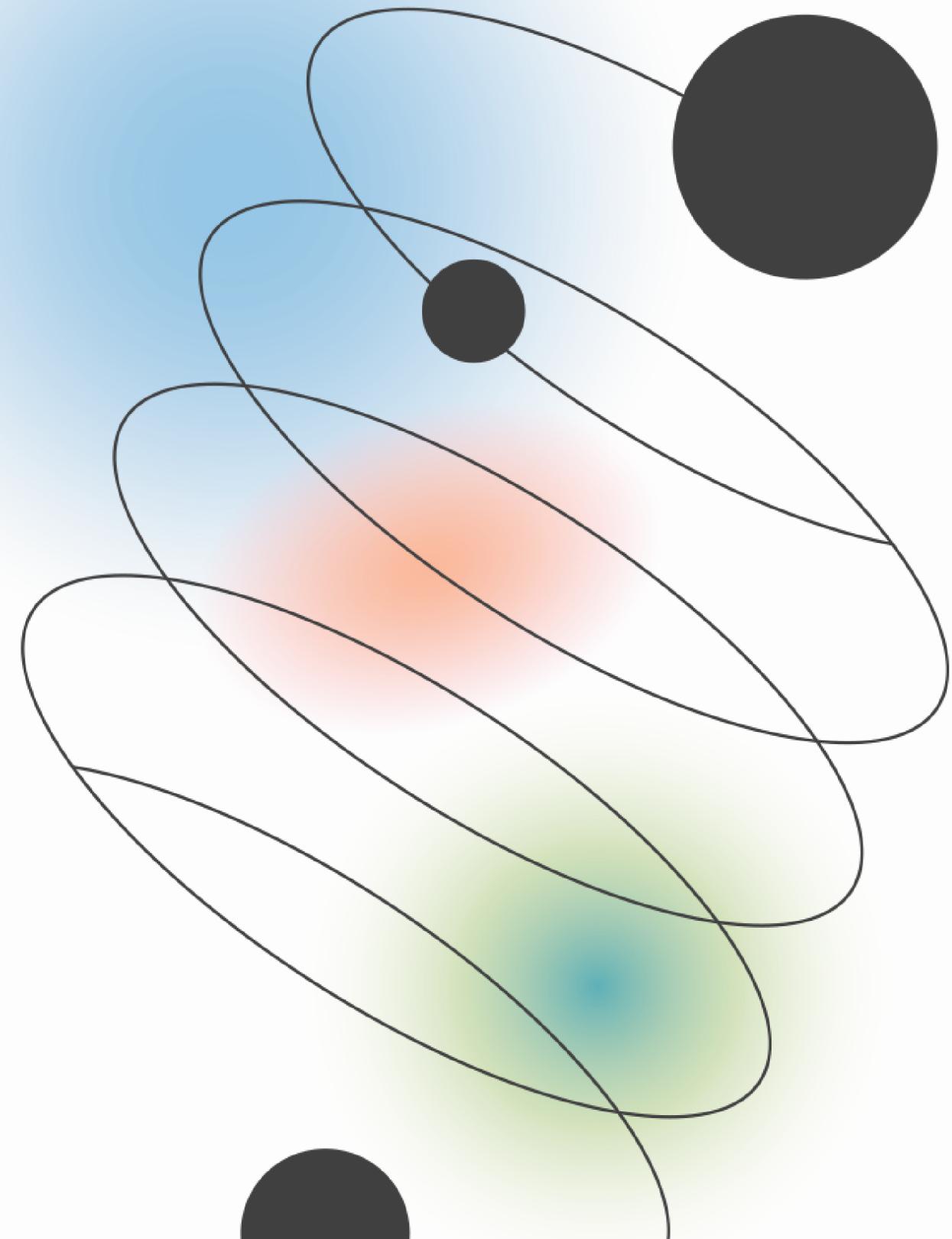


# World Happiness Score

Anushka Shah, Huixin 'Blessia' Li,  
Jyothika Mohan, Anchal  
Chaudhary, Alba Valdivia

VISUAL ANALYSIS





Anushka Shah



Alba Valdivia



Anchal Chaudhary



Huixin 'Blessia' Li

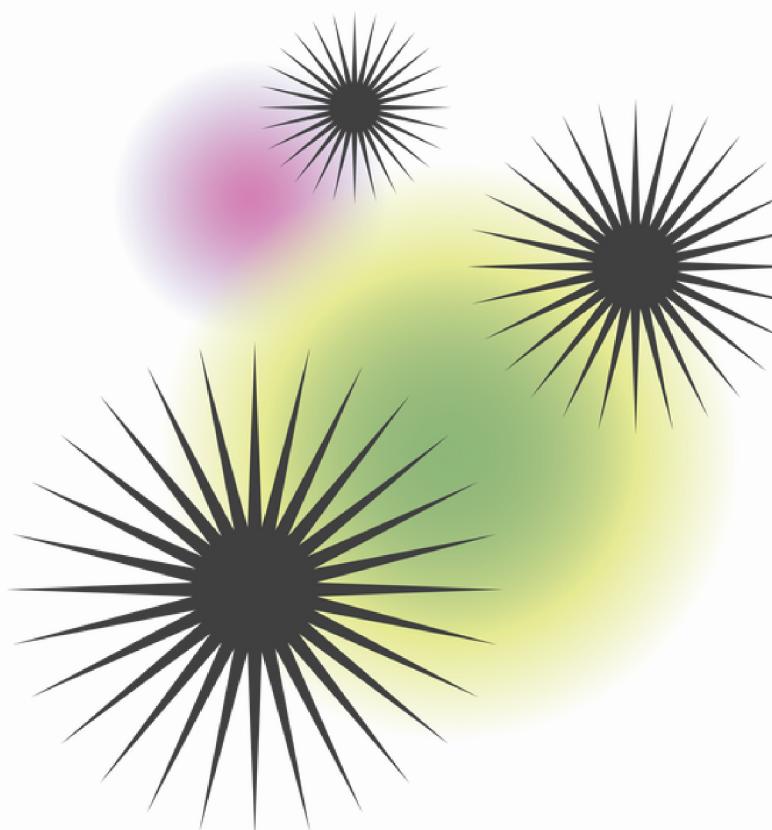


Jyotika Mohan

MEET THE TEAM

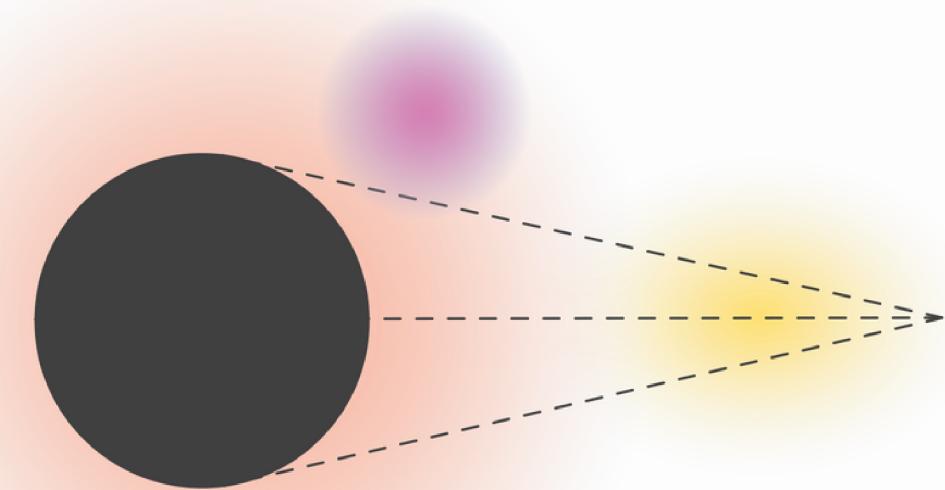
# Today's Agenda

In this meeting, we'll be going over the following:



**01**  
Project Overview

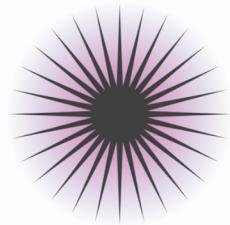
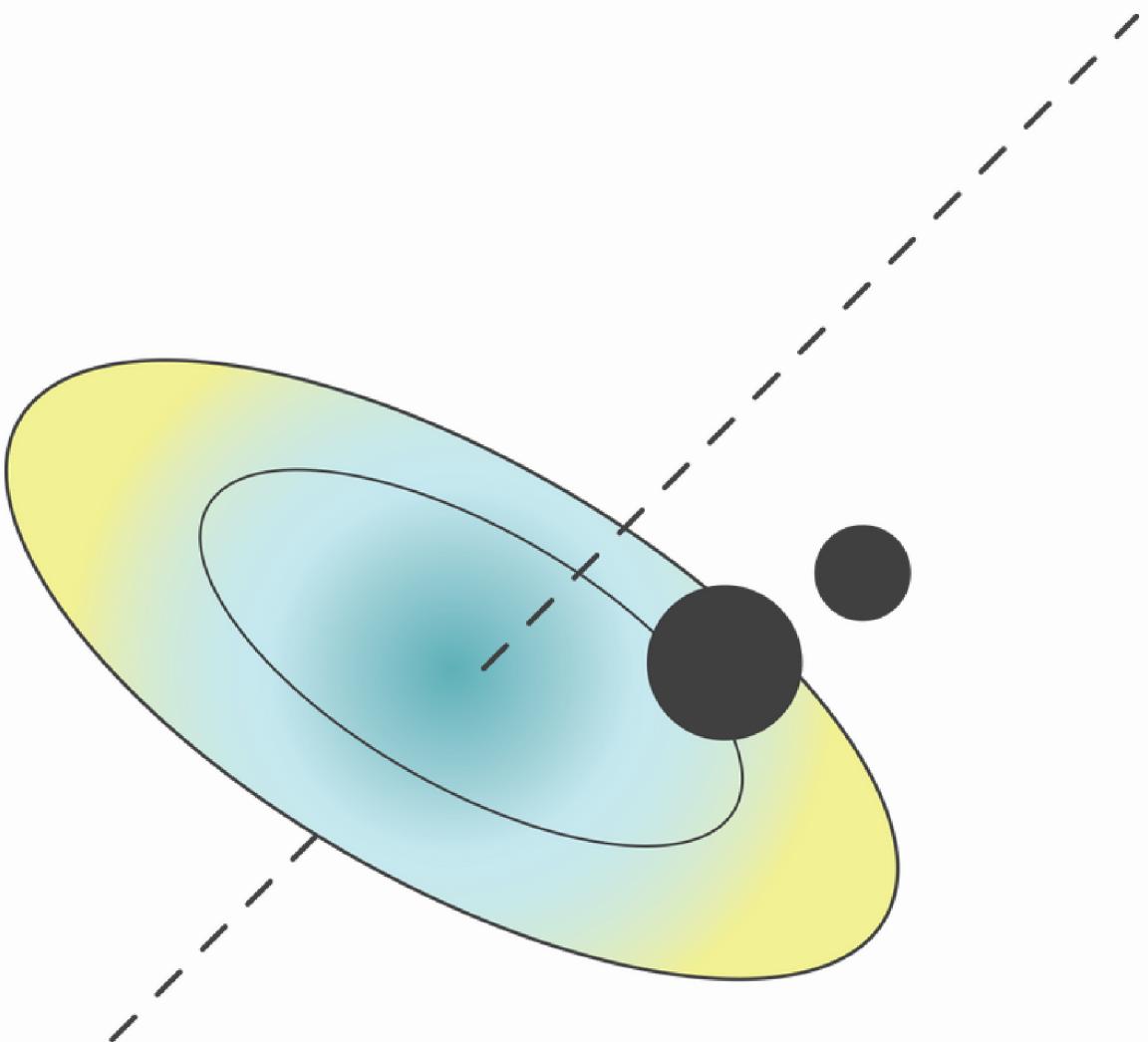
**03**  
Demo - Interactive  
Dashboard



**02**  
Use Cases and  
Data Sources

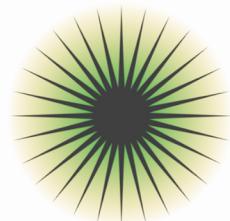
**04**  
Challenges/ Blockers

# Project Overview



## Purpose

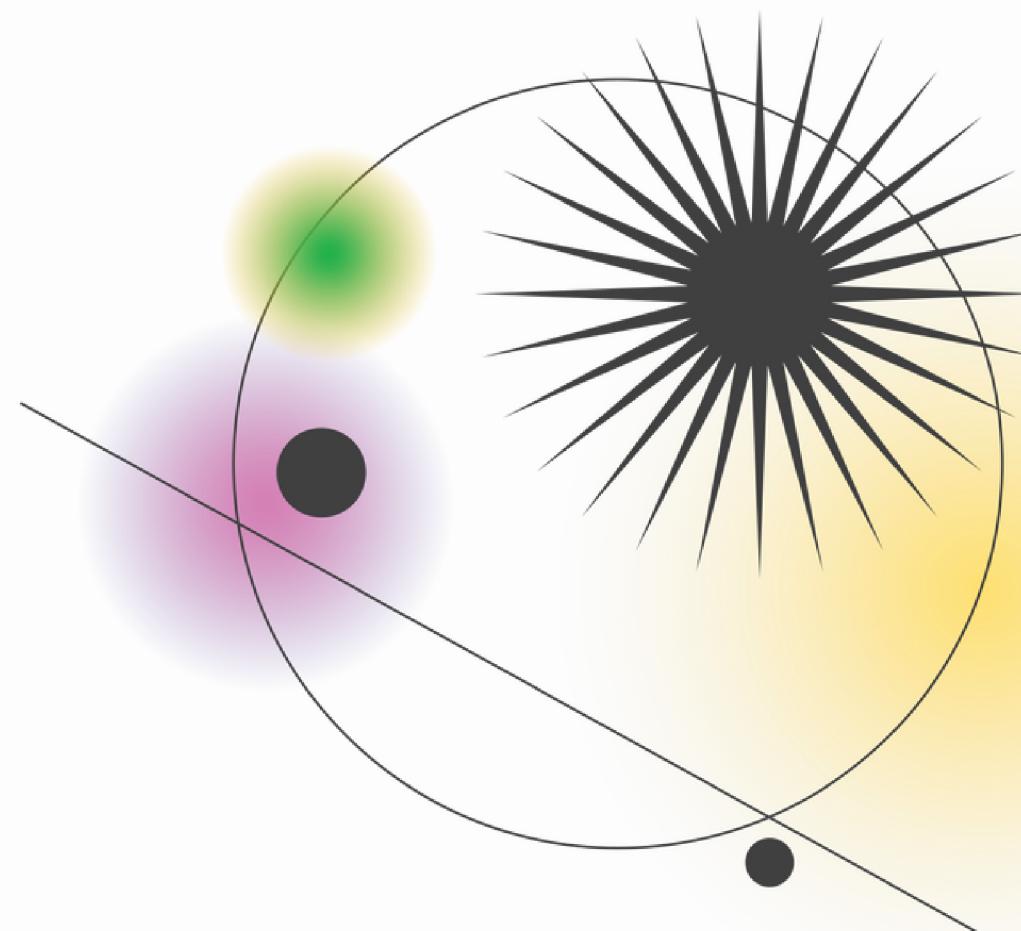
To identify the significant factors that contribute to the changing trends of happiness scores across various countries in the world and explore them using data visualization methods



## What is Happiness Score?

The Happiness Index is a survey that measures your happiness in 10 different areas of your life. The Happiness Index was calculated by averaging the survey results of the respondents of the Gallup World Poll (GWP).

# Data Sources



- 01 Kaggle - Happiness and Corruption 2015-2020

Pre-processed and aggregated data containing factors such as happiness score, GDP per capita, freedom, family, health, generosity, government trust etc. for all countries in the world from 2015 - 2020.
- 02 Transparency International  
Corruption Perception Index (CPI) for all countries in the world from 2015 - 2020 exposes systematic issues that affect happiness in a country
- 03 World Happiness Report  
Global Survey Data to report how people evaluate their own lives in more than 150 countries worldwide.

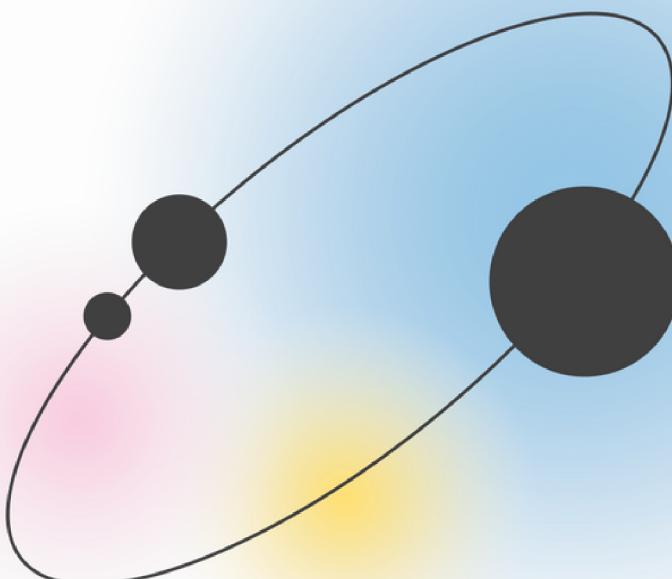
# Data Exploration

## Happiness and Freedom (COVID -19)

$$Happiness Score_i = \beta Freedom_i + u$$

H0: COVID-19's quarantine policy has no significant impact on happiness

H1: COVID-19's quarantine policy has a significant impact on happiness



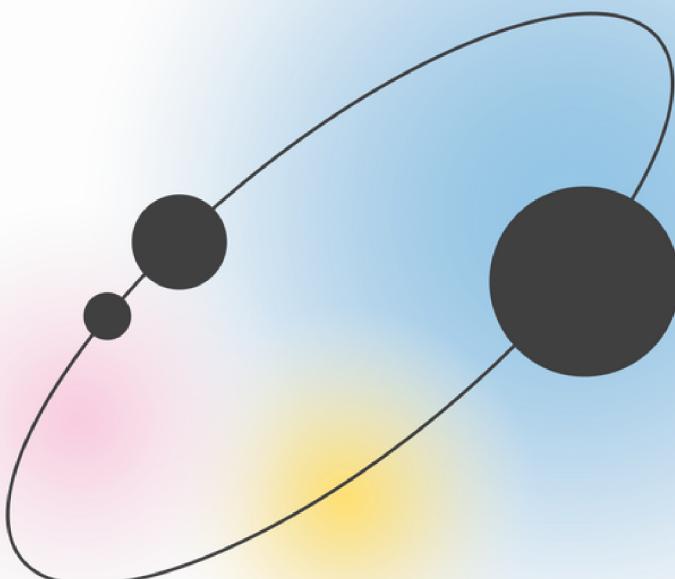
# Data Exploration

Happiness and Mortality Rate (COVID-19)

$$Happiness Score = \beta_1 Mortality Rate + u$$

H0: The number of deaths per Covid doesn't affect a country's happiness rank

H1: The number of deaths per Covid affects a country's happiness rank



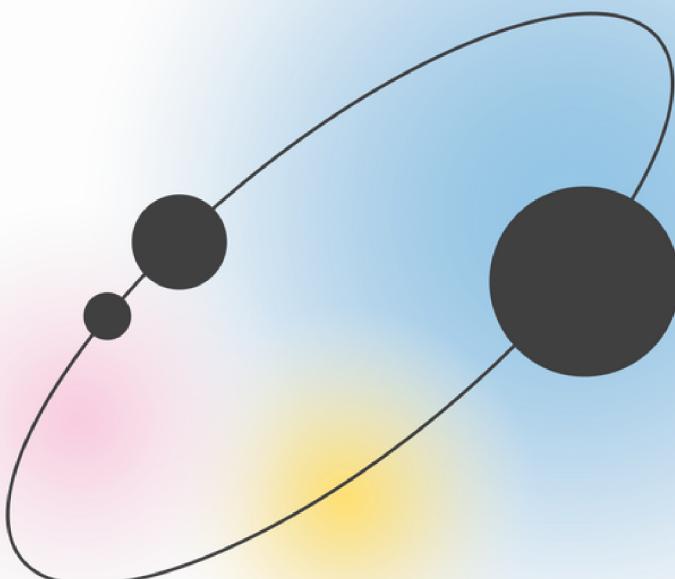
# Data Exploration

## Happiness and Government Trust

$$Happiness Score = \beta_0 + \beta_1 Govt\ Trust + u_i$$

H0: Government Trust & happiness scores are independent of each other

H1: Government trust & happiness scores are dependent on each other



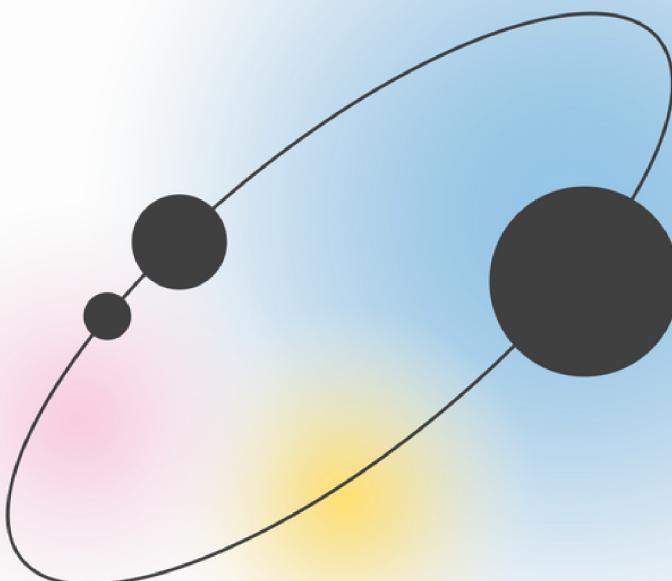
# Data Exploration

## Happiness and GDP per Capita

$$Happiness Score_i = \beta_0 + \beta_1 GDP \text{ per capita}_i + u_i$$

$H_0$ : GDP does not make a significant impact on the Happiness score

$H_1$ : GDP does make a significant impact on the Happiness score



# Challenges and Blockers

- 01 Data Cleaning

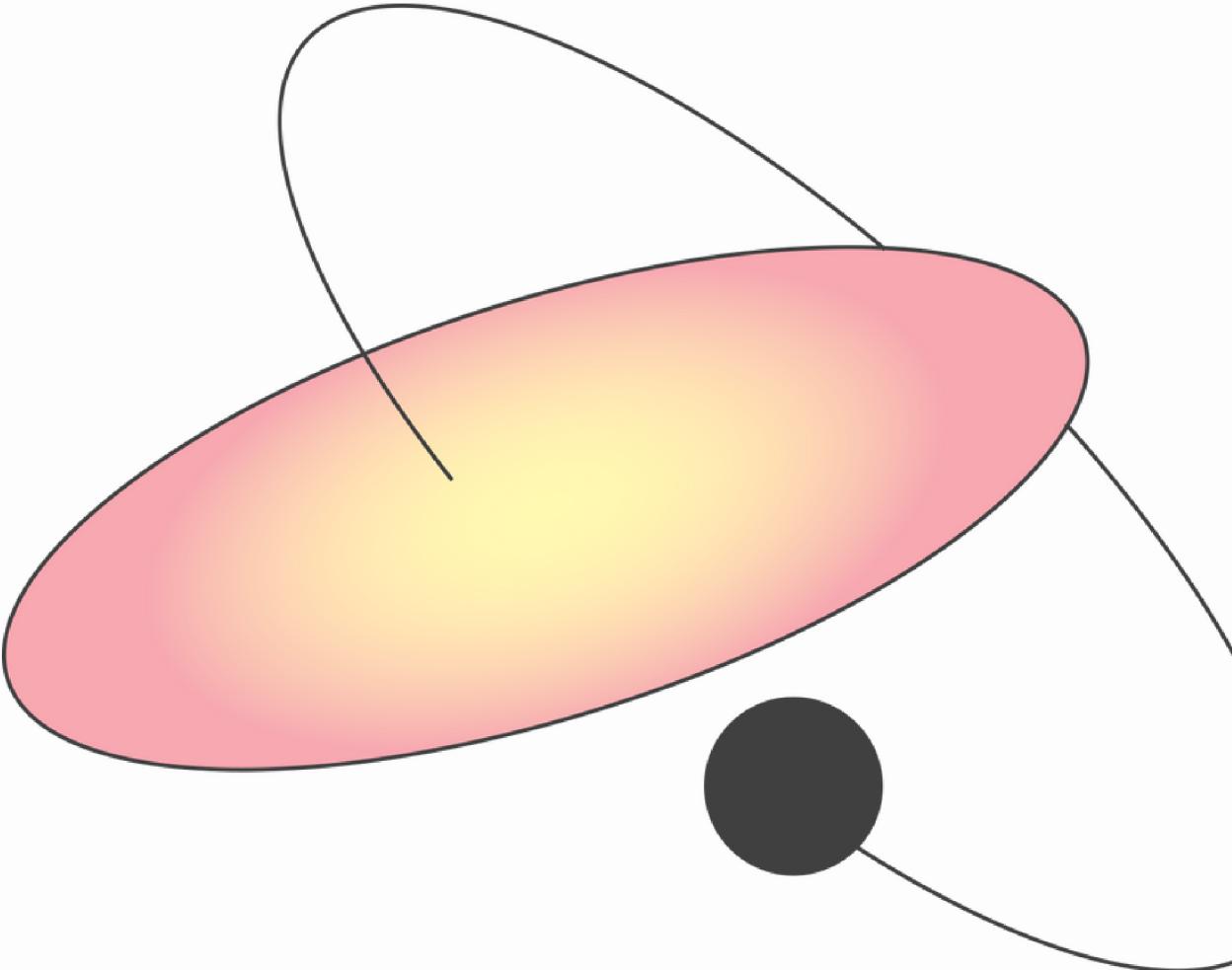
We needed to diagnose data before exploring. Cleaning the data requires removal of duplications, removing or replacing missing entries, correcting misfielded values, ensuring consistent formatting and more which was time-taking.
- 02 Inconsistent Data

Missing data present for some key categories such as social support score and dystopia residual. A lot of null values were recorded for those column categories so we cannot rightly justify hypothesis related to those columns.
- 03 Implicit Bias

The World Happiness Report data is self-reported using surveys. These surveys depend on subjective self-reporting and eliding cultural differences. In Japan there is a cultural bias against boasting of one's good fortune, and in East Asia the most common response, by far, is to report one's happiness as average.

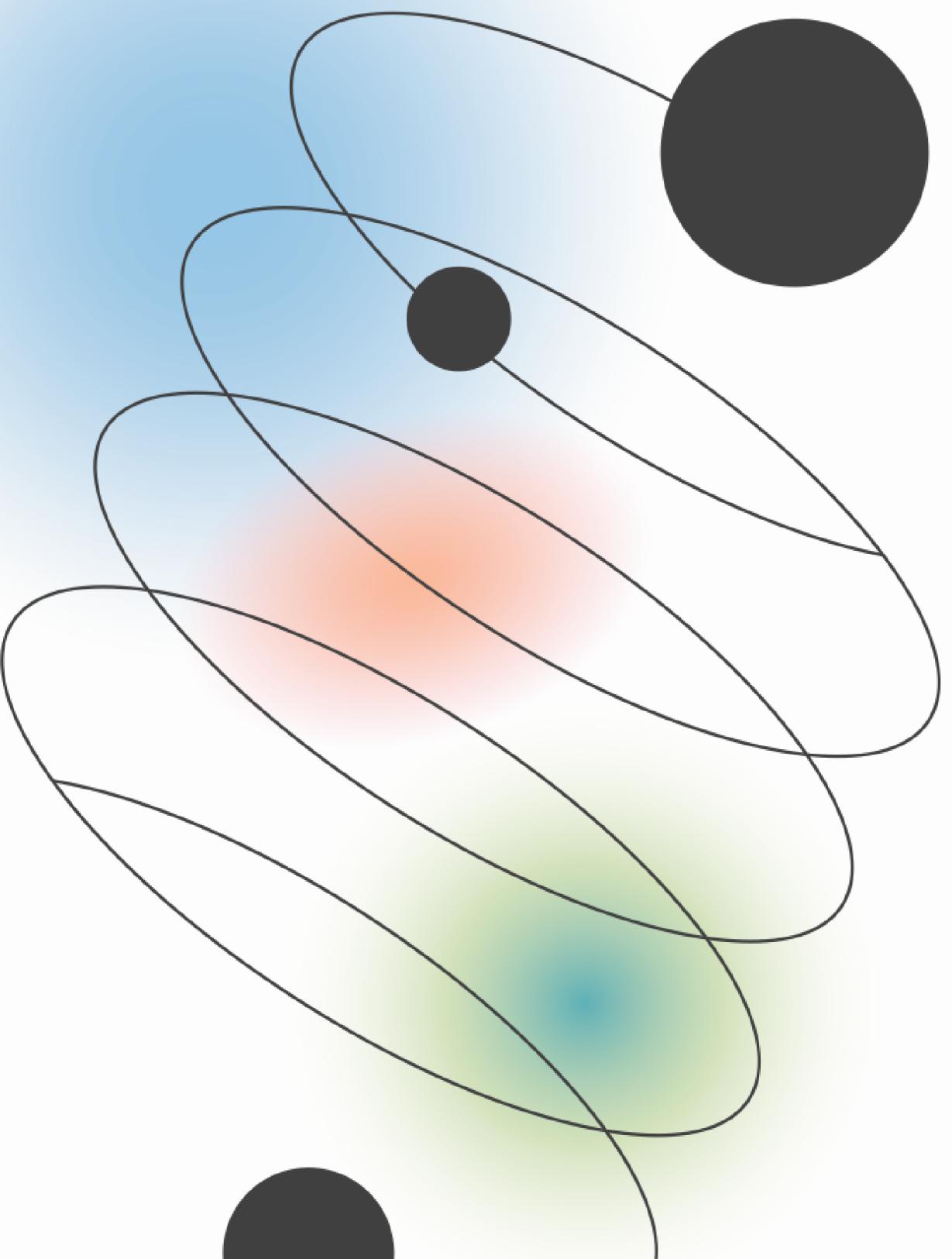
# To Wrap It Up

We are hoping our analysis provided a deeper dive into different factors such as per capita GDP, Government Trust etc that may affect happiness and help in creating goals that work towards a stronger community.

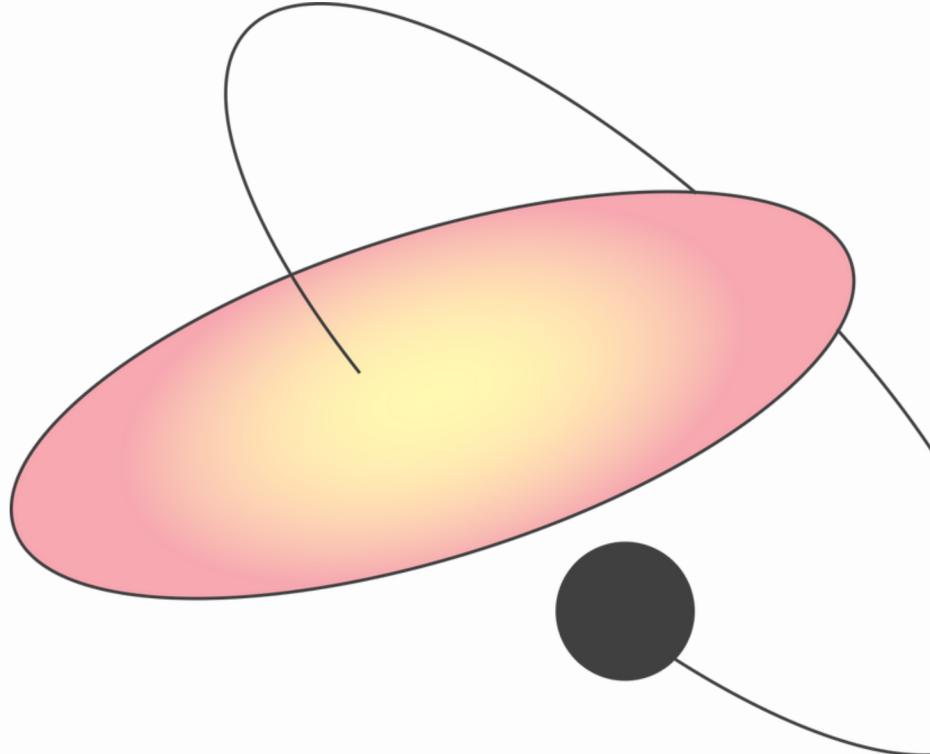


# Thank You

Anushka Shah, Blessia Li,  
Jyothika Mohan, Anchal  
Chaudhary, Alba Valdivia



# Recommendations



## Collect Data Regularly

Regular collection of happiness data on a large scale can inform policy-making and help us identify what "deliverables" should be created to foster well-being.

## Additional Factors

Absolute income is important in poor countries, but rich countries tend to place more importance on comparative income. Other factors with a strong impact on happiness include quality of work, social trust, freedom of choice, and political participation.

## Create Goals

Create goals that work toward strong communities with high degrees of trust, high employment and quality of employment, improved mental and physical health, support of family life, and accessible, quality education.