

The background features a dark, abstract composition with glowing blue and white lines. On the left, a line graph with circular markers is visible, with one point labeled '289.33'. Below it, a bar chart with blue bars is partially shown. The overall aesthetic is high-tech and data-driven.

# A Presentation on Industry Analysis

**Prompt :**  
**How Big Data Analytics changed the Industry ?**

Introduction to Data Analytics  
(ALY6000)

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# AGENDA

1

## INDUSTRY

- Nuclear Energy

3

## VISUALIZATION

- Compared Generation Ratio over time

2

## IMPACT Of BIG DATA

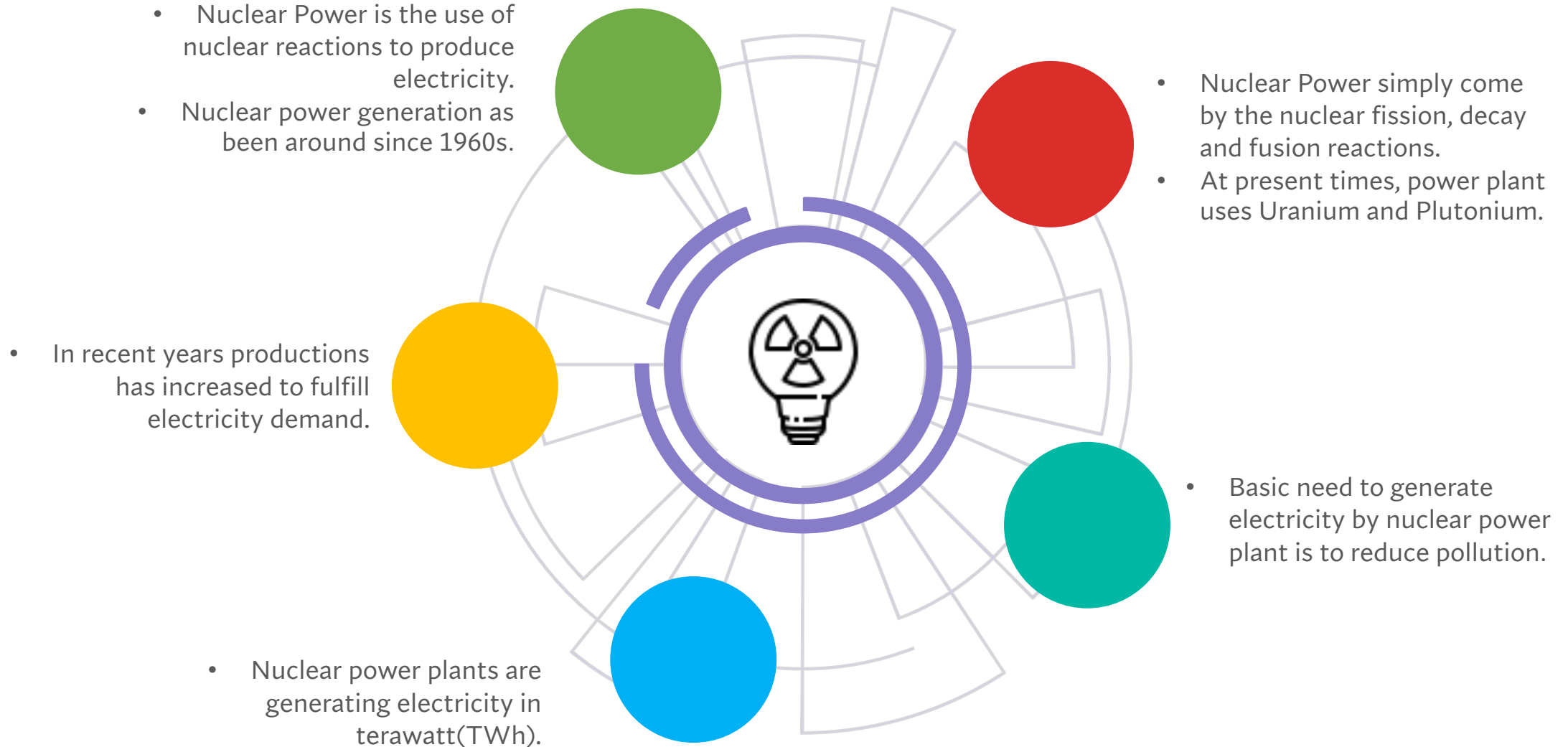
- Descriptive Statistics
- Passive Reviews of Historic Data

4

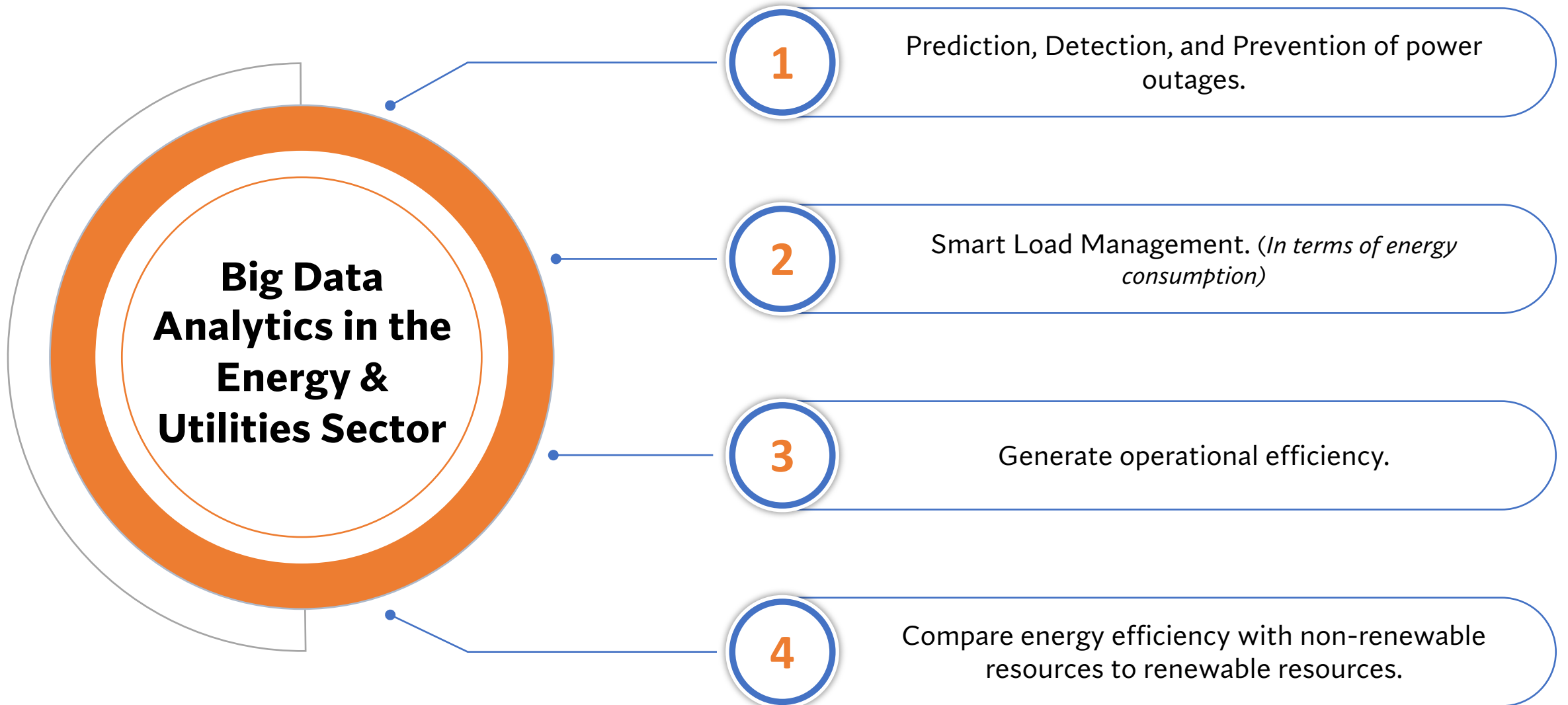
## CONCLUSION

- Bibliography

# INDUSTRY



# IMPACT OF BIG DATA



# INVOLVEMENT OF BIG DATA ANALYTICS

01

## Industry

- In the industry of energy, data analytics plays vital role.
- With the help of every experiments and appropriate measures technique of power generation has changed.
- Industry Evolution has opened whole new concept of nuclear power plant.

02

## Product Efficiency

- By comparing with traditional power plants which uses fossil fuels to generate electricity.
- However, burned fossils directly impacted on global climate change via releasing CO<sub>2</sub>.
- Although, Fossil fuel energy has been a fundamental driver of global energy systems.

03

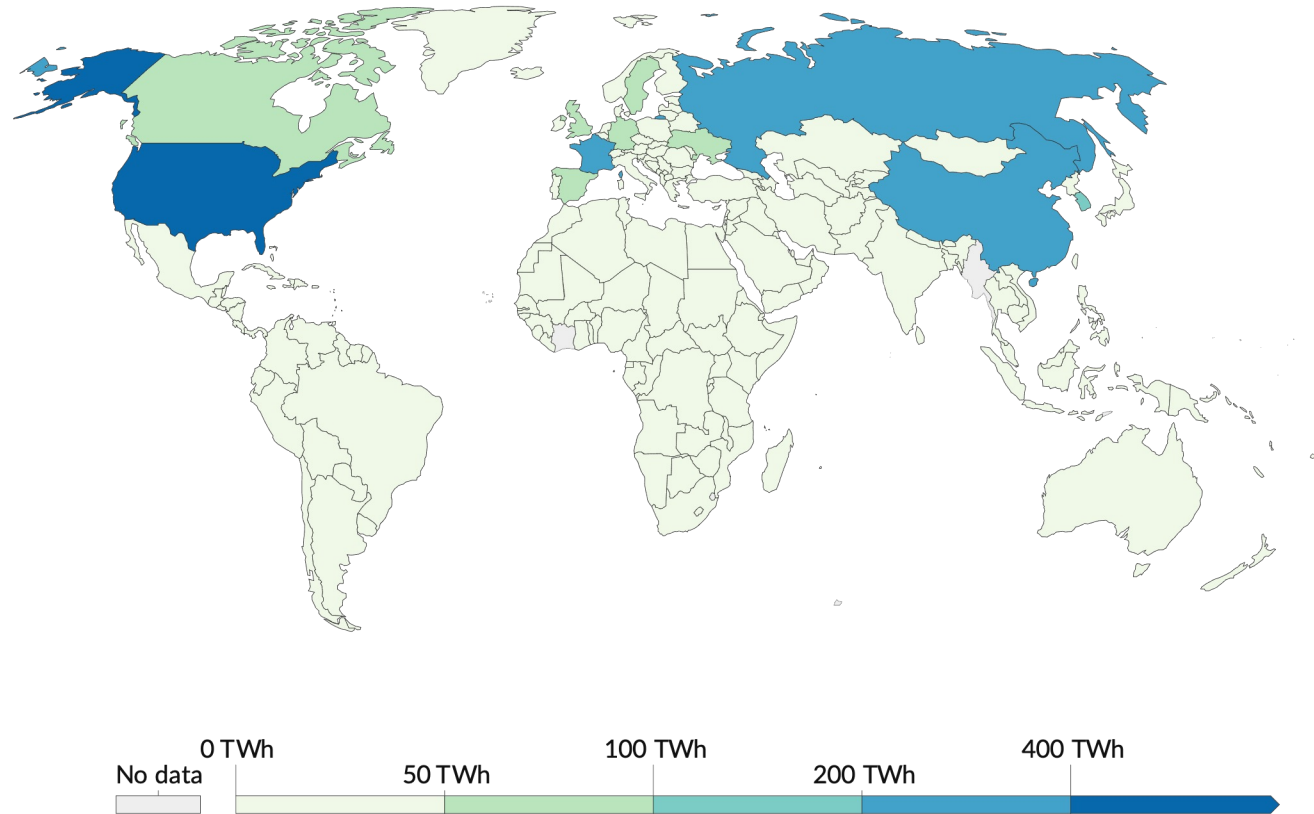
## Challenges

- The Nuclear Power Plant works efficiently until its maintainability has not been compromised.
- Big Data Analytics has introduced several measures and recorded specific safety concerns while operating nuclear power plant.

# PASSIVE REVIEWS OF HISTORIC DATA

Nuclear power generation, 2020

Our World  
in Data

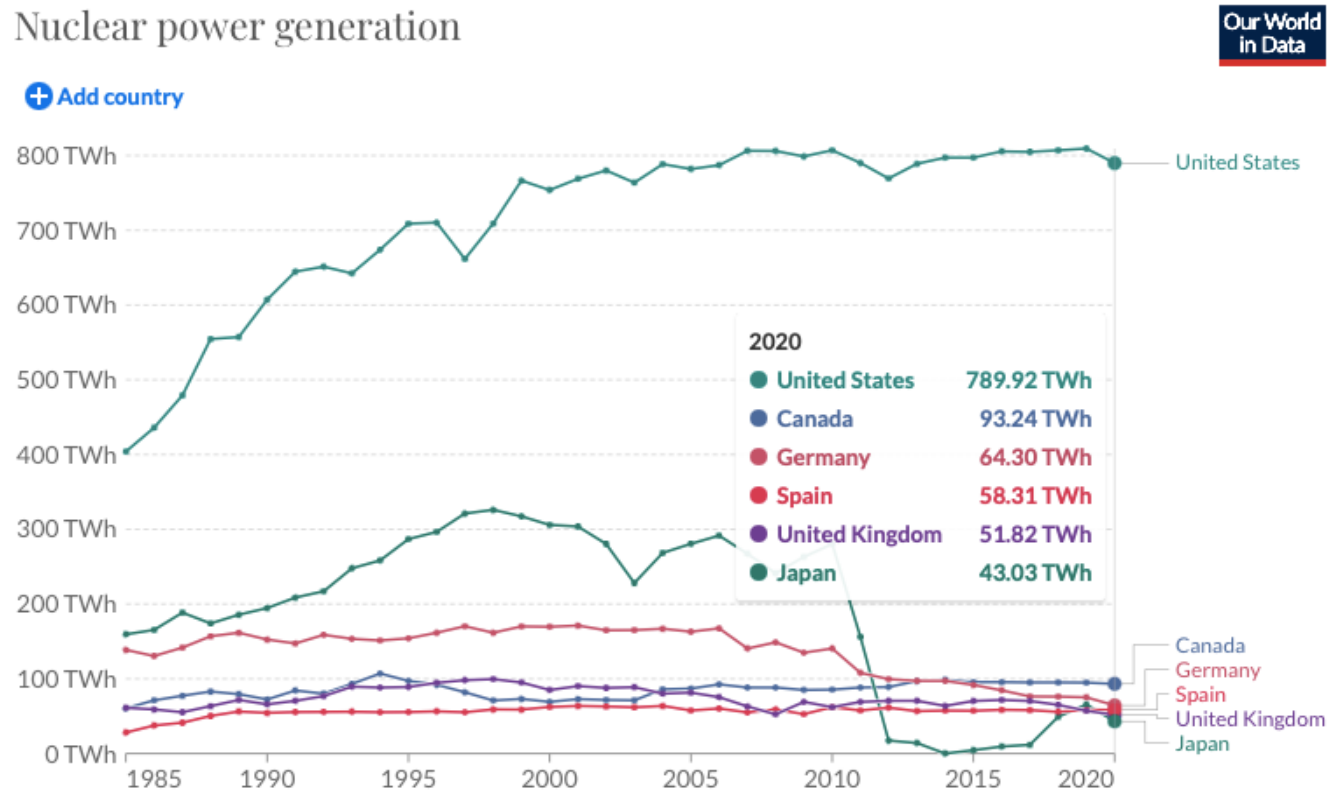


Source: Our World in Data based on BP Statistical Review of World Energy & Ember

OurWorldInData.org/energy • CC BY

Source: <https://ourworldindata.org/nuclear-energy>

# DESCRIPTIVE STATISTICS ON NUCLEAR ENERGY



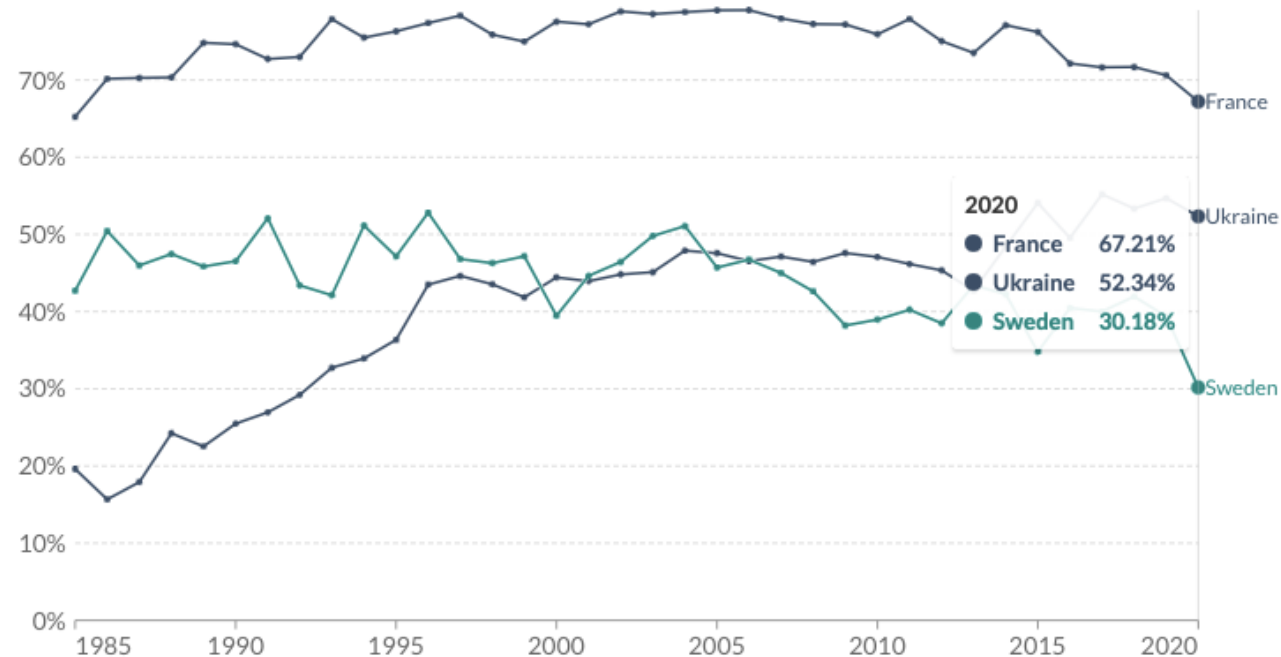
- Nuclear Power Generation has been around since 1960s, but as we can see that world is generating electricity by nuclear energy over the past half-century.
- The initial growth was static, however after 1980-90s, there is a significant increment in nuclear generation in some countries.
- Following the rapid growth, the United States has accounted highest global generation in compared to other nations.
- According to the statistics, Nuclear Power generated **789.92TWh** ( terawatt-hour) electricity in United States.



# VISUALIZATION

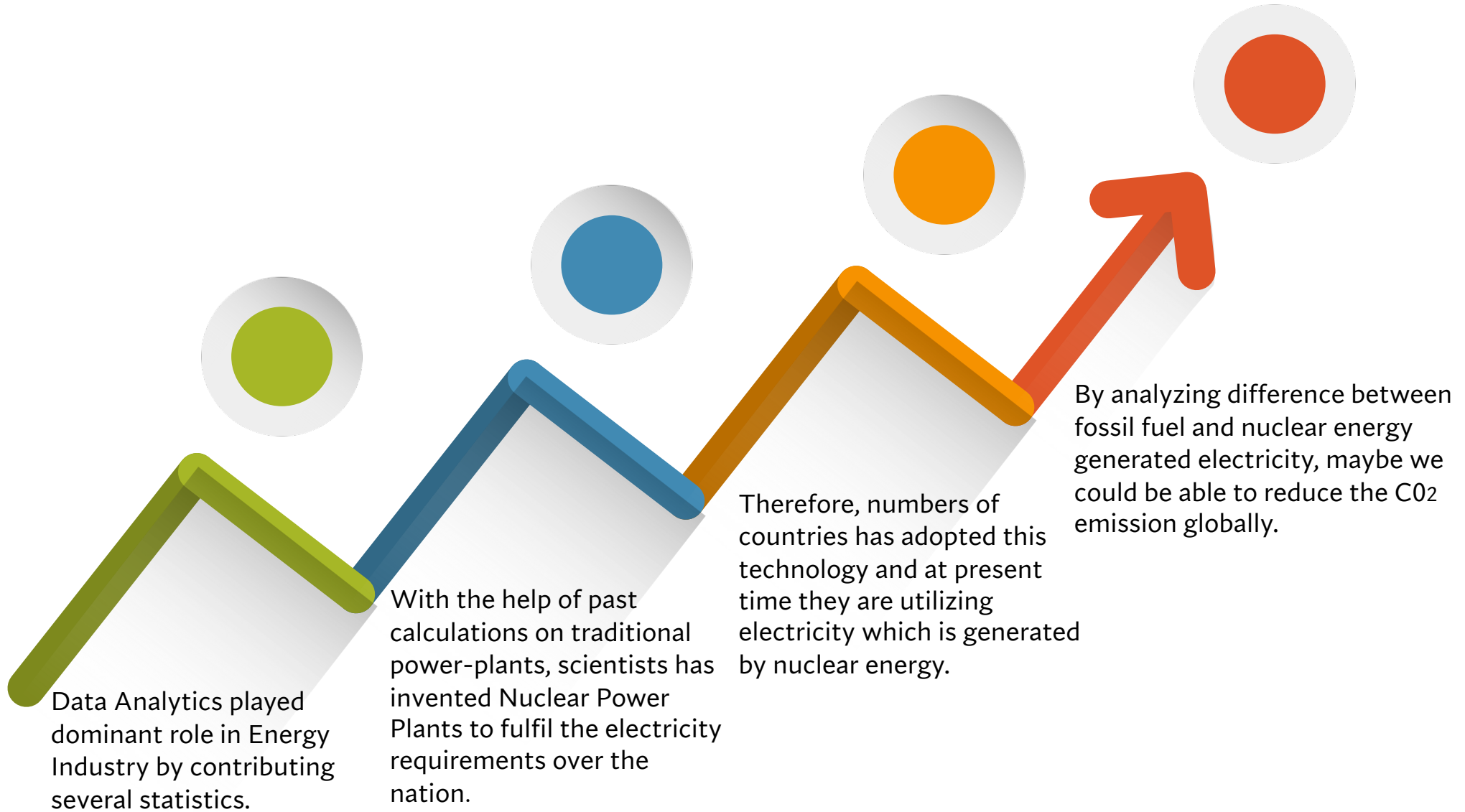
Share of electricity production from nuclear

+ Add country



- Although in 2020, these determined countries ***France, Ukraine and Sweden*** has highest shares of electricity production from nuclear power.
- Globally, around **10% electricity** comes from nuclear energy. As a result, some countries are heavily relied on nuclear power.
- In previous slide we saw total nuclear power generation in terms of specific energy unit (TWh), where ***France, United States, China, Russia and Canada*** produced relatively larger amounts of energy from nuclear power.

# CONCLUSION



# BIBLIOGRAPHY

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