

# AKA Consulting Firm

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Final Presentation  
203 BUS- 240 F-1 : Information Visualization



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## Outlines



### 01. About AKA

Background and Service provided

### 02. Data Quality

Data source and Data sample

### 03. Client Group

Data research provide for Non-Profit Companies and Commercial Companies

### 04. Summary

Case Analysis



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## About the firm

- AKA is a Data Visualization Consultancy which
  - specifies in global and regional death/suicides situation
  - Figure out how it affects our consumers: Non- Profit Organizations and Insurance Companies
  - Help our consumers to develop better and easier

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## Data Quality



### Reliability and Accuracy

- World Bank
- Global Health Data Exchange (GHDX)



### Completeness



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## Data Quality Cont.



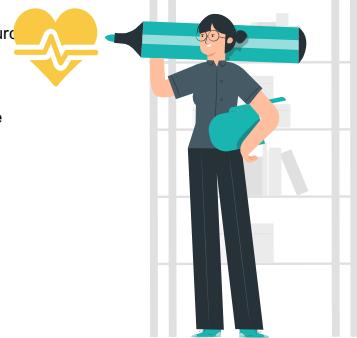
```
# filter the top 5 country with highest suicide number
t5 <- subset(f1, country == "United States"
           | country == "Russian Federation"
           | country == "Japan"
           | country == "Republic of Korea"
           | country == "Brazil")
```

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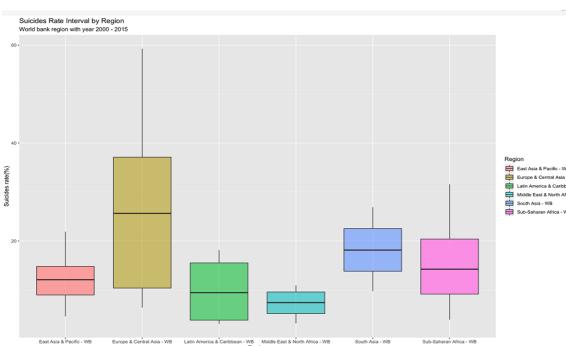
## 1st Customer group: Non-Profit Organizations

- Context:** Some Non-Profit Organizations offer nonprofit resources for those affected by suicide
- Issue:** These Non-Profit Organizations need to **determine the target group divide by age** in specific country
- Goal:** Use data visualizations help these Non-Profit Organizations make sure their target group



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## Suicide Rate with Regional Difference from 2000 to 2015

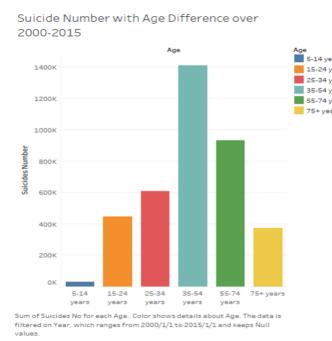


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The region of Europe & Central Asia has highest median

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## Suicide Number with Age Difference over 2000-2015

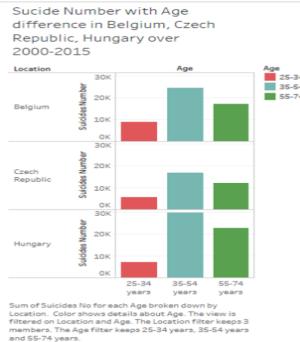


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The Age group 35~54 years should be the target group

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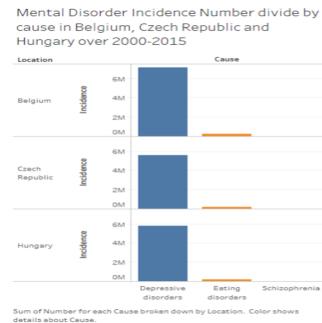
## Suicide Number with Age difference in Belgium, Czech Republic, Hungary over 2000-2015



The age group of 35~54 years also is the **target group** in Belgium, Czech Republic and Hungary

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## Mental Disorder Incidence Number divide by cause in Belgium, Czech Republic and Hungary over 2000-2015



More supporting plans should be provide for **depressive disorders** patients

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## 2nd Customer group: Insurance Company

### Do you know?

Life insurance death benefits are typically large, anywhere from:

\$500,000 ~ \$1 million!

( People even die for money in some cases )



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## 2nd Customer group: Insurance Company

Whether they are

- **Suicidal client (sickness)** make insurance companies suffer more losses
- **Intentional suicidal client for money**

Huge loss for Insurance Company!



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## 2nd Customer group: Insurance Company

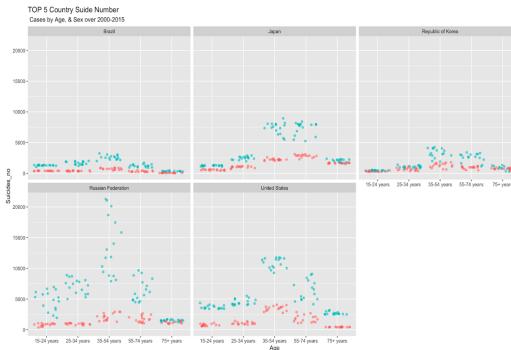
### Our Goal :

Classify high-risk client groups  
for Insurance Company to reduce their loss



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## Sampling: The top 5 countries with the highest suicide numbers



16 Countries: United States, Republic of Korea, Japan, Russian Federation and Brazil.

What we have from graph:

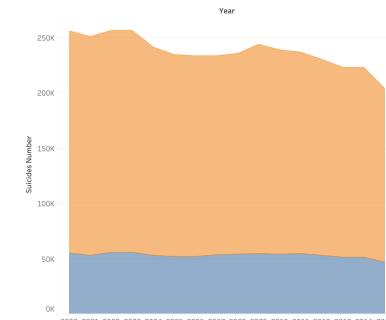
- Male > Female
- Suicide number in Age 35-54 are higher.

Questions:

- Is global data shows the similar the trend?

## Gender difference

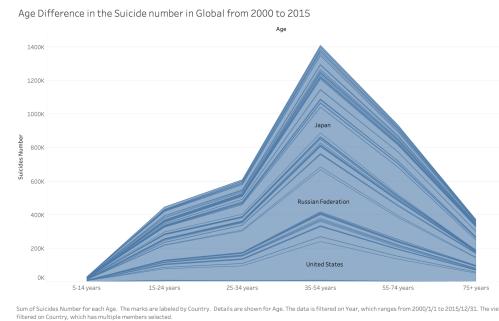
Global Gender differences in Suicide Number From 2000 to 2015



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- Female : Male = 1 : 5
- The male suicide number is decreasing.
- The change in female is not obvious.
- The gap is still big!

## 1) Reflection on Age Difference



YES!

Same trend with Peak in 35~54 years

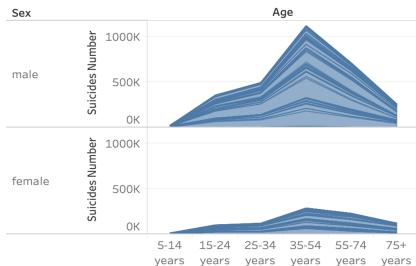
↓  
The middle-age crisis

↓  
Easy to suicide

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## 1) 1st Risk group

Age Difference in the Suicide number in Global Female and Male from 2000 to 2015



Sum of Suicides Number for each Age broken down by Sex. The marks are labeled by Country. Details are shown for Age. The data is filtered on Year, which ranges from 2000/1/1 to 2015/12/31. The view is filtered on Country, which has multiple members selected.

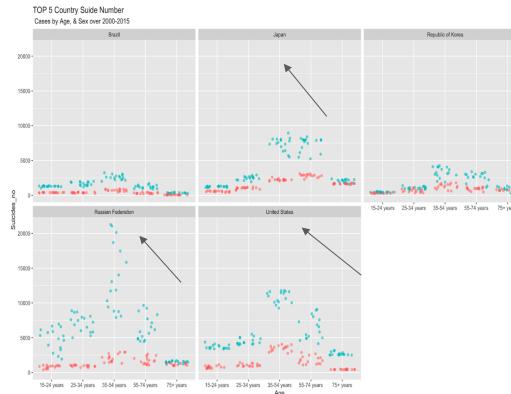
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### They are:

- People with age from 35-54 years old
- Especially male

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### Sampling: The 5 countries with the highest suicide numbers



They are: United States, Republic of Korea, Japan, Russian Federation and Brazil.

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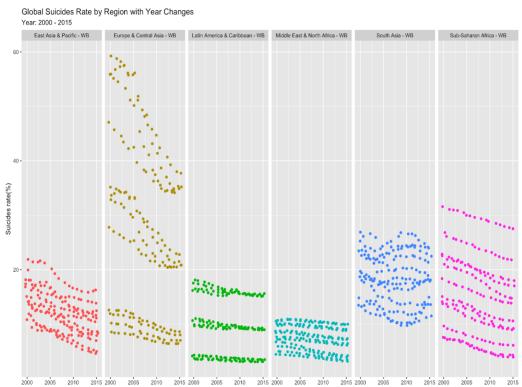
What we have from graph:

Japan, Russian Federation, and the united states has more extreme behavior.

### Questions: Region?

- Do the people in 3 countries has different social role or responsibilities due to the different cultures of the country, which leads the situation?

## 2) Reflection on Regional difference



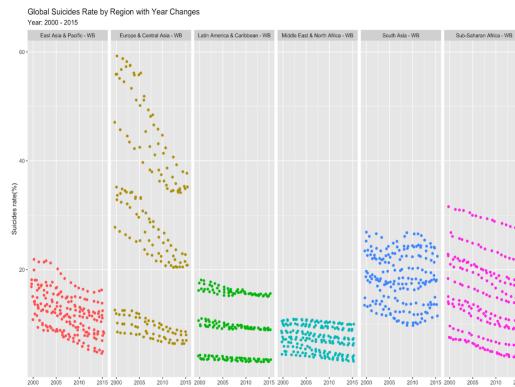
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Most regions are getting better

South Asia is still struggling

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## 2) Reflection on Regional difference



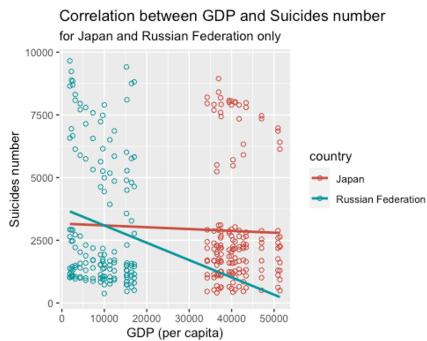
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But why Asia??

## 2) Reflection on Regional difference

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In strong male chauvinism country, men need to bear most of the family responsibilities and are majorly contributing to the family income.

Therefore, in Countries with **strong male chauvinism**:

↓ in GDP → ↑ in Suicide Number

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## In summary: Case suggestion to for NPO

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In order to help NPO **target age group** and develop **specific suicide prevention plans**:

- Target age group : **35~54 years old** (Both for global and the three sample countries we choose)
- Specific Suicide Prevention plans: set up **supporting groups for depressive patients**

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## In summary: Case suggestion to for Insurance company

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In order to decrease loss of Insurance Company:

- Reduce the number of acceptance of new client with high pressure
  - **with age from 35-54 years old, especially male**
  - **with "strong male chauvinism"**
  - **With region in South Asia**
- It is better to increase the **background check** into evaluation if they have higher suicidal risk.

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Thanks!  
Any Questions?

