Tracing the Growth of the Global Community: A Population Forecasting Analysis

INTRODUCTION:

1.1-Overview:

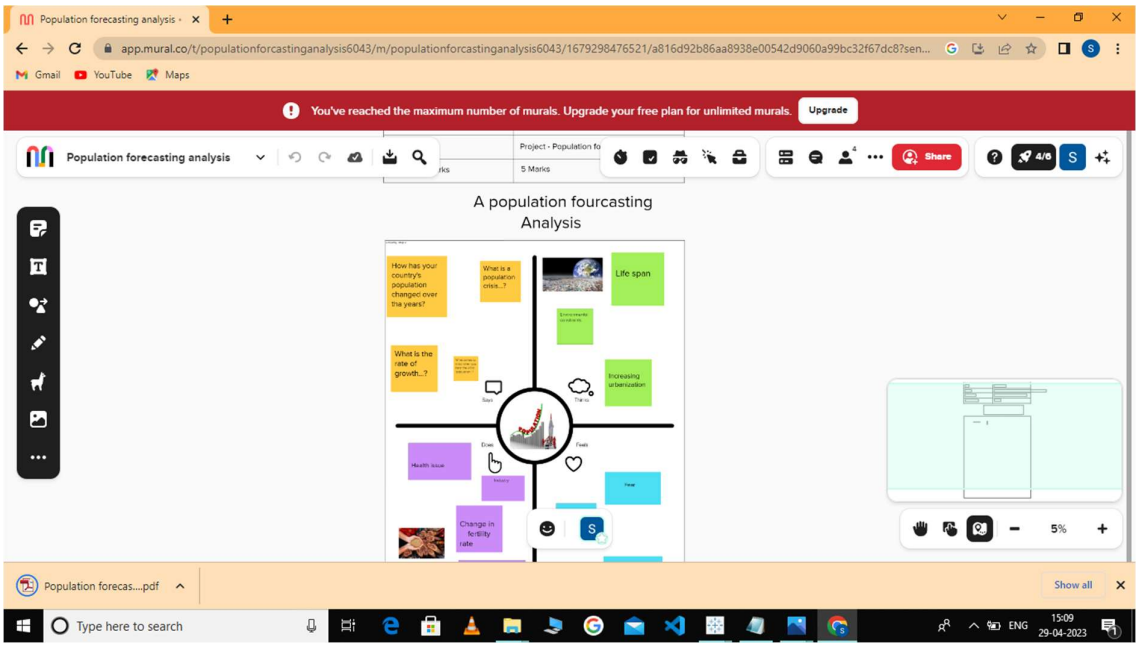
Forecasts try to estimate the rate of population growth, but this is understandably difficult to predict. For example, the UN has issued multiple projections of future world population, based on different assumptions. From 2000 to 2005, the UN consistently revised these projections downward, until the 2006 revision, issued on March 14, 2007, revised the 2050 mid-range estimate upwards by 273 million. The UN now estimates that, by 2050, world population will reach 9 billion people. However, this forecast, like all population forecasts, is subject to change.

1.2-Purpose:

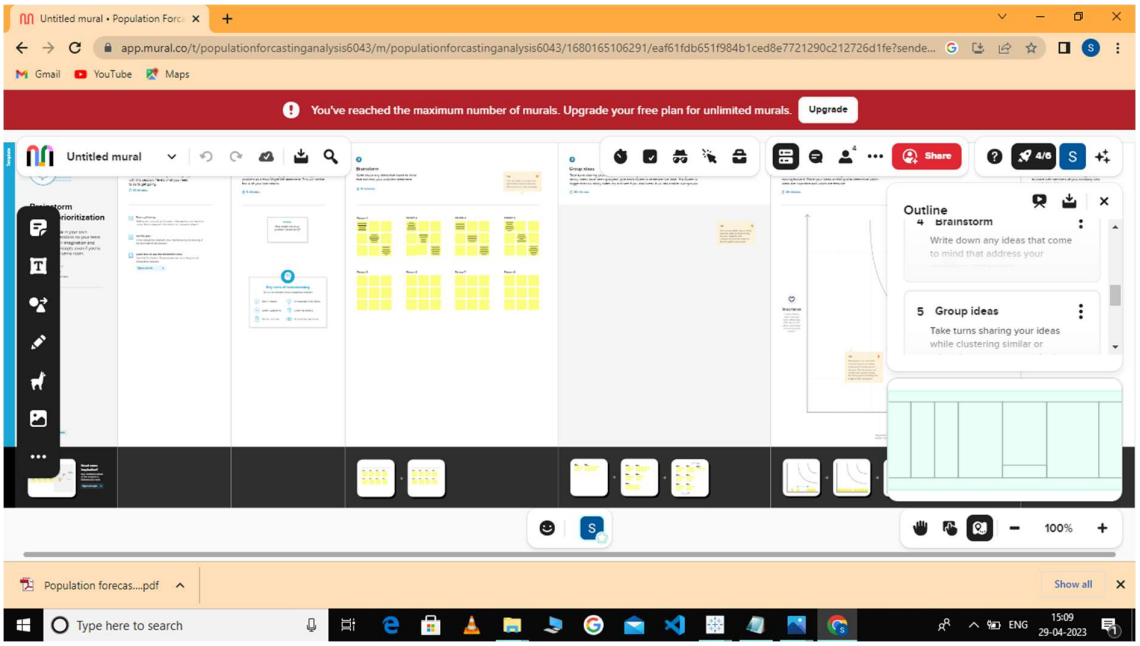
A population projection gives a picture of what the future size and structure of the population by sex and age might look like. It is based on knowledge of the past trends, and, for the future, on assumptions made for three components: fertility, mortality and migration. Different evolution assumptions are made for each component, constituting different scenarios. The projections serve as a basis for long-term thinking, particularly in terms of collective development. They make it possible to analyse population trends if the assumptions are true, but are not forecasts. Individual behaviour, certain public policy actions, scientific progress or unforeseen events (weather events, epidemics) in the coming years may have a lasting effect and significantly influence trends, which the projections do not take into account.

2.PROBLEM DEFINITION & DESIGN THINKING:

2.1-Empathy map:



2.2-ideation &Brainstorming Map:



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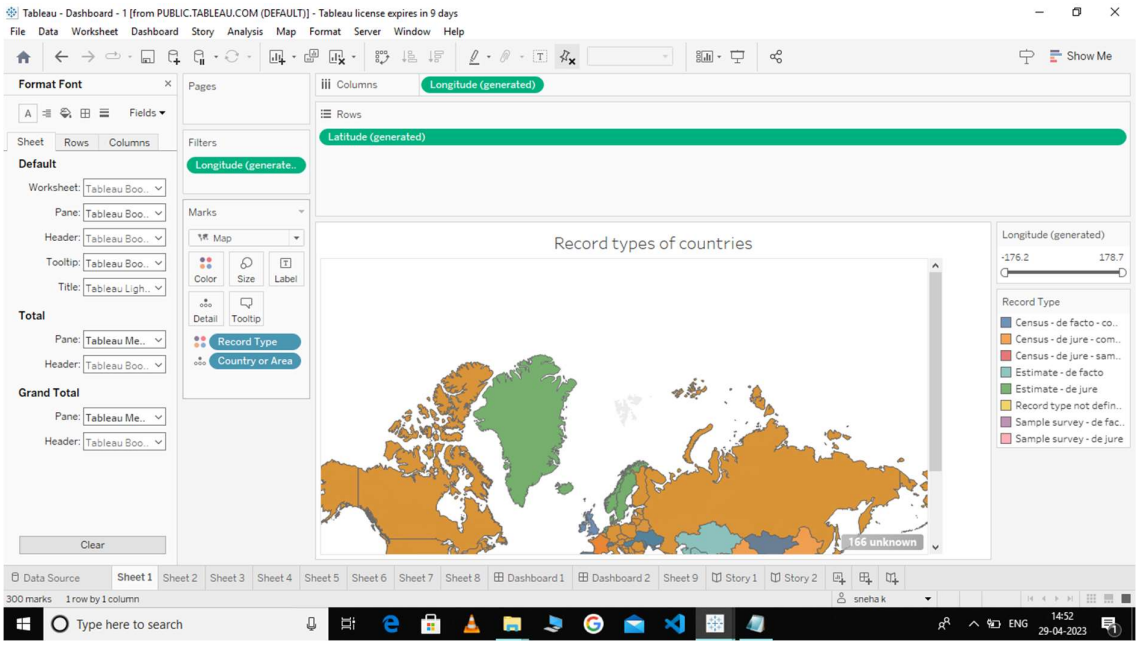
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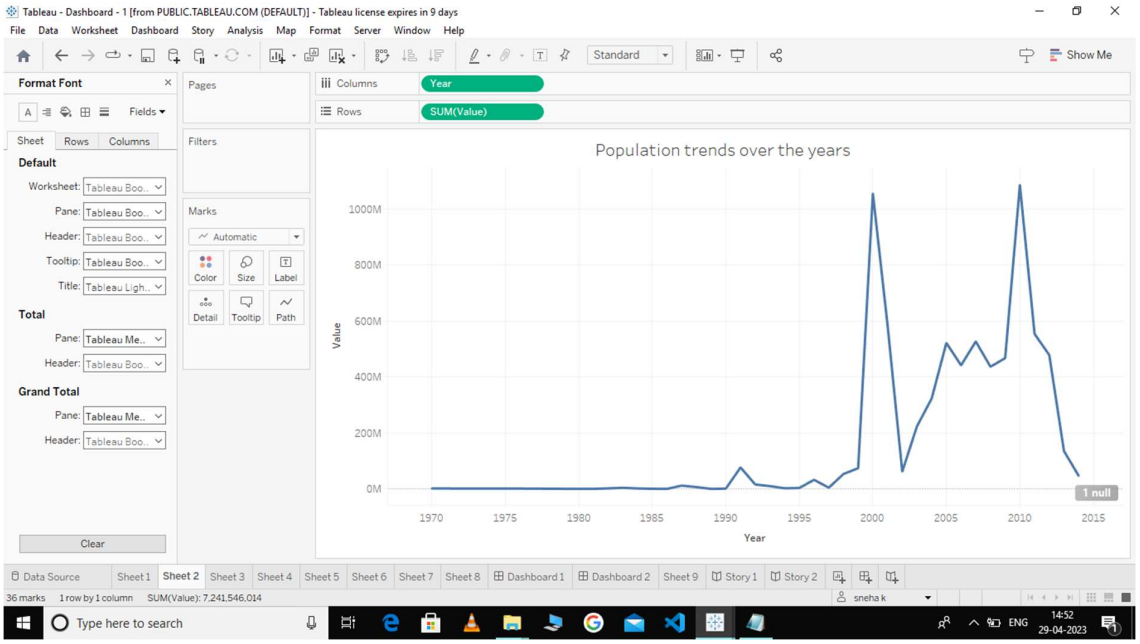
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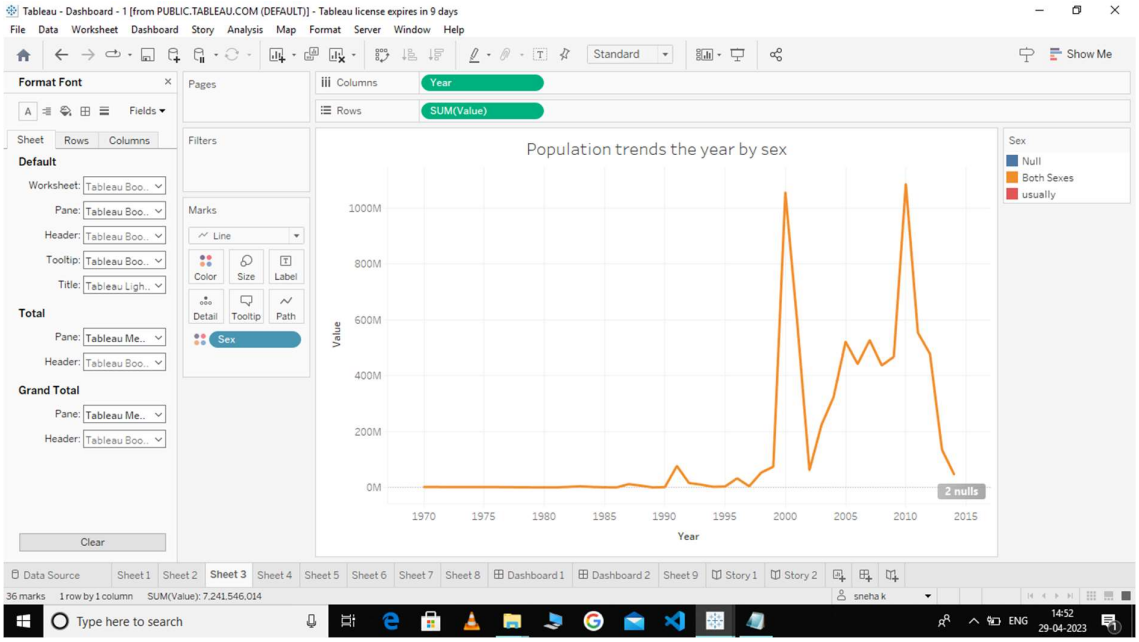
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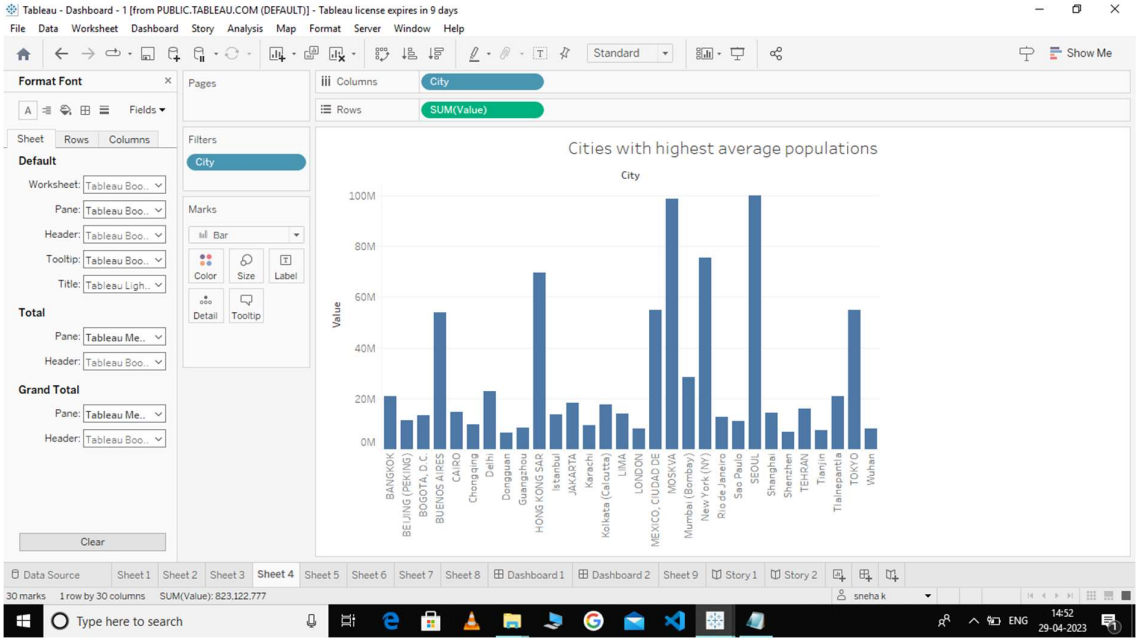
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BEIJING (PEKING)
BOGOTA, D.C.
BUENOS AIRES
CAIRO
Chongqing
Delhi
Dongguan
Guangzhou
HONG KONG SAR
Istanbul
JAKARTA
Karachi
Kolkata (Calcutta)
LIMA
LONDON
MEXICO, CIUDAD DE
MOSKVA
Mumbai (Bombay)
New York (NY)
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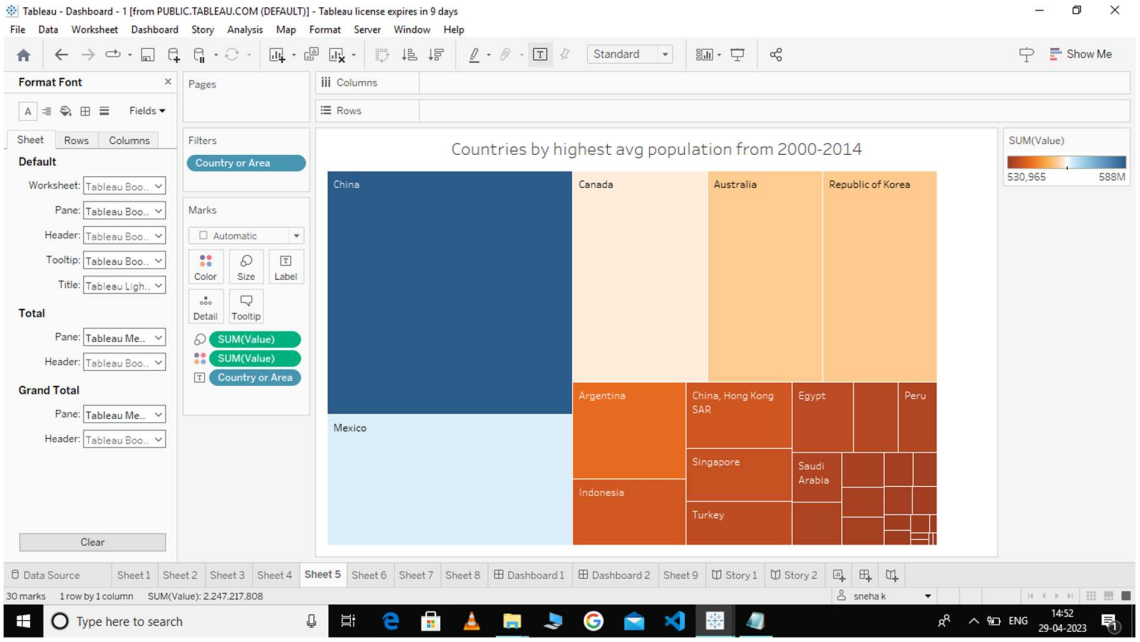
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Australia
Republic of Korea
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Argentina
China, Hong Kong SAR
Egypt
Peru
Singapore
Saudi Arabia
Indonesia
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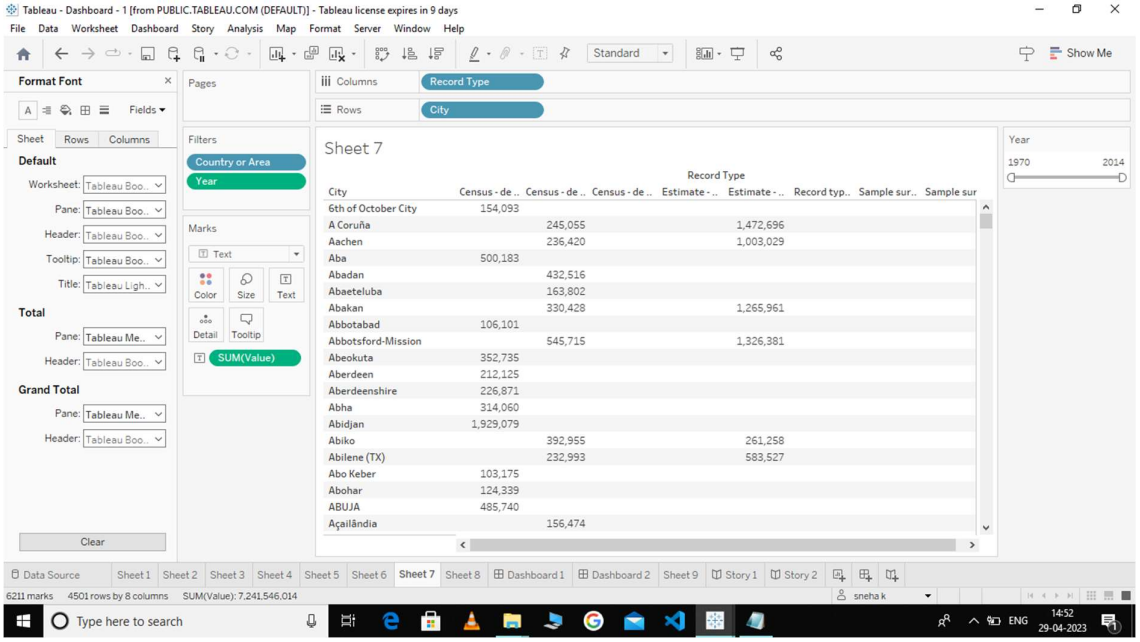
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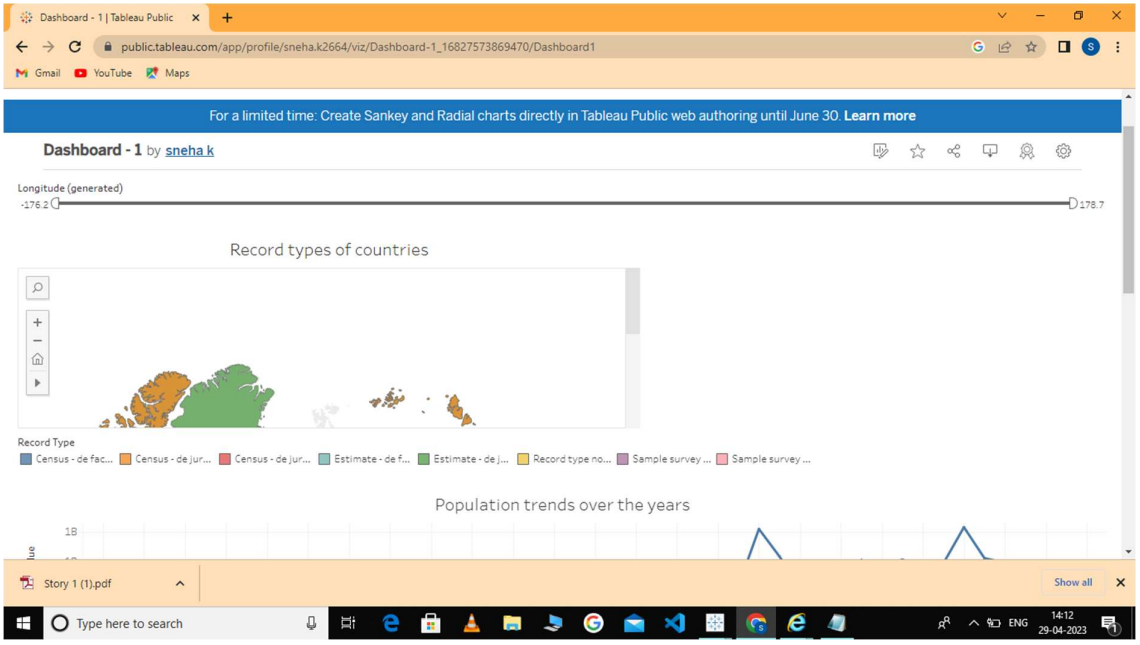
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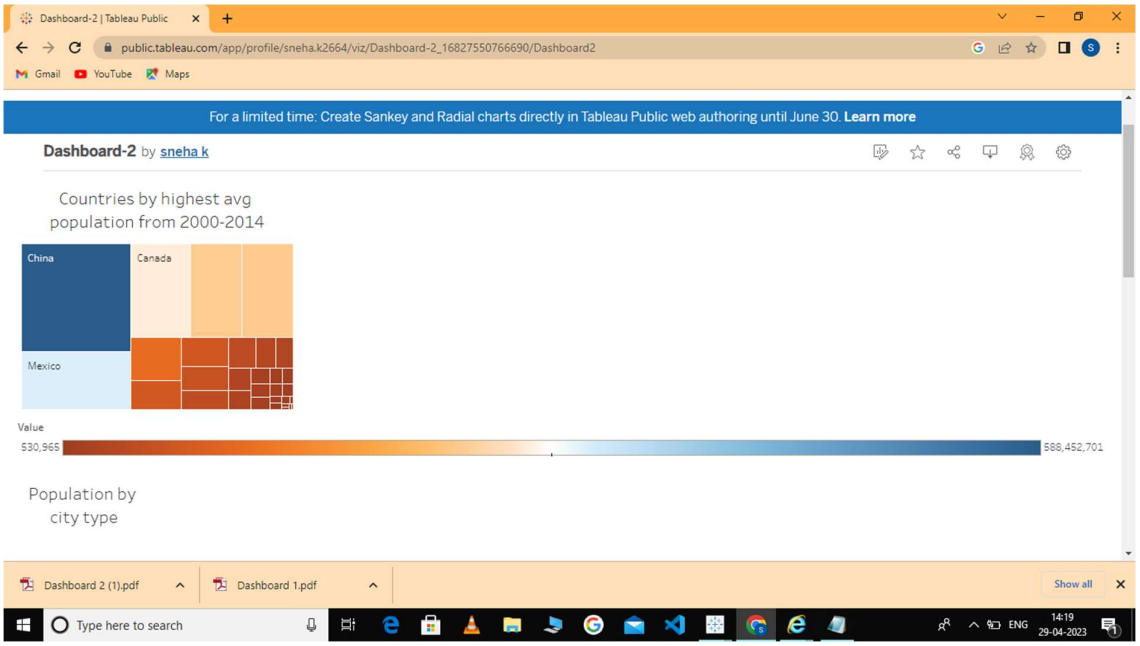
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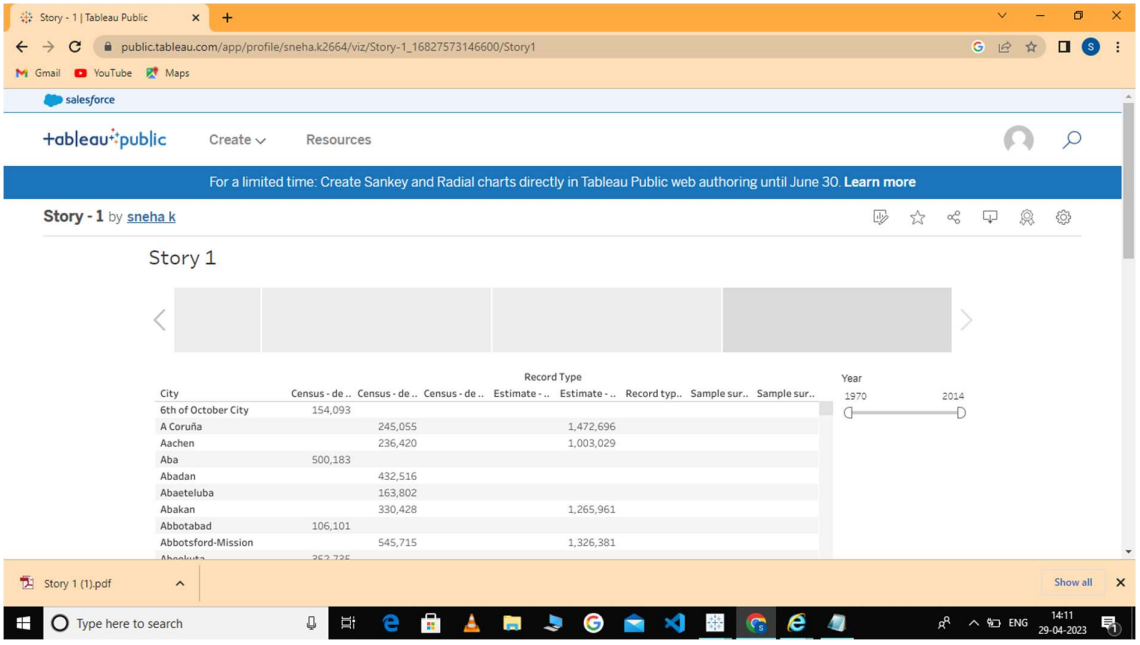
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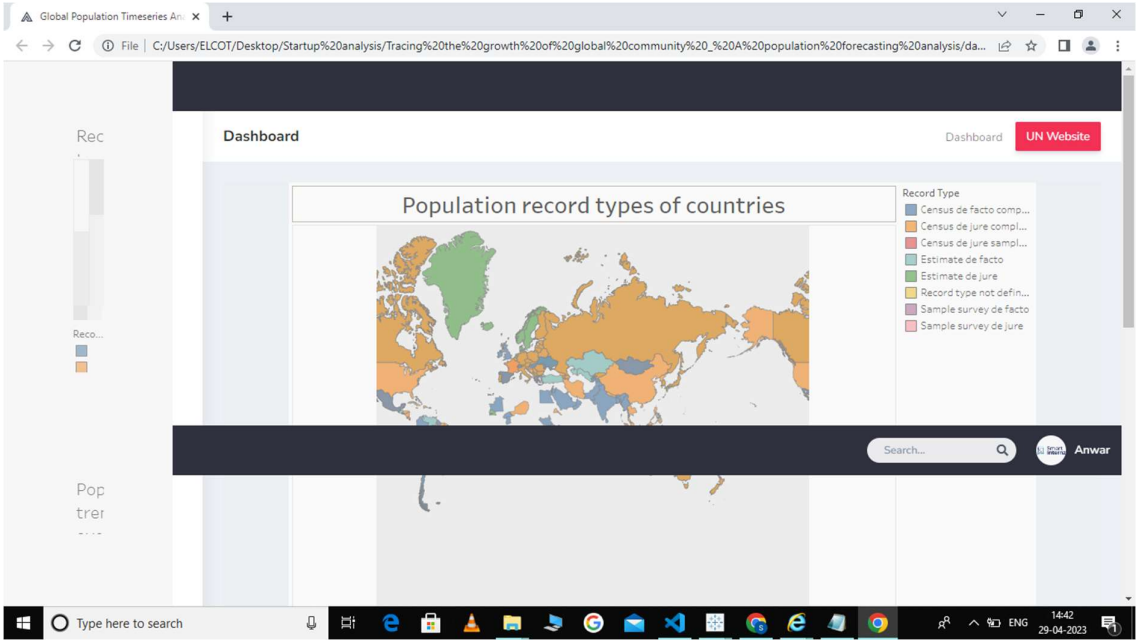
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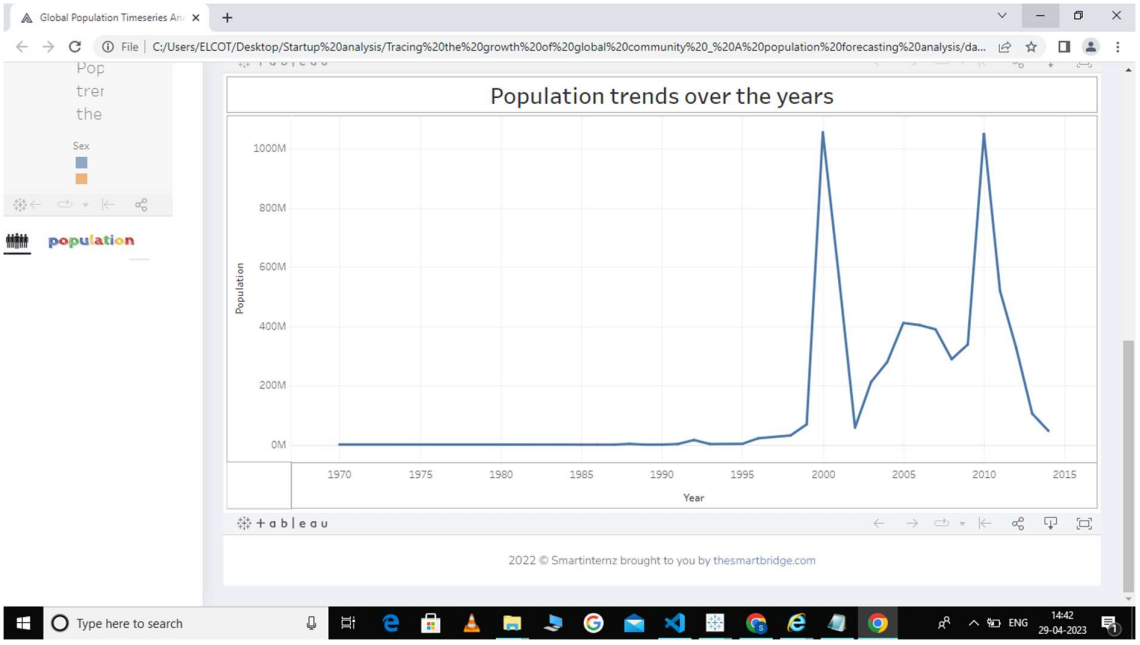

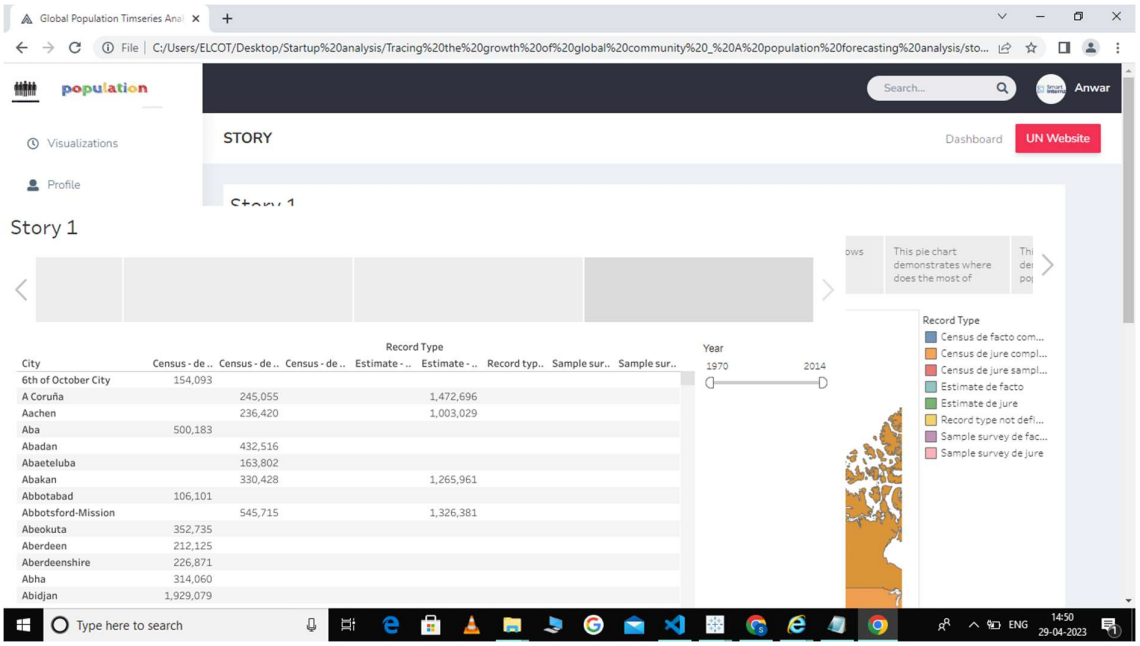

4. ADVANTAGES & DISADVANTAGES:

4.1-Advantages:

- Greater economic growth.
- Human Resources will Increase.
- Increased productivity through specialization.
- Demand has led to more jobs.

- Higher population density efficiency.
- Higher Industry Demand.
- Increasing military power.

4.2-Disadvantages:

- Increasing Resources Demand.
- Shortage of food due to population expansion.
- Generating Non-biodegradable waste.
- Threat to Natural Habitat.
- Effect on climate.
- Water Shortage.

5.Applications:

- Population projections can be used as a tool to provide information on possible scenarios of future dimension and age and sex composition of population, and, therefore, to support decision-making processes in diverse socio-economic areas, such as, higher education institutional network planning.

6.CONCLUSION:

It took hundreds of thousands of years for the world population to grow to 1 billion then in just another 200 years or so, it grew sevenfold. In 2011, the global population reached the 7 billion marks, it stands at almost 7.9 billion in 2021, and it's expected to grow to around 8.5 billion in 2030, 9.7 billion in 2050, and 10.9 billion in 2100.This dramatic growth has been driven largely by increasing numbers of people surviving to reproductive age, and has been accompanied by major changes in fertility rates, increasing urbanization and accelerating migration. These trends will have far-reaching implications for generations to come. The recent past has seen enormous changes in fertility rates and life expectancy. In the early 1970s, women had on average 4.5 children each; by 2015, total fertility for the world had fallen to below 2.5 children

per woman. Meanwhile, average global lifespans have risen, from 64.6 years in the early 1990s to 72.6 years in 2019**.**

7.FUTURE SCOPE:

Mathematical Method, Economic Method and Cohort Component Method. Mathematical method is frequently used for the estimation of population. It is done for short period i.e. less than 10 years. Arithmetic projection, since it has been employed during periods of population increase, has generally been used to show population growth in fixed amounts. For example, it may be found that City X^3 increased by 20,000 people every 10 years since 1910 (when its population was 100,000).