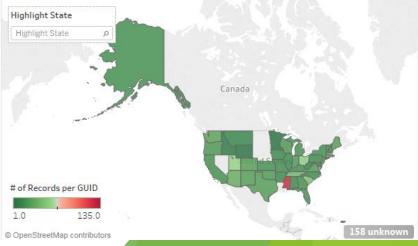


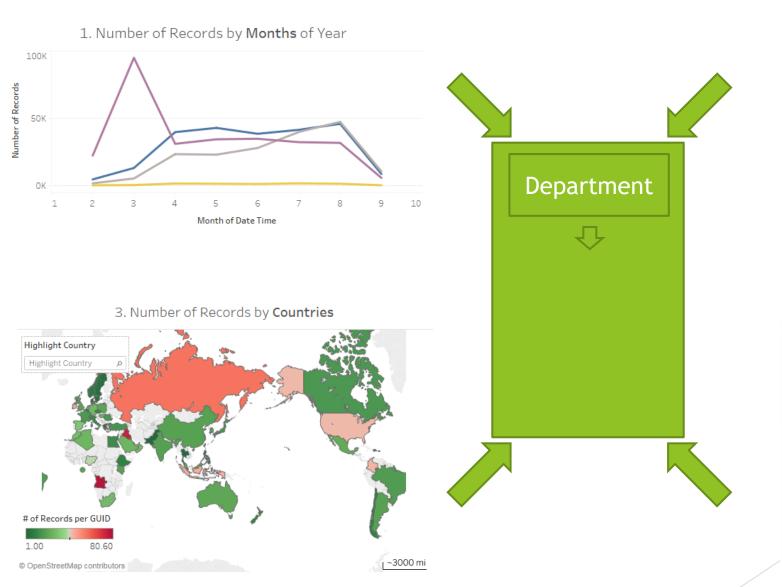


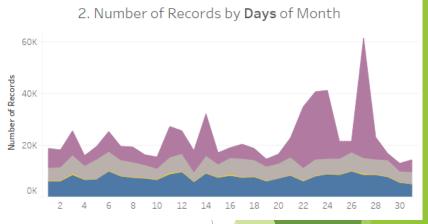




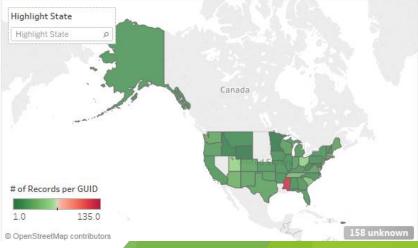


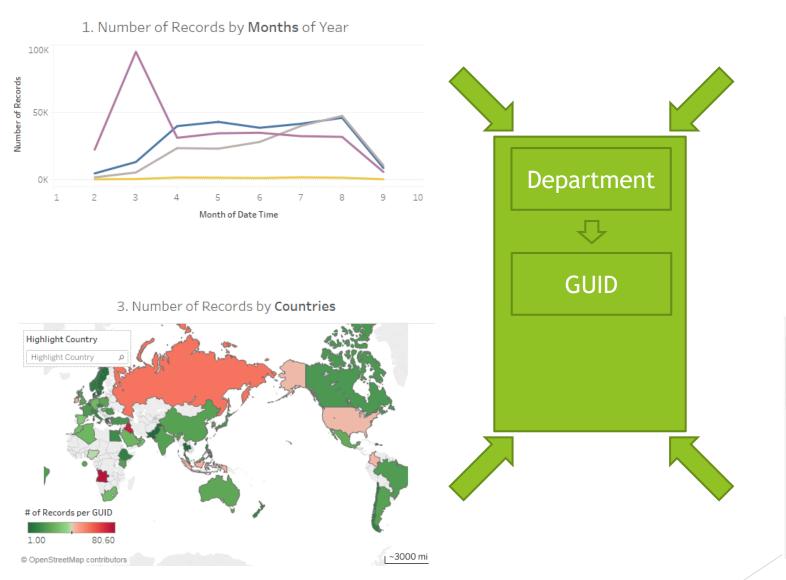


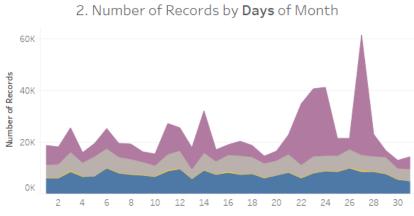




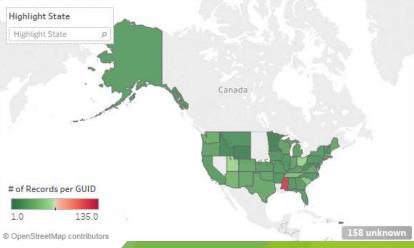


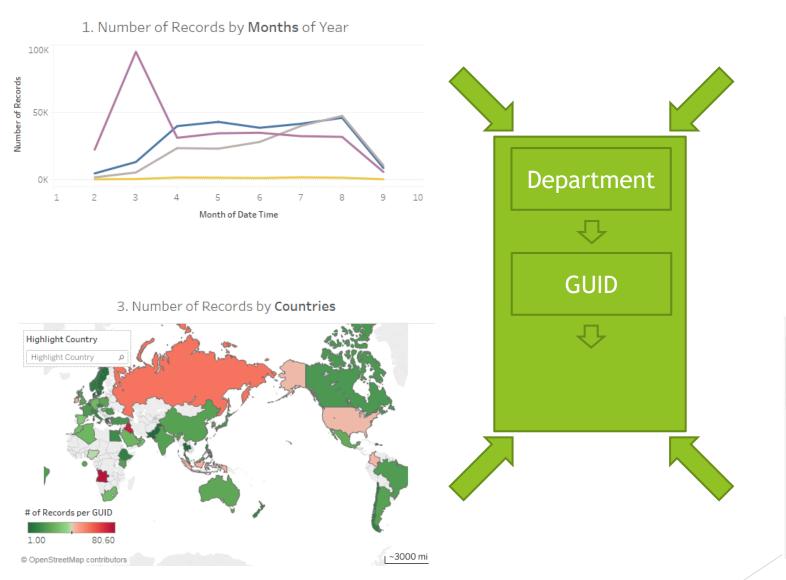


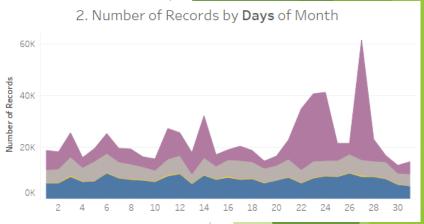




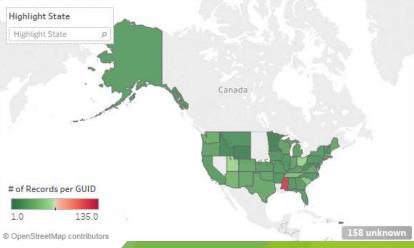


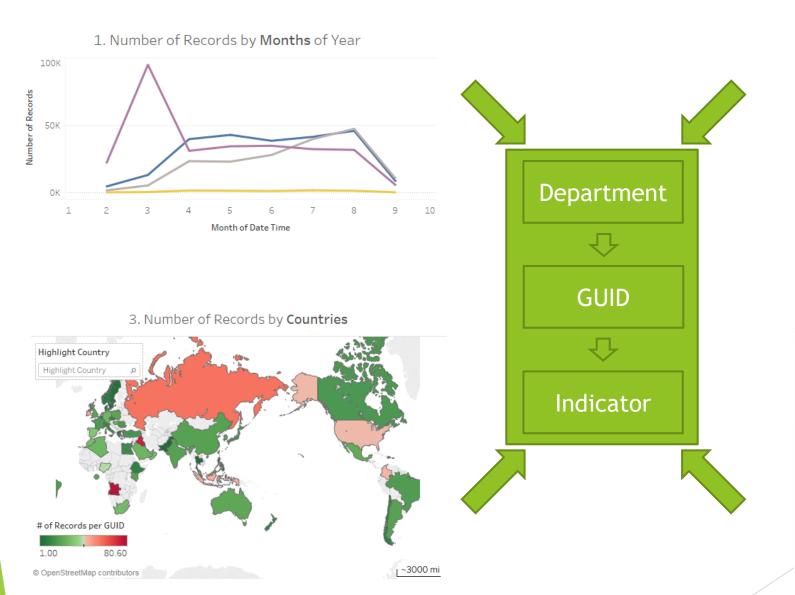


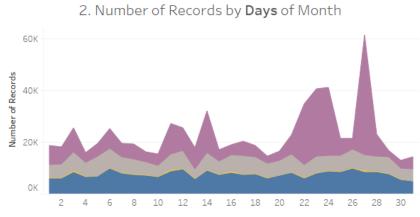




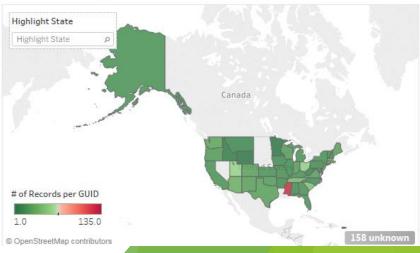




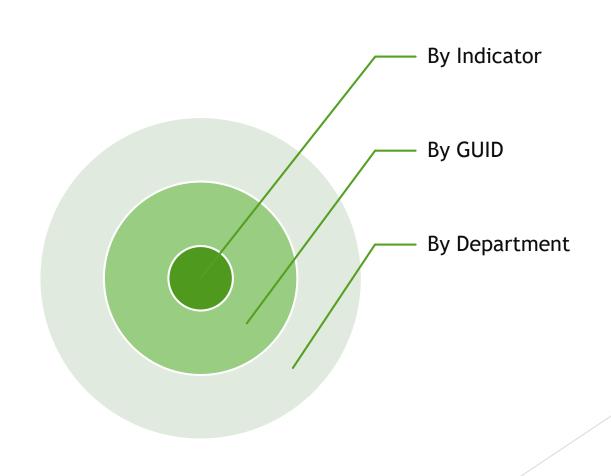




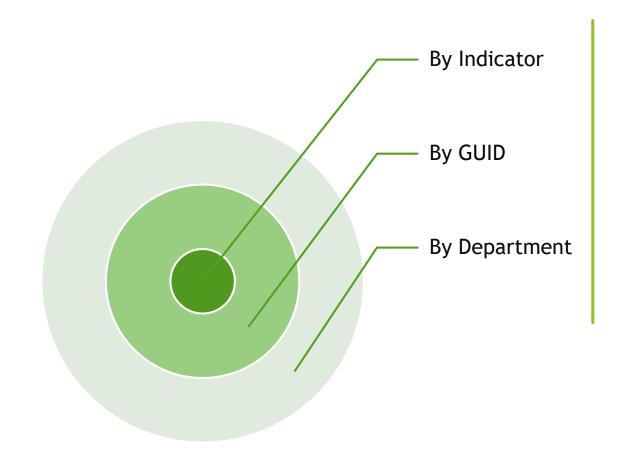




## **TOP-DOWN APPROACH**



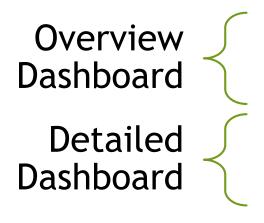
## **TOP-DOWN APPROACH**



1. Filter

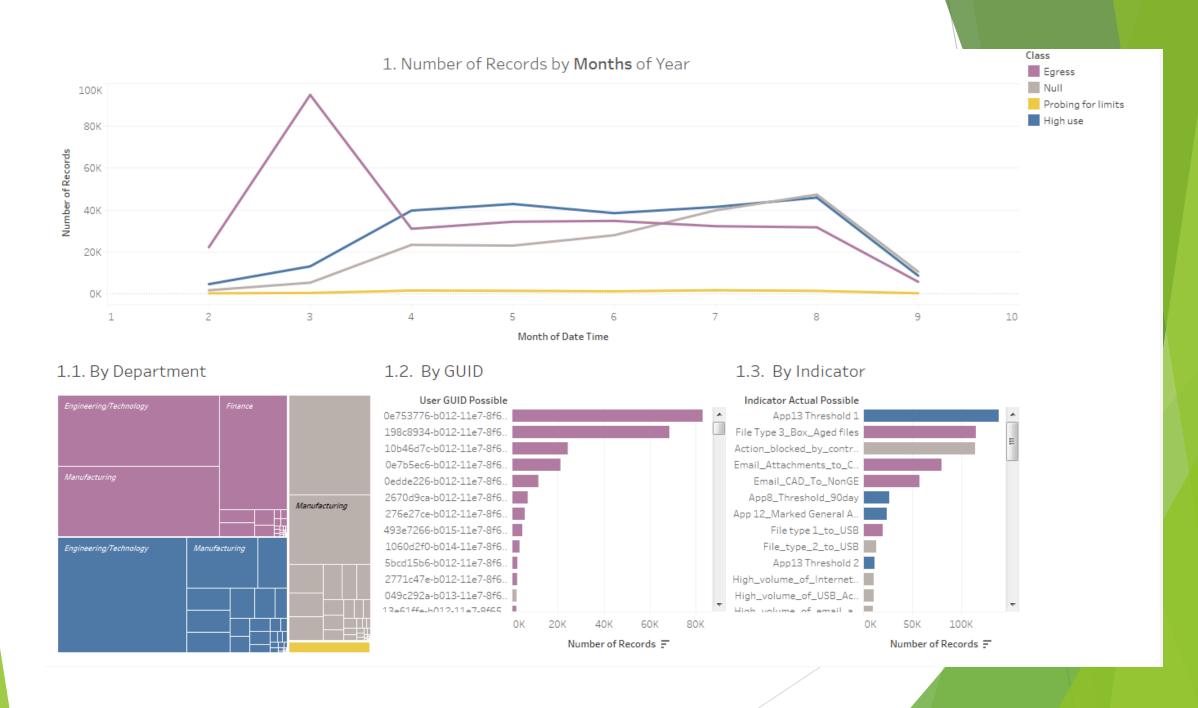
2. Highlight

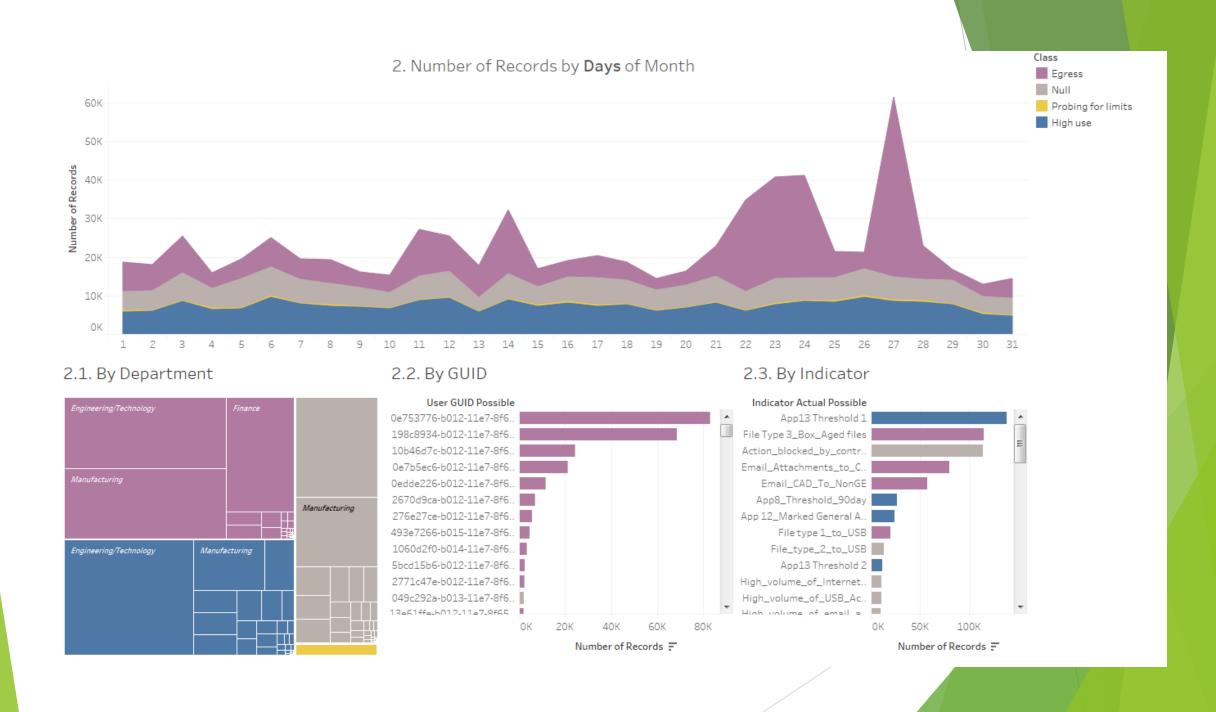
### FILTER

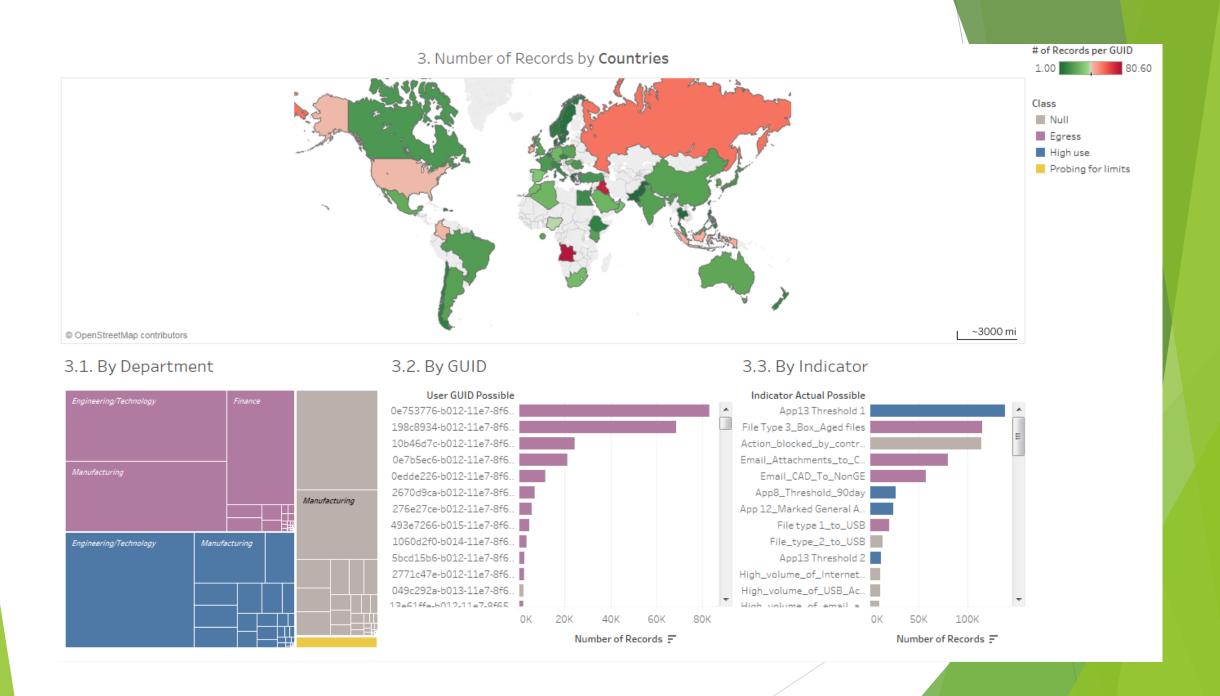


• Filter by manual input

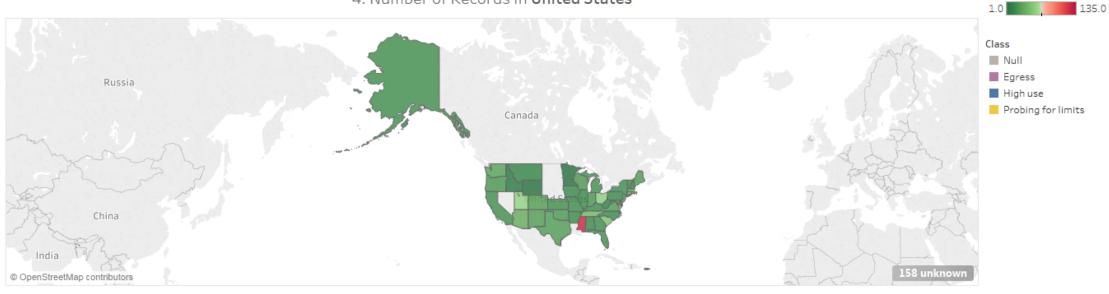
Filter by graph input



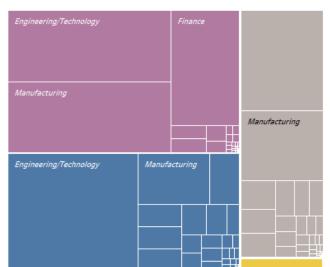




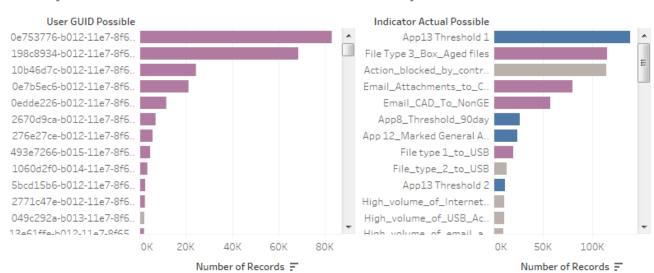
#### 4. Number of Records in **United States**



#### 4.1. By Department



#### 4.2. By GUID

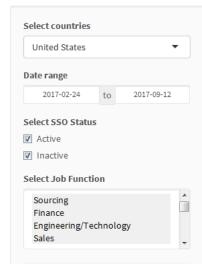


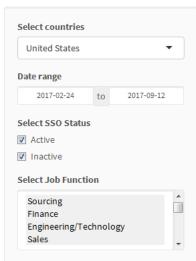
#### 4.3. By Indicator

# of Records per GUID

## R Shiny

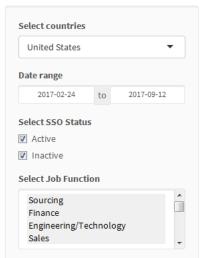






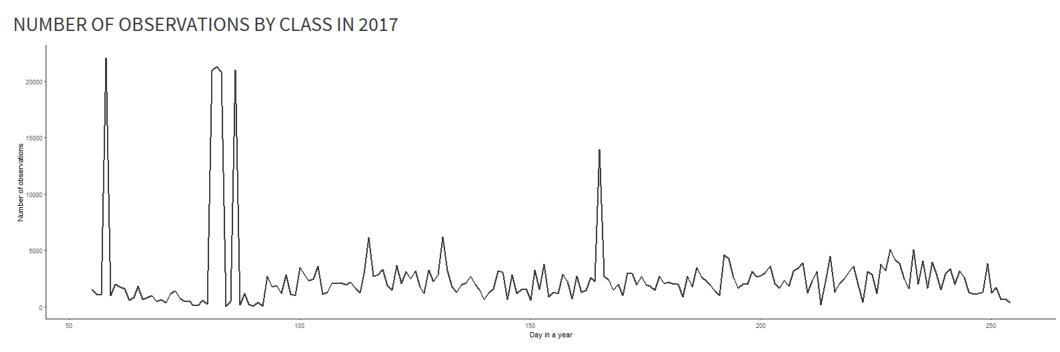
Line graph Data table

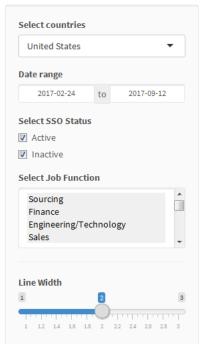


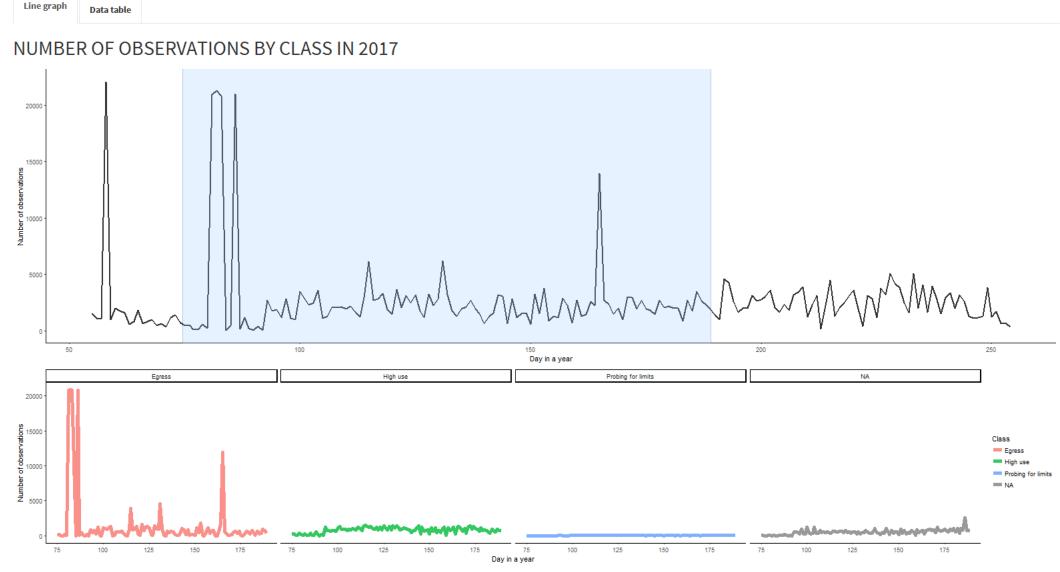


Line graph

Data table

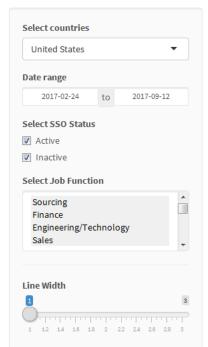


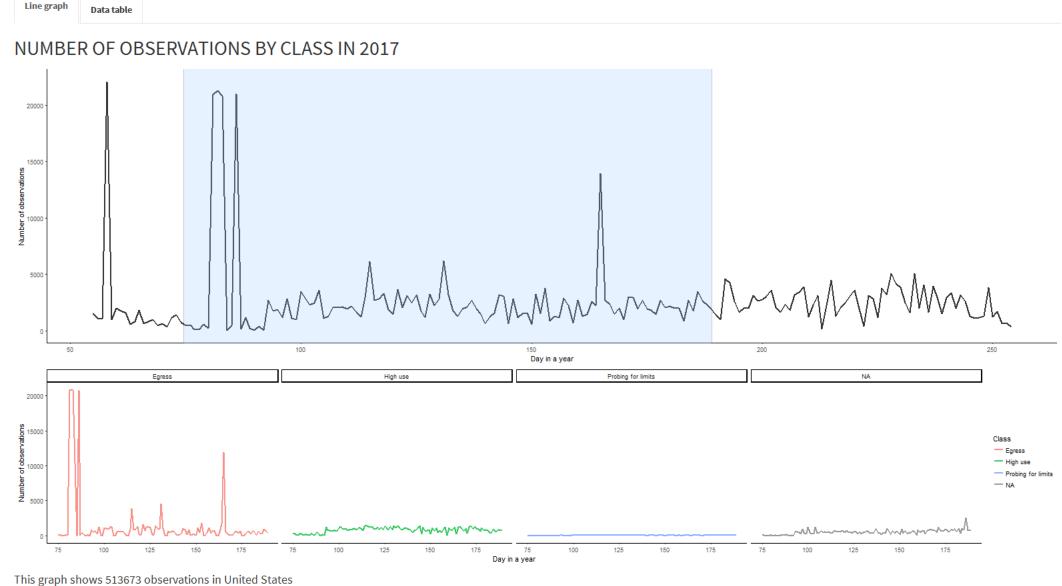


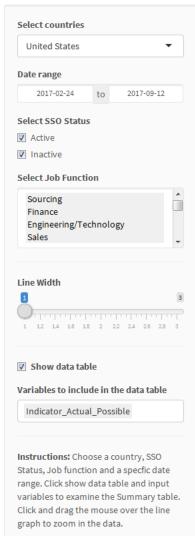


This graph shows 513673 observations in United States



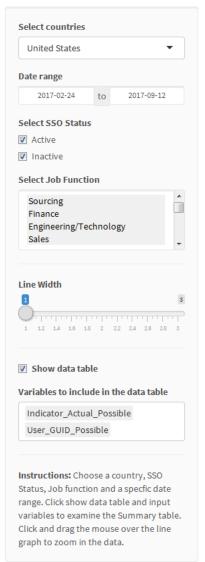




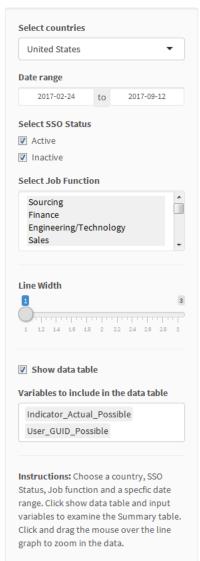


Line graph Data table		
Show 10 ▼ entries		Search:
Indicator_Actual_Possible	$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	Percentage of Observations $\propth{$\psi$}$
Action_blocked_by_control_software	84202	16.39
App 12_Marked-Intellectual_Property	3653	0.71
App 12_Marked General Access	17209	3.35
App 12_Marked Restricted Access	814	0.16
App13 Threshold 1	98600	19.2
App13 Threshold 2	7204	1.4
App13 Threshold 3	3524	0.69
App2_Access_Volume_30day	1730	0.34
App2_Access_Volume_7day	2568	0.5
App2_Access_Volume_90day	2078	0.4
Showing 1 to 10 of 65 entries		Previous 1 2 3 4 5 6 7 Next

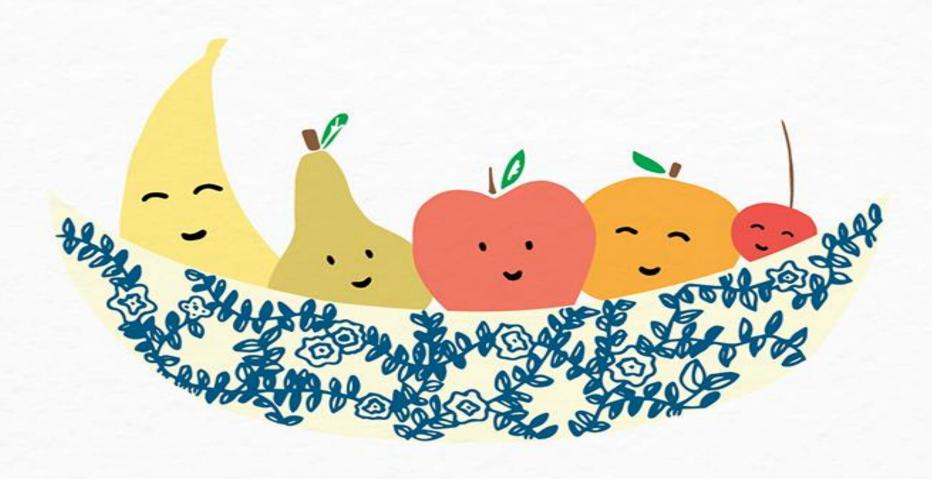




Line graph Data table			
Show 10 ▼ entries			Search:
Indicator_Actual_Possible		 Number of Observations $\mithspace{0.05cm}$	Percentage of Observations $\mbox{$\phi$}$
Action_blocked_by_control_software	00829076-b014-11e7-8f65-08002768f7af	6	0
Action_blocked_by_control_software	0084ab46-b018-11e7-8f65-08002768f7af	3	0
Action_blocked_by_control_software	0085b152-b014-11e7-8f65-08002768f7af	6	0
Action_blocked_by_control_software	00889dd6-b014-11e7-8f65-08002768f7af	7	0
Action_blocked_by_control_software	008bfde4-b01b-11e7-8f65-08002768f7af	4	0
Action_blocked_by_control_software	00928d78-b014-11e7-8f65-08002768f7af	39	0.01
Action_blocked_by_control_software	00a63c4a-b016-11e7-8f65-08002768f7af	4	0
Action_blocked_by_control_software	00aa5e0e-b013-11e7-8f65-08002768f7af	4	0
Action_blocked_by_control_software	00ae1c1a-b013-11e7-8f65-08002768f7af	24	0
Action_blocked_by_control_software	01068b12-b017-11e7-8f65-08002768f7af	18	0
Showing 1 to 10 of 27,523 entries		Previous 1 2 3	4 5 2753 Next



Line graph Data table				
Show 10 ▼ entries				Search:
Indicator_Actual_Possible		<b>♦</b> Number o	f Observations 🔻	Percentage of Observations $\phi$
Email_Attachments_to_Competitor_Domain	0e753776-b012-11e7-8f65-08002768f7af		41496	80.8
Email_CAD_To_NonGE	0e753776-b012-11e7-8f65-08002768f7af		41289	8.04
File Type 3_Box_Aged files	198c8934-b012-11e7-8f65-08002768f7af		33996	6.62
File Type 3_Box_Aged files	10b46d7c-b012-11e7-8f65-08002768f7af		12012	2.34
Email_Attachments_to_Competitor_Domain	0e7b5ec6-b012-11e7-8f65-08002768f7af		10423	2.03
Email_CAD_To_NonGE	0e7b5ec6-b012-11e7-8f65-08002768f7af		10358	2.02
Email_Attachments_to_Competitor_Domain	0edde226-b012-11e7-8f65-08002768f7af		5766	1.12
Email_CAD_To_NonGE	0edde226-b012-11e7-8f65-08002768f7af		5581	1.09
File type 1_to_USB	493e7266-b015-11e7-8f65-08002768f7af		4217	0.82
File Type 3_Box_Aged files	2670d9ca-b012-11e7-8f65-08002768f7af		3386	0.66
Showing 1 to 10 of 27,523 entries			Previous 1 2 3	4 5 2753 Next



THANK YOU