

Incarceration Rate As A Measure of Governance: The United States vs. Latin America

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Problem Statement:



BACKGROUND INFORMATION

- According to the Freedom House Project-America's oldest organization defending democracy in the world- we are living in the midst of a growing global trend of democratic decline and rising authoritarianism. " Fewer than a fifth of the world's population now live in fully free countries.
- This data science project seeks to draw parallels in the trends of incarceration, by age and gender, across Brazil, El Salvador, Honduras, Mexico and the United States as they relate to the State of governance.

BACKGROUND INFORMATION

- "Imprisonment is fundamentally an exercise of power," it is a measure of class/racial struggles, political trends, policy choices, public sentiment and media interpretation." This is why we believe it to be one the strongest indicators on the State of Governance for any nation; and we have chosen it as the main focus for our analysis.

BACKGROUND INFORMATION

- To test our theory, we have chosen to train various machine learning algorithms to predict the Democracy Index of multiple nations based on incarceration rates and compared their performance to a robust model which includes multiple governance and economic indicators. Most notable among these indicators are the Freedom House Project's Political Rights and Civil Liberties scores.

Why we chose these 4 Countries:

- The attacks on the presidential palace in Brasilia on January 8th, 2023 by supporters of former Brazilian president Jair Bolsonaro, which were directly inspired by the January, 6th 2021 U.S Capitol attacks . Leaders of this movement have effectively sown doubt of the legitimacy of the electoral process [\(source\)](#).

Why we chose these 4 Countries:

- The deeply rooted and devastating effects of the "War on Drugs," first declared by Richard Nixon in 1973 and which was swiftly adopted by Latin American authorities with the political and economic influence of the U.S. As a results of this conflict organized crime (Drug Cartels) have evolved to become as sophisticated as the most advanced military operations ever designed against them by U.S. Military/Intelligence agencies.
(source)

Why we chose these 4 Countries:

- El Salvador, Honduras & Mexico are home to some of the most violent cities in the world. Drug Cartels in these regions have evolved to mimic state behaviors controlling territory public/private institutions, imposing taxes, redlining and forcing civic loyalty through terror and intimidation. According to the Latin American Public Opinion Project, approval for national military control was at an all time high as of the end of 2021 ([source](#)). Fear of becoming a homicide victim was found to be the number one variable correlated to these approval ratings:
 - Mexico 48%
 - El Salvador 52%
 - Honduras 64%



Democracy Index

- Bring the attention of your audience over a key concept using icons or illustrations

El Salvador and Honduras

- El Salvador
 - Asdfg
- Honduras
 - asdfg

Classification Model

- El Salvador
 - Asdfg
- Honduras
 - asdfg

Visualization Slide
ASDFG

Visualization Slide
ASDFG

United States and Mexico

- United States
 - **Source: Bureau of justice statistics**
 - **Key points: U.S. is #1 and has for profit prison system, but varies wildly by state**
- Mexico
 - **Source: Un submitted data, missing 2015 by error not by hiding of data,**
 - **Key points: #9 overall not all prisoners are necessarily reported, lots of missing persons in mexico due to violence or extrajudicial killings or imprisonment.**

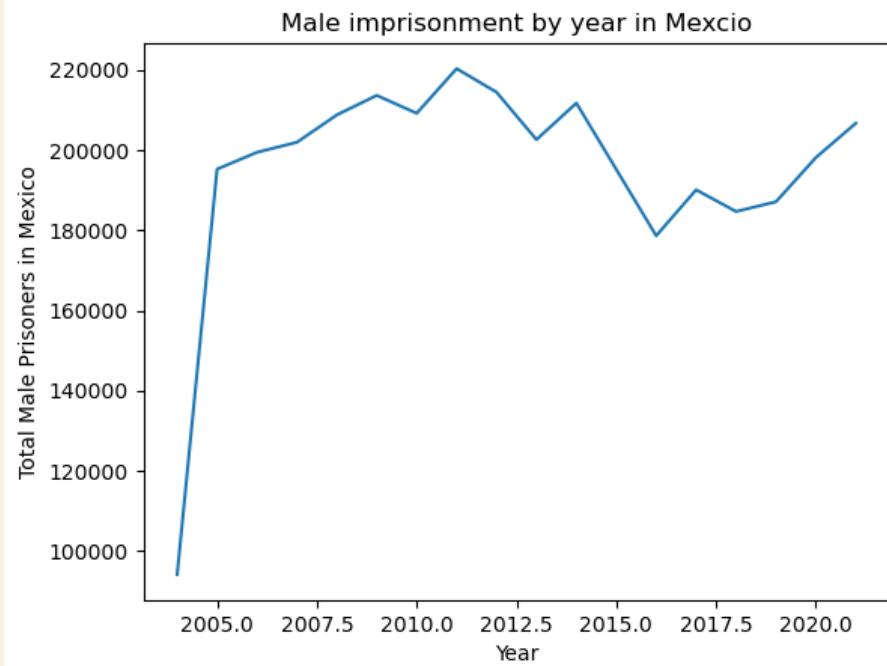
Decision Tree Model

- El Salvador
 - Asdfg
- Honduras
 - asdfg

Prison pop map male US

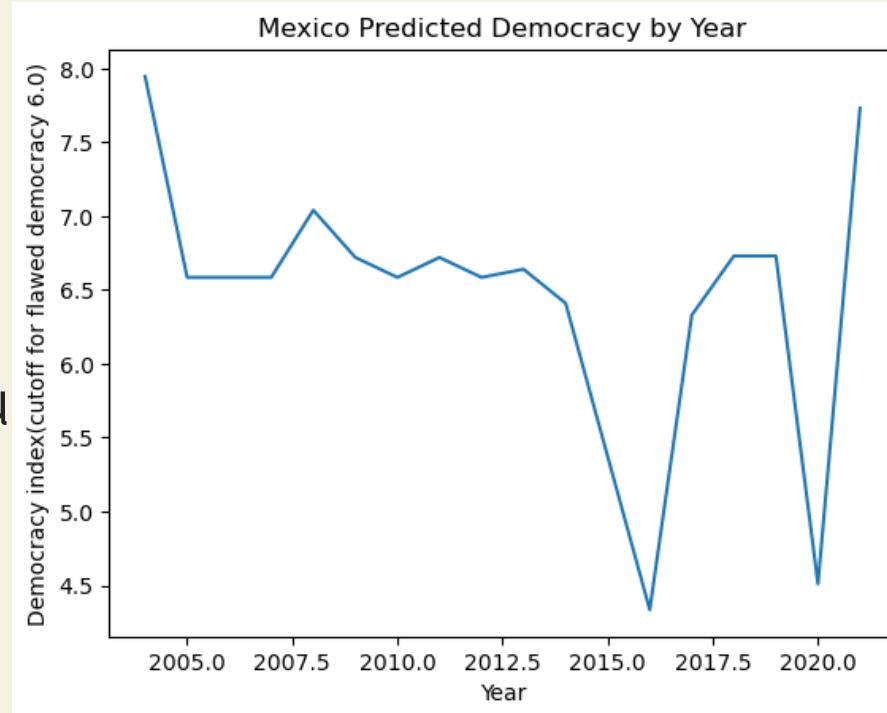
Run stremlit app(done)

Mexico prisoners by year
Show and explain your
web, app or software
projects using these
gadget templates.



Mexico Predictions

Show and explain your web, app or software projects using these gadget templates.

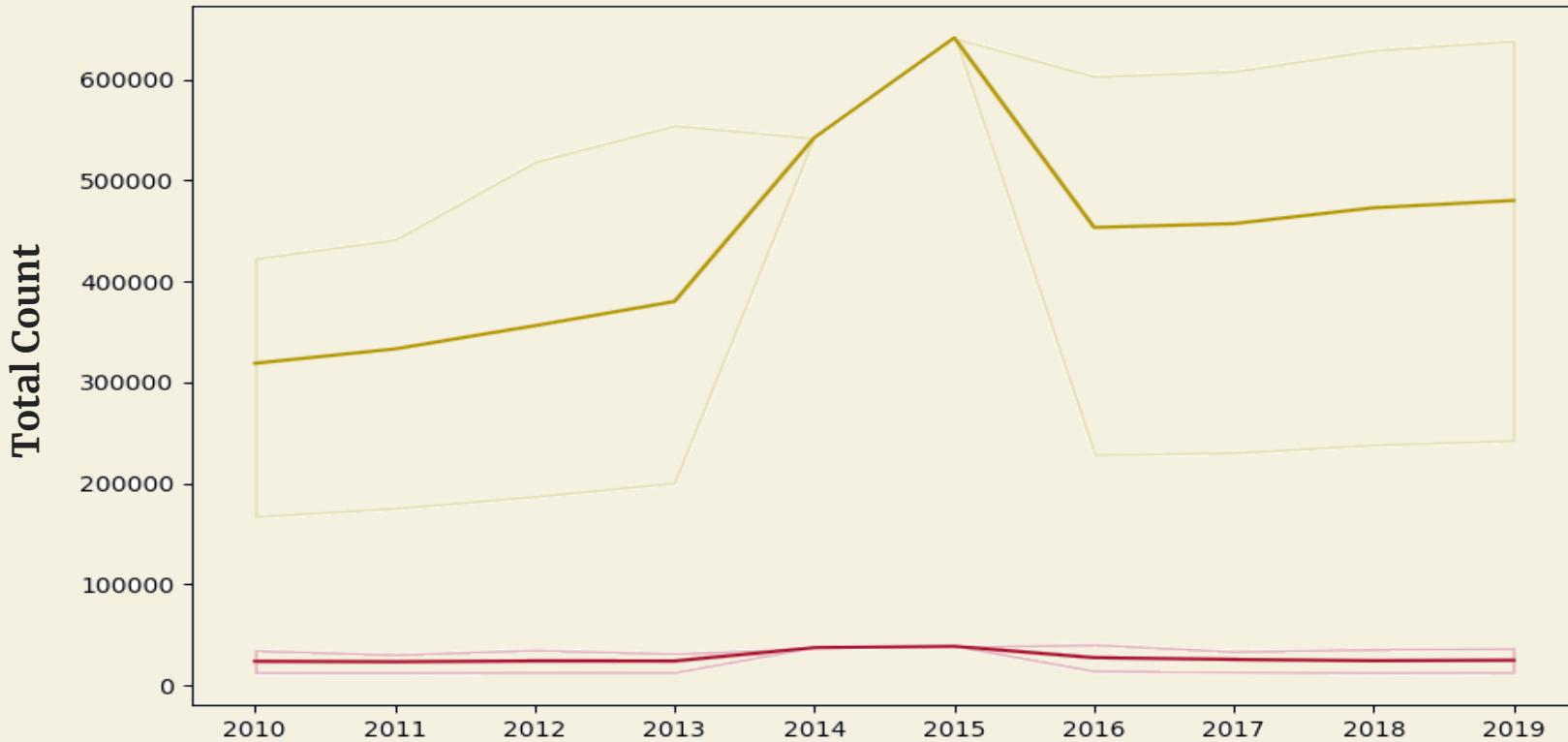


Brazil

- El Salvador
 - Asdfg
- Honduras
 - asdfg

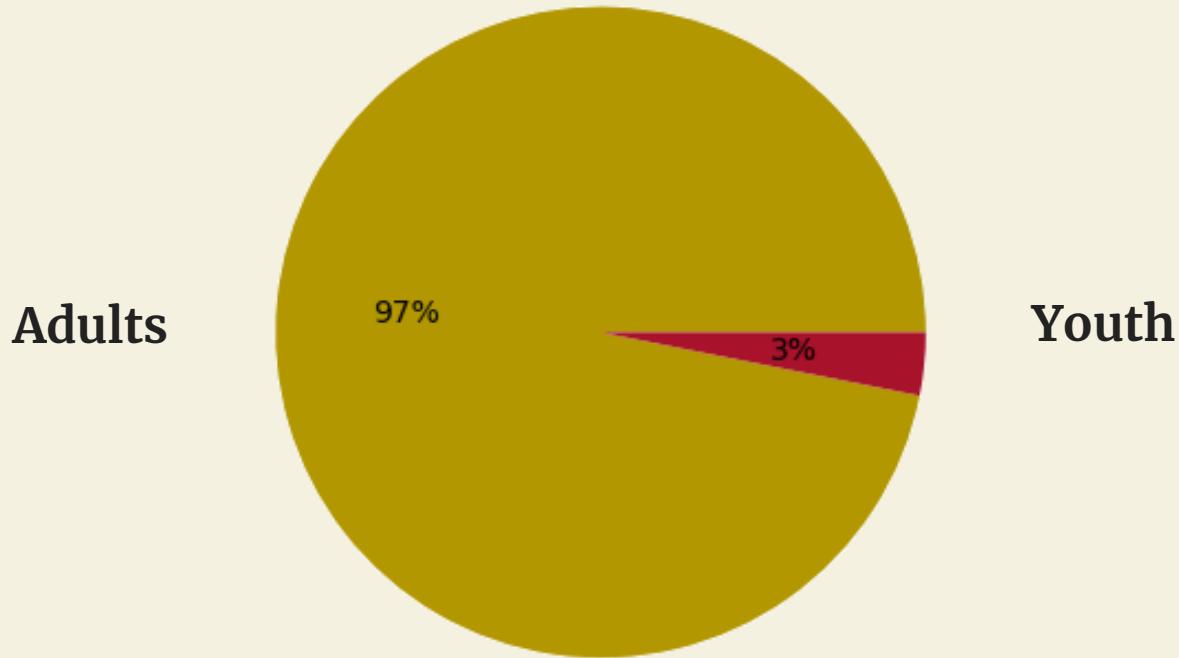
Brazil

Male vs. Female Prison Population



Brazil

Adult vs. Youth Prison Population (Average from 2010 to 2019)



Random Forest Model



THE QUALITY
OF GOVERNMENT
INSTITUTE



Random Forest Model

Sasfddsa

Correlations with Democracy Index:



Sasfddsaf

Sasfddsa

Sasfddsa

Sasfddsaf

Sasfddsa

Sasfddsa



Correlations with Democracy Index:



Sasfddsaf

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Correlations with Democracy Index:



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Correlations with Incarceration Rates:



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Correlations with Incarceration Rate:



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Correlations with Incarceration Rate:

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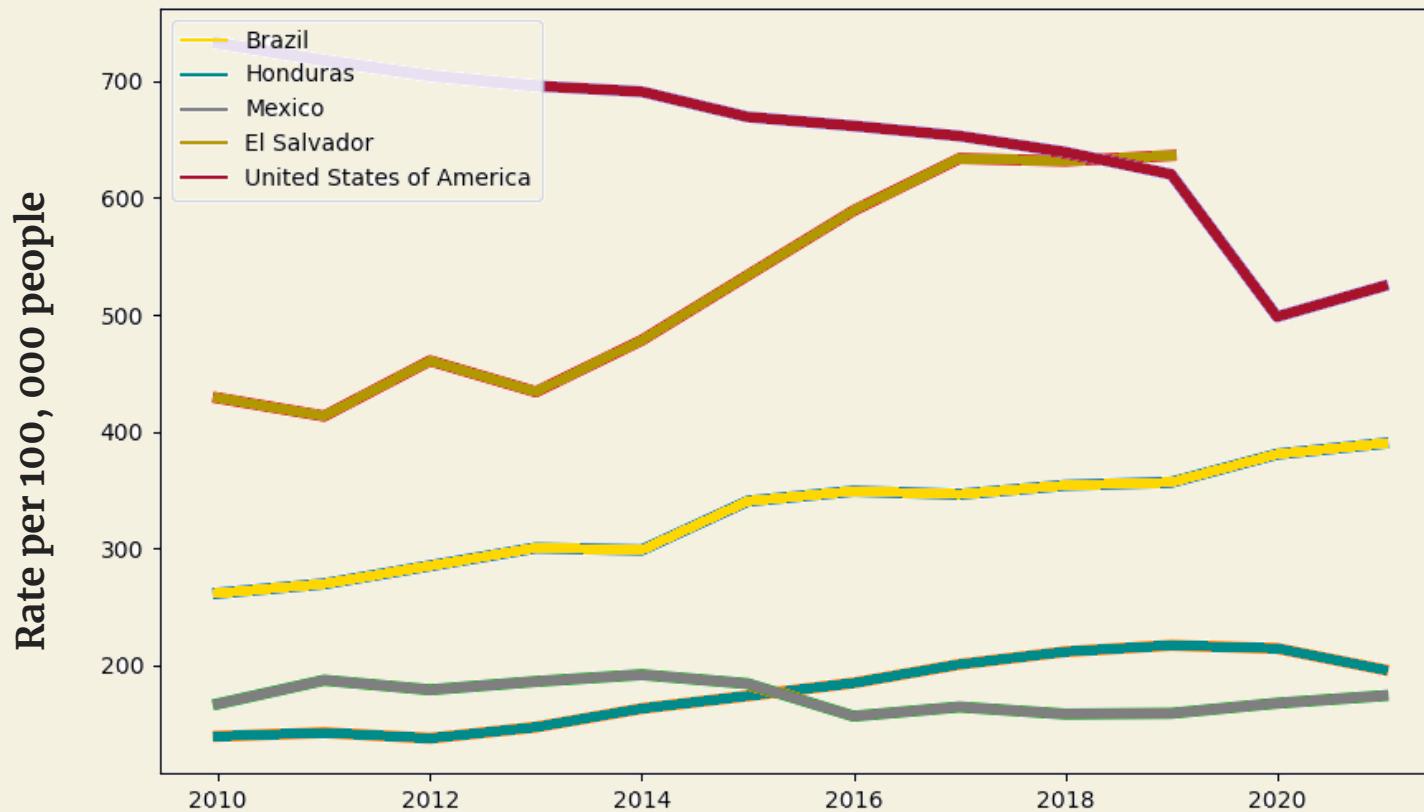
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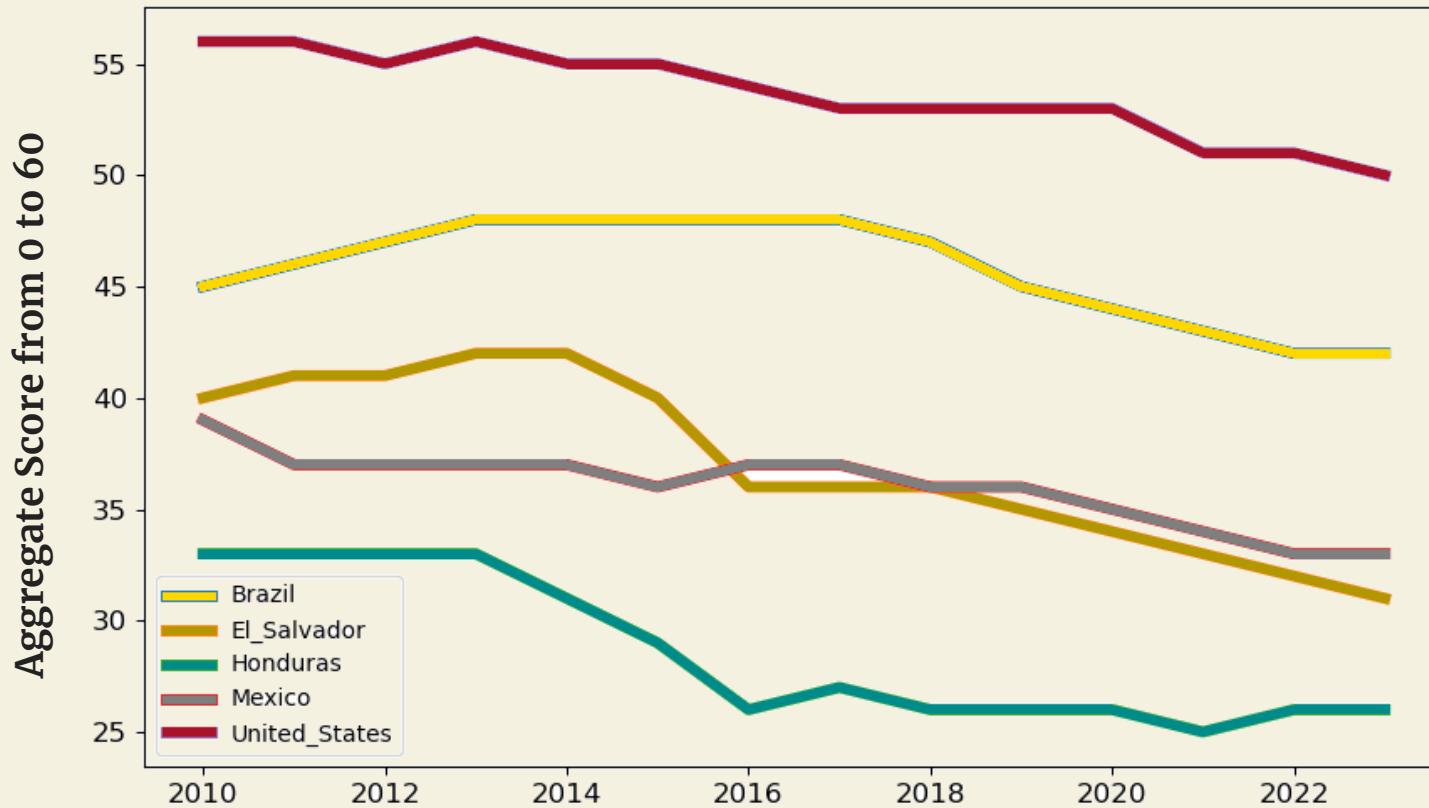
Multi-Country Summary:

- El Salvador
 - Asdfg
- Honduras
 - asdfg

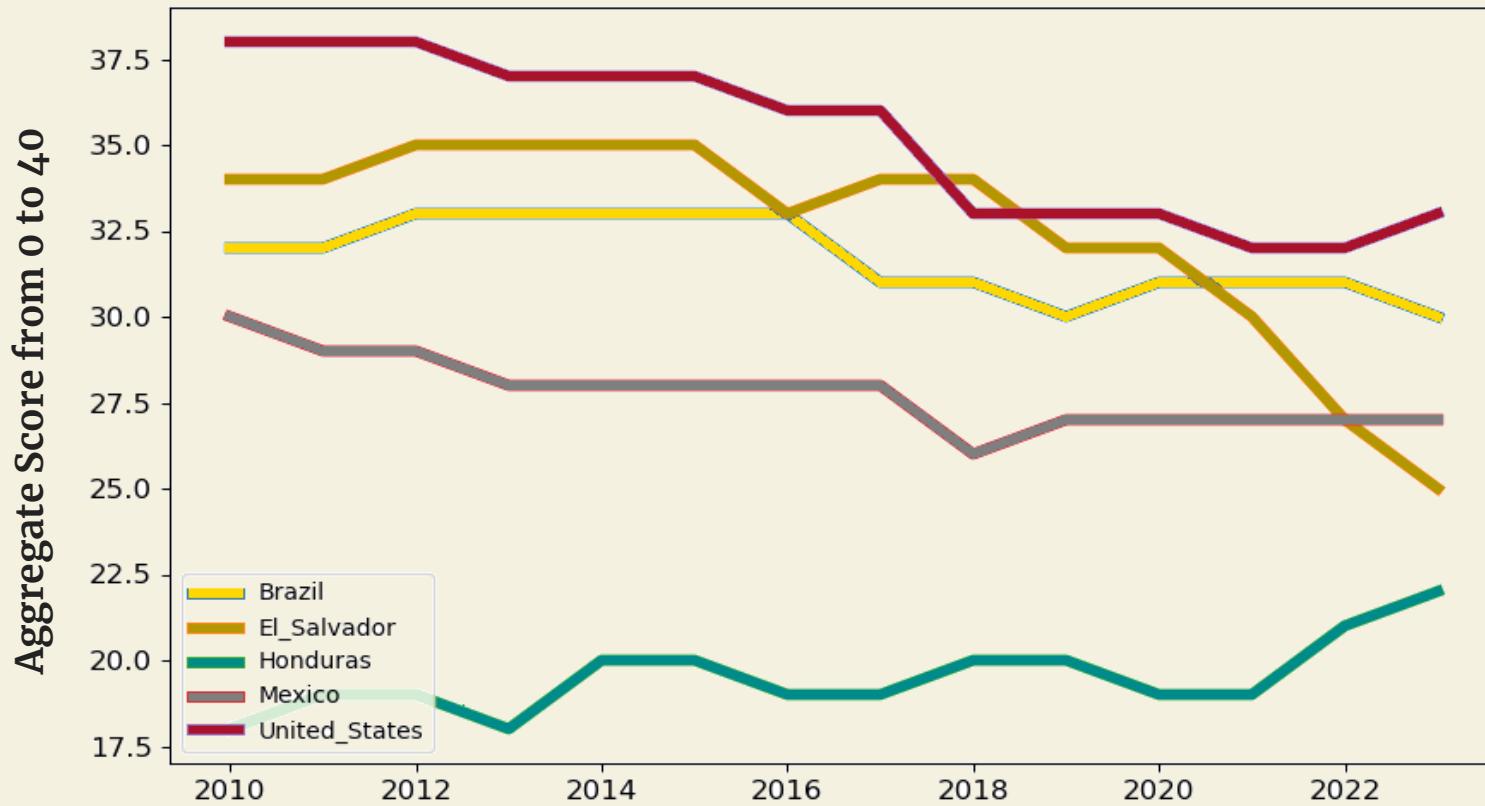
Summary of Incarceration Rate



Summary of Civil Liberties Scores (Freedom House Project)



Summary of Civil Liberties Scores (Freedom House Project)



Incarceration Rate Predictions:

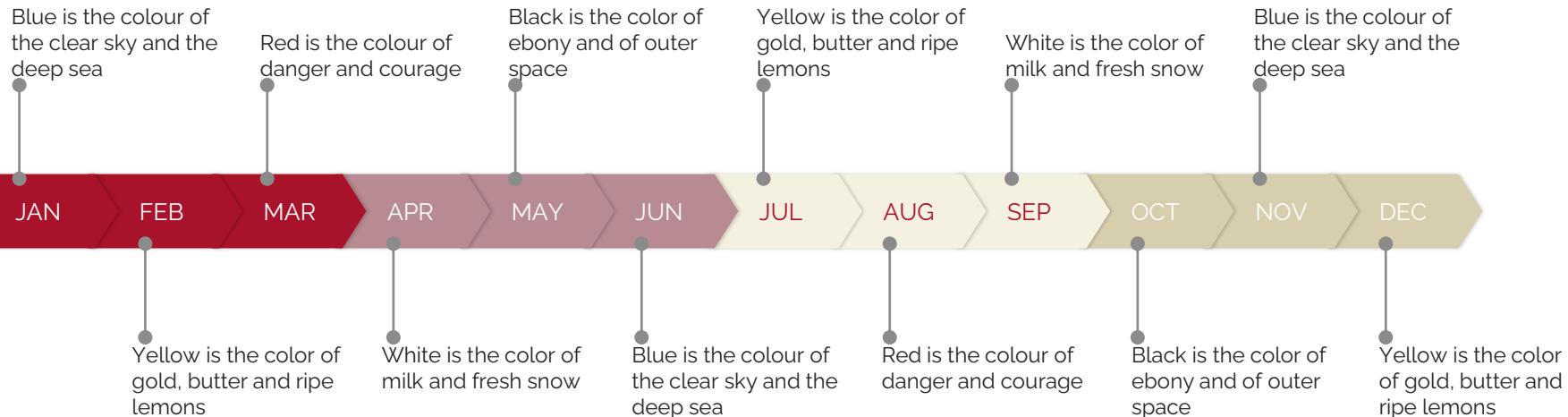
- El Salvador
 - Asdfg
- Honduras
 - asdfg



Conclusions:

- El Salvador
 - Asdfg
- Honduras
 - asdfg

Timeline



Roadmap

Blue is the colour of the clear sky and the deep sea



Red is the colour of danger and courage



Black is the color of ebony and of outer space



Yellow is the color of gold, butter and ripe lemons



White is the color of milk and fresh snow



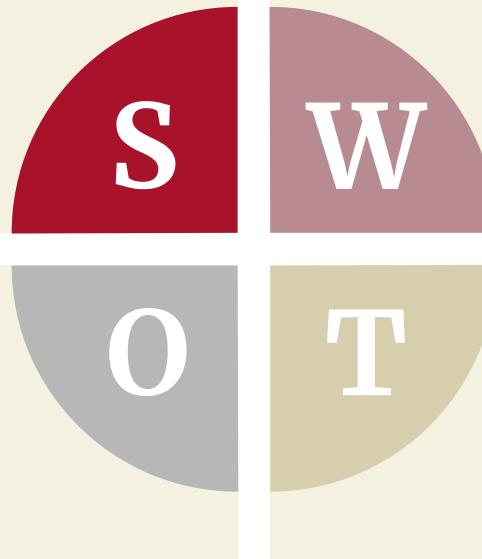
Blue is the colour of the clear sky and the deep sea



SWOT Analysis

STRENGTHS

Blue is the colour of the clear sky and the deep sea



WEAKNESSES

Yellow is the color of gold, butter and ripe lemons

Black is the color of ebony and of outer space

OPPORTUNITIES

White is the color of milk and fresh snow

THREATS

Business Model Canvas

Key Partners Insert your content	 Key Activities Insert your content	 Value Propositions Insert your content	 Customer Relationships  Insert your content	Customer Segments Insert your content
	Key Resources Insert your content		Channels Insert your content	
Cost Structure Insert your content			Revenue Streams Insert your content	

Funnel



- Insert your content

Weekly Planner

Team Presentation



Imani Jackson

JOB TITLE

Blue is the colour of the
clear sky and the deep sea



Marcos Galán

JOB TITLE

Blue is the colour of the
clear sky and the deep sea



Ixchel Valdía

JOB TITLE

Blue is the colour of the
clear sky and the deep sea

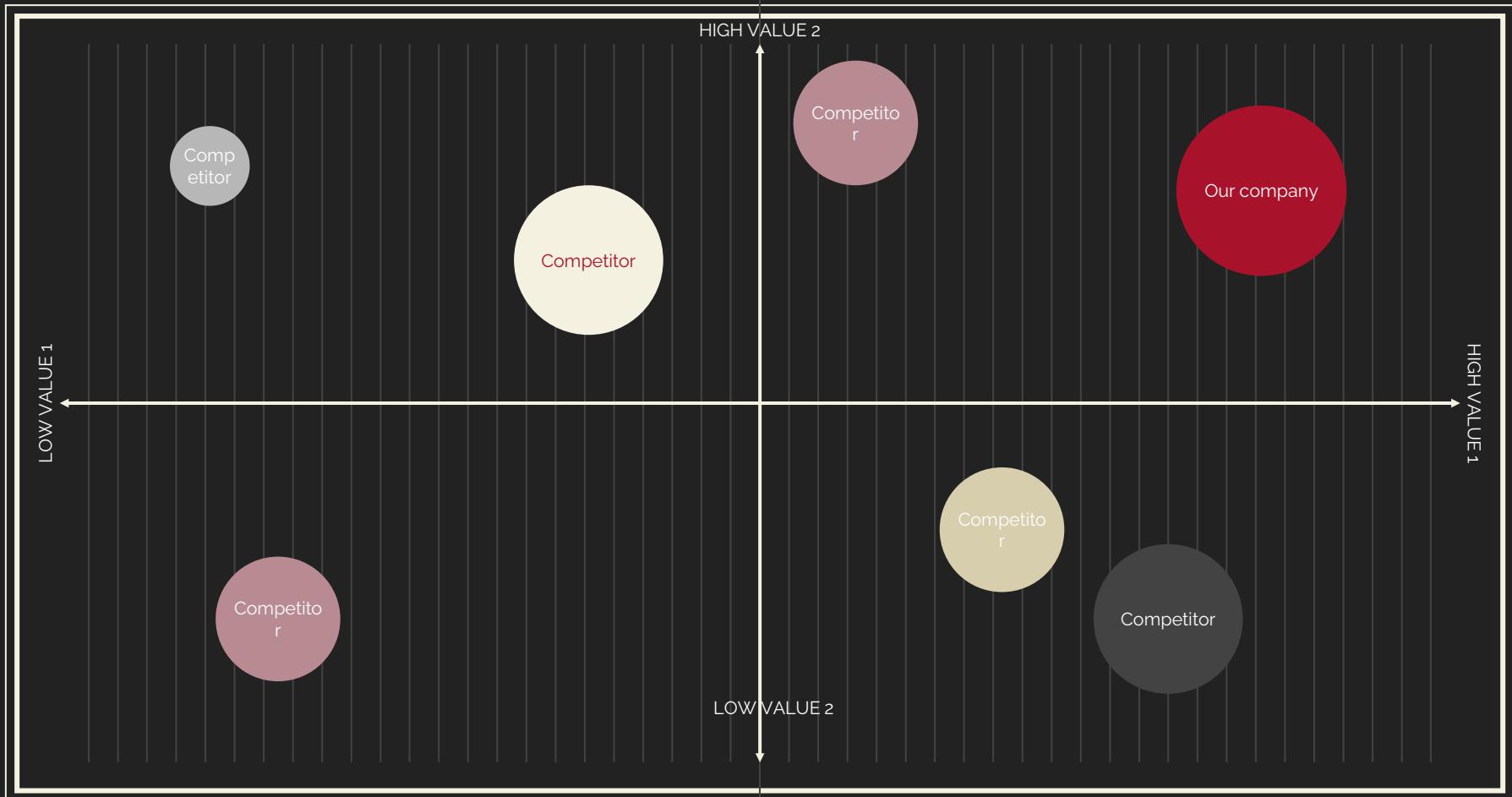


Nils Årud

JOB TITLE

Blue is the colour of the
clear sky and the deep sea

Competitor Matrix





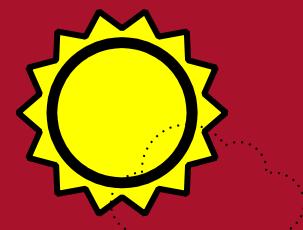
SlidesCarnival icons are editable shapes.

This means that you can:

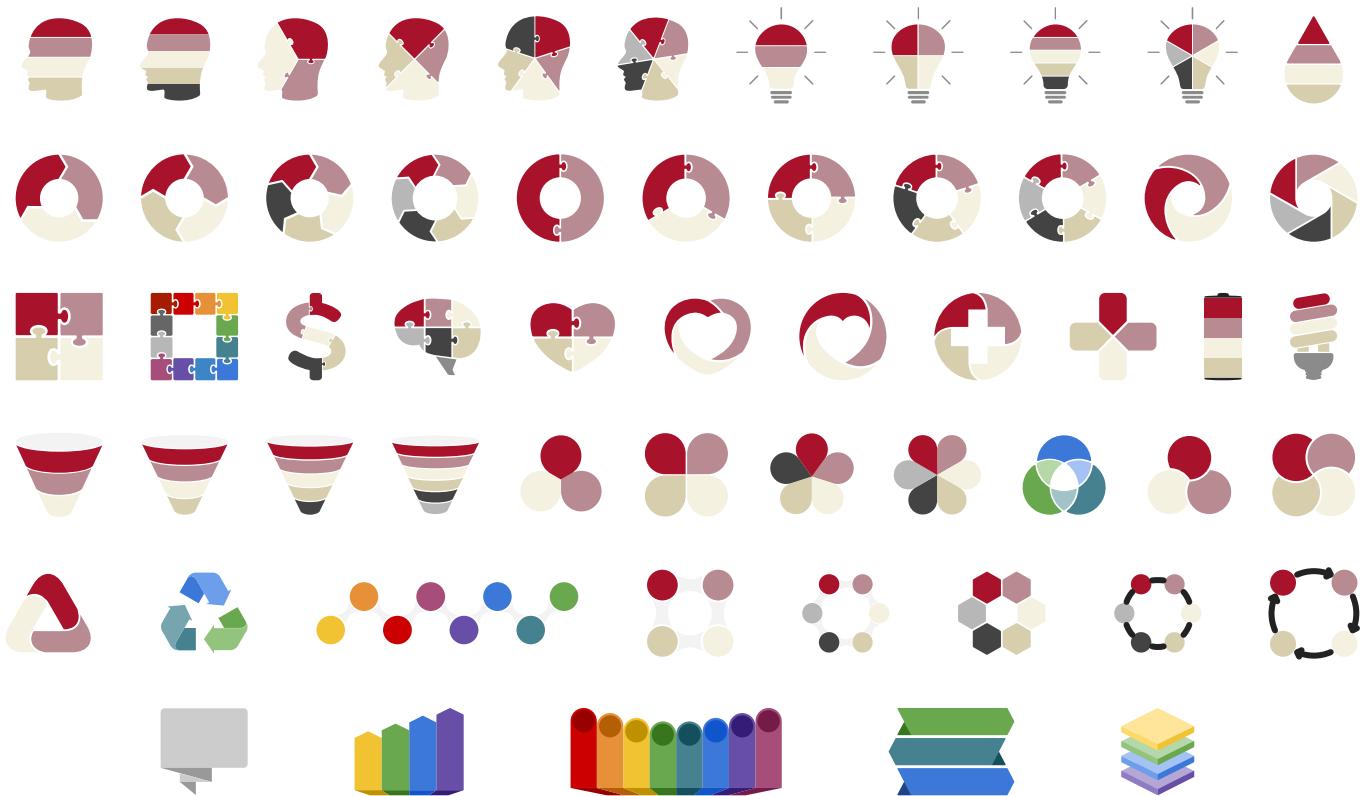
- Resize them without losing quality.
- Change fill color and opacity.
- Change line color, width and style.

Isn't that nice? :)

Examples:



Diagrams and infographics



You can also use any emoji as an icon!

And of course it resizes without losing quality.

How? Follow Google instructions

<https://twitter.com/googledocs/status/730087240156643328>



Thanks!

ANY QUESTIONS?

Please visit our Project Repository for more information about our team



Presentation template by [SlidesCarnival](#)
Photographs by [Unsplash](#)