

INTRODUCTION:

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.

Population analysis is needed to identify problems and community needs, establish goals and objectives, assess alternative courses of action, allocate resources for plan implementation, and evaluate the ability of the plan to achieve goals and objectives.

THE NEED FOR POPULATION FOTECASTING:

In the solution of any planning problem, the planner either makes an explicit forecast, or makes some implicit assumption about the population for which he is planning. "Population" includes much more than mere numbers of people. The planner must know what kind of people live in his planning area, what types of lives they lead, and would like to lead, how long they will live, and how long they will reside in the particular area; and who will replace them when they move out or die; how many children they will have (and would like to have under different conditions), whether these children will live in the area, and many other factors.

Many communities have installed facilities which have become useless because predicated on faulty estimates of future population, or they have failed to install facilities where justified by future population. A common example of such errors is the newly constructed school in an area where the population is aging rather than being replaced by young, child-bearing families. Sewer systems have been expensively developed only to be later replaced because the population soon was double or triple what was anticipated for the area. Narrow streets have been later widened at great expense. On the other hand, land often has been overly zoned for commercial purposes in the expectation of a vast increase in population which did not materialize. Or land was zoned for potential capacities in some cities of whole state or even the entire population of the country. Prematurely subdivided land is plaguing many of our communities today.

BACKGROUND:

Demography, the study of population, tries to find the answers to the questions of what types and numbers of persons can be expected to reside in an area at a future date. Population analysts have found that changes in population, the aspect most important to the planner, are related to other social and economic changes. The rate of industrialization and its effects on population growth is perhaps the most important relationship.

In Western civilization, increased knowledge and application of science and technology has over the last 150 years sharply decreased the death rate. During this period, the birth rate has also been lowered, mainly through the practice of birth control. Since the birth rate decreased more slowly than the death rate, a large increase in population took place in the Western world in

the 19th and 20th centuries. In the most industrialized countries the death rate today has almost reached the present biological minimum, but since birth rates also continue to fall, population increase is being slowed. Northwestern, southern and central Europe, North America, Australia and New Zealand are among these countries which are identified as having a population of incipient decline.

In those countries which are undergoing the process of industrialization, the application of modern hygiene methods such as more widespread use of medical facilities and D. D. T., have decreased the death rate. The lowering of the death rate precedes the lowering of the birth rate, and consequently these countries are now undergoing or have undergone a very large population increase. These countries are said to be in the stage of transitional growth, and countries such as the Soviet Union, Japan and some Latin American countries are in the midst of this stage of population change while Turkey, Palestine and parts of North Africa seem to be entering it.

There are also a number of countries which are not yet industrialized to any great extent, such as China, India, Egypt, the Near East, and most of South and Central America, which have at present both a high birth rate and a high death rate, which prevents any large population increase. These countries are characterized as being of high growth potential since rapid growth may be expected as soon as technological developments make possible a decline in mortality.¹

Generalizations about the United States, with its present low birth and low death rate, have been made which forecast an increasing population of older persons in the population, an increasing number of future births from the low-income groups and from particular ethnic, social and religious groups, and from rural populations. The United States has been identified as a country of incipient population decline since it is felt that with an increase in families of small size (with few or no children) the population will not reproduce itself. The age-sex pyramid, which charts the number of people by age groupings and sex is a useful tool for describing population characteristics, and, when used comparatively, for showing population change. (See Appendix A for examples of age-sex pyramids.)

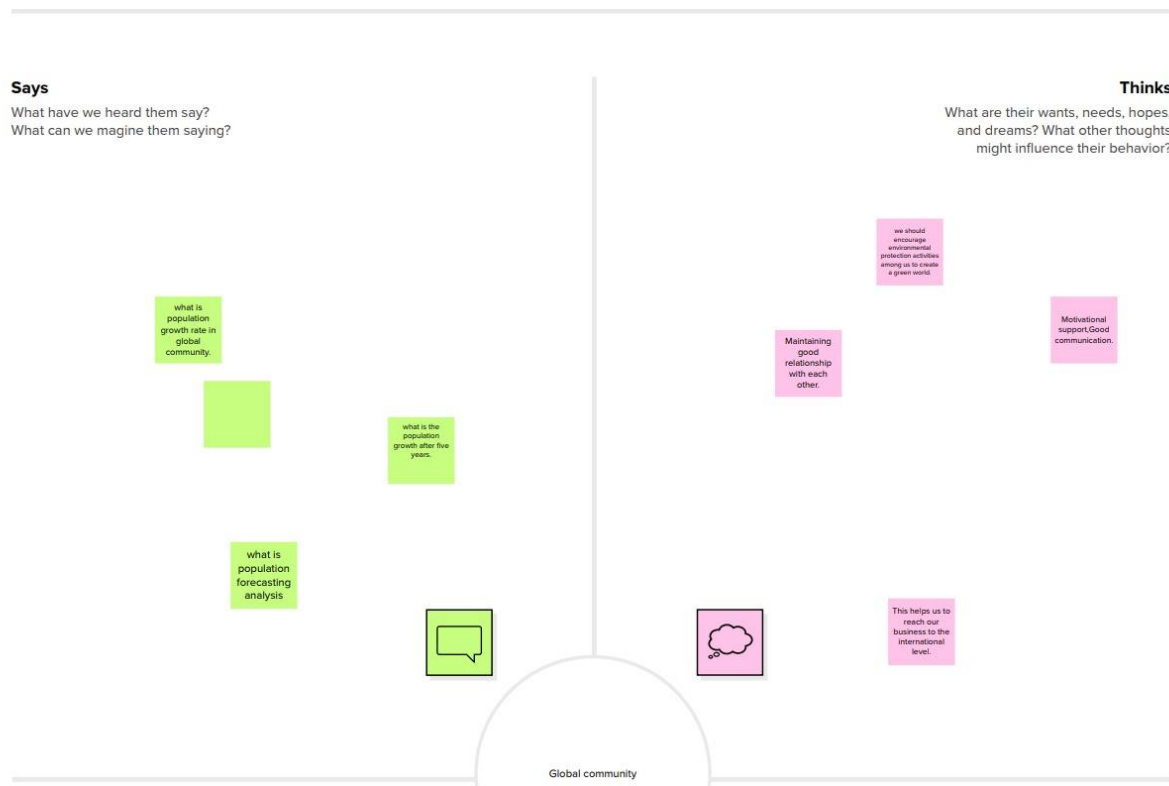
Although the United States as a whole is classified as one of incipient decline, there are sections of the country (such as rural areas and neighborhoods of foreign-born in urban areas) where the birth rate is still quite high, and sanitation facilities, diet, etc., are deficient enough to keep the death rate above the national average. Infancy death rates are high, and the life expectancy (the average number of years a person may expect to live) may be five, ten or more years below the national figure.

The planner must be cognizant of the historical trend discussed briefly above. He must also be aware of the many different socio-economic groups present locally and in the nation. These groups have differing population reproduction and death rates, and also have with differing population "habits" — different attitudes about getting married, when to get married, when to have children, how to space them, and how many to have.² They have differing ideas (and also pressures upon them) about moving, both within and between communities.

There are a number of over-all generalizations which show differences in population habits. It is known for instance that the size of family generally varies inversely with income and education, that low income groups have more children than high income groups, that farm families are larger than city ones, and that most families of foreign birth (perhaps not so much because they are foreign, as because they often have low incomes) have more children than

native born people. In general, Catholic families in the United States have tended to have more children than those of most Protestant denominations. Although these generalizations have been valid, it does not mean that they will always apply. It is being noticed today, for instance, that some persons in professional occupations (who have been among those with the least children) now seem to be favoring larger families; the same is true of some high-income groups. The trend of urban migration out to the suburbs and dormitory towns seems also to encourage larger families in these "fringe" areas.

EMPATHY MAP:



Empathy map

Use this framework to develop a deep, shared understanding and empathy for other people. An empathy map helps describe the aspects of a user's experience, needs and pain points, to quickly understand your users' experience and mindset.

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Build empathy

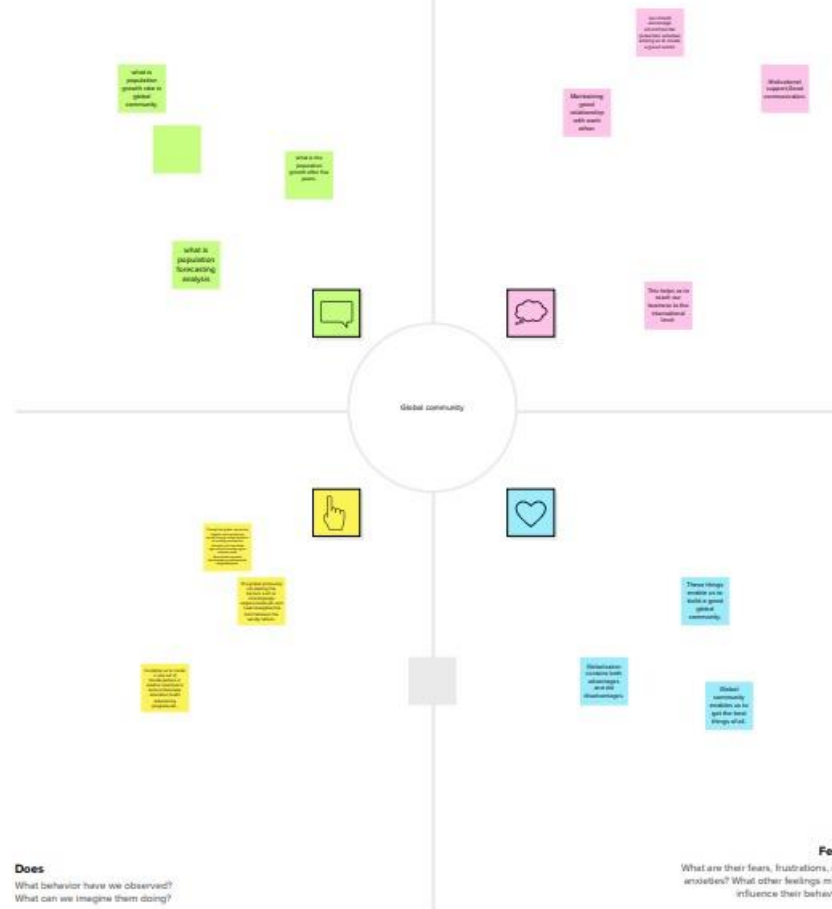
The information you add here should be representative of the observations and research you've done about your users.

Says

What have we heard them say?
What can we imagine them saying?

Thinks

What are their wants, needs, hopes and dreams? What other thoughts might influence their behavior?



Does

What behavior have we observed?
What can we imagine them doing?

Feels

What are their fears, frustrations, anxieties? What other feelings might influence their behavior?

Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

 5 minutes

PROBLEM

To analyse the growth of the global community

The population of the world, now somewhat in excess of three billion persons, is growing at about two per cent a year, or faster than at any other period in man's history. While there has been a steady increase of population growth during the past two or three centuries, it has been especially rapid during the past 20 years.

National Academies of Sciences, Engineering, and Medicine. 1963.

The Growth of World Population: Analysis of the Problems and Recommendations for Research and Training. Washington, DC: The National Academies Press. <https://doi.org/10.17226/9543>.



Key rules of brainstorming

To run an smooth and productive session



Stay in topic.



Encourage wild ideas.



Defer judgment.



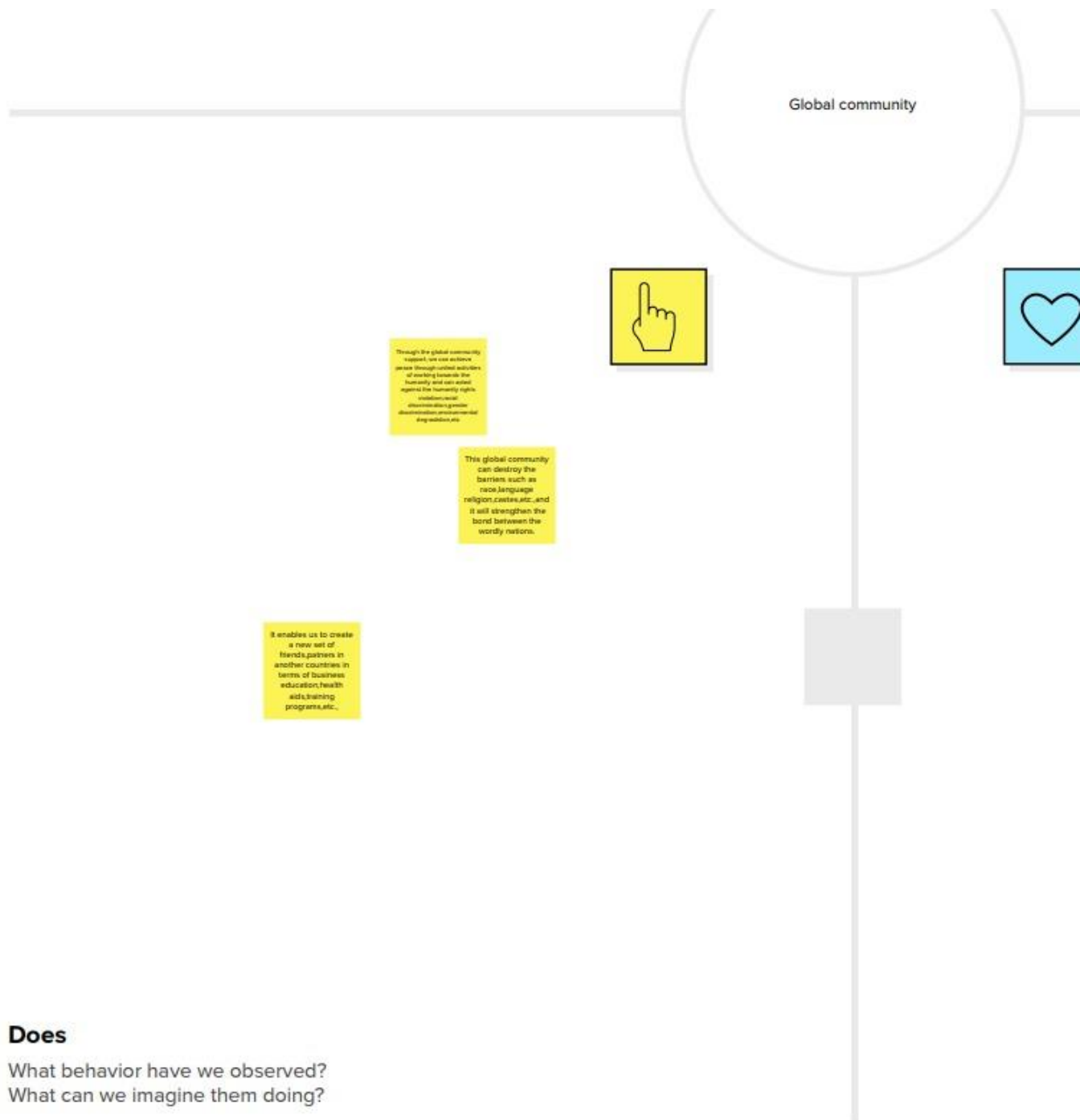
Listen to others.



Go for volume.



If possible, be visual.



Does

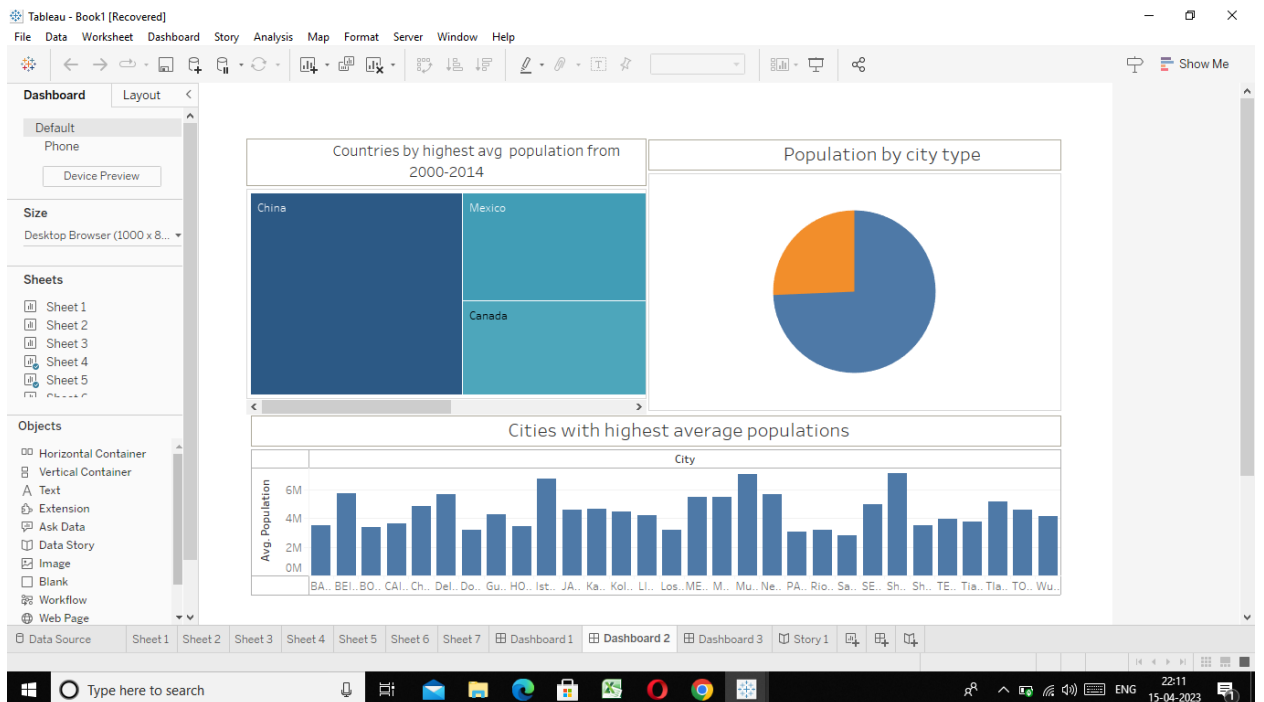
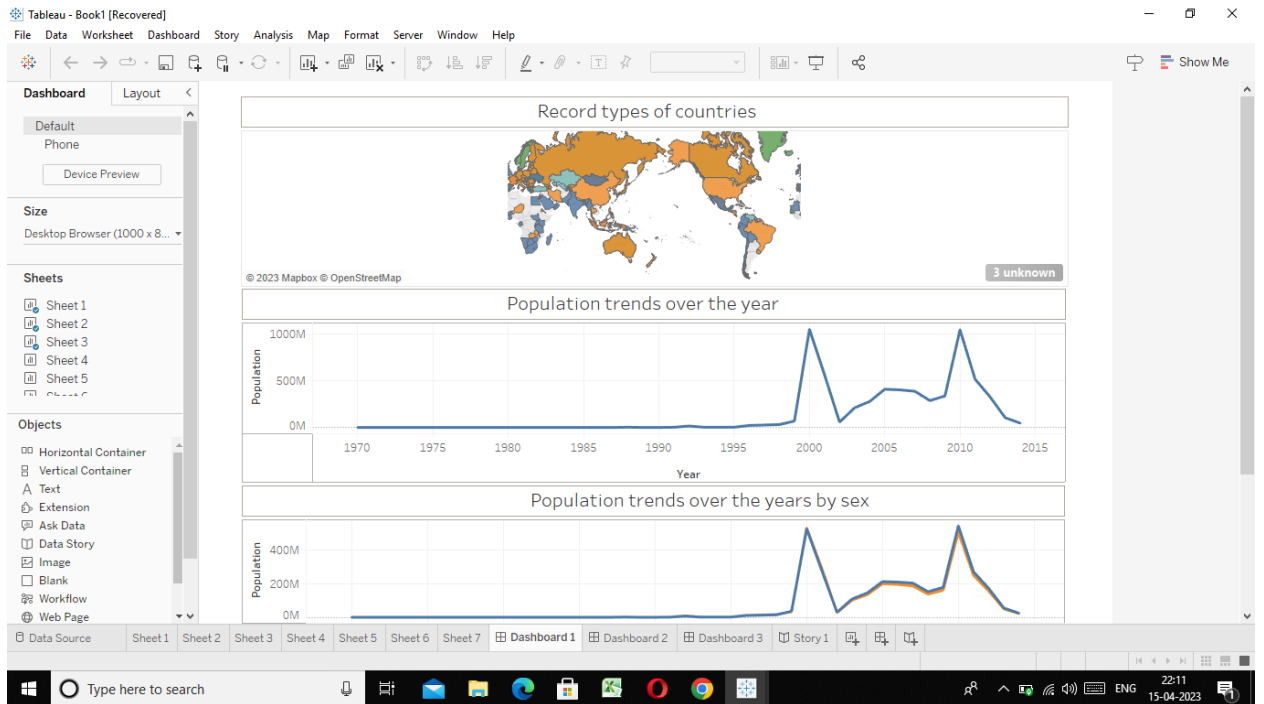
What behavior have we observed?
What can we imagine them doing?

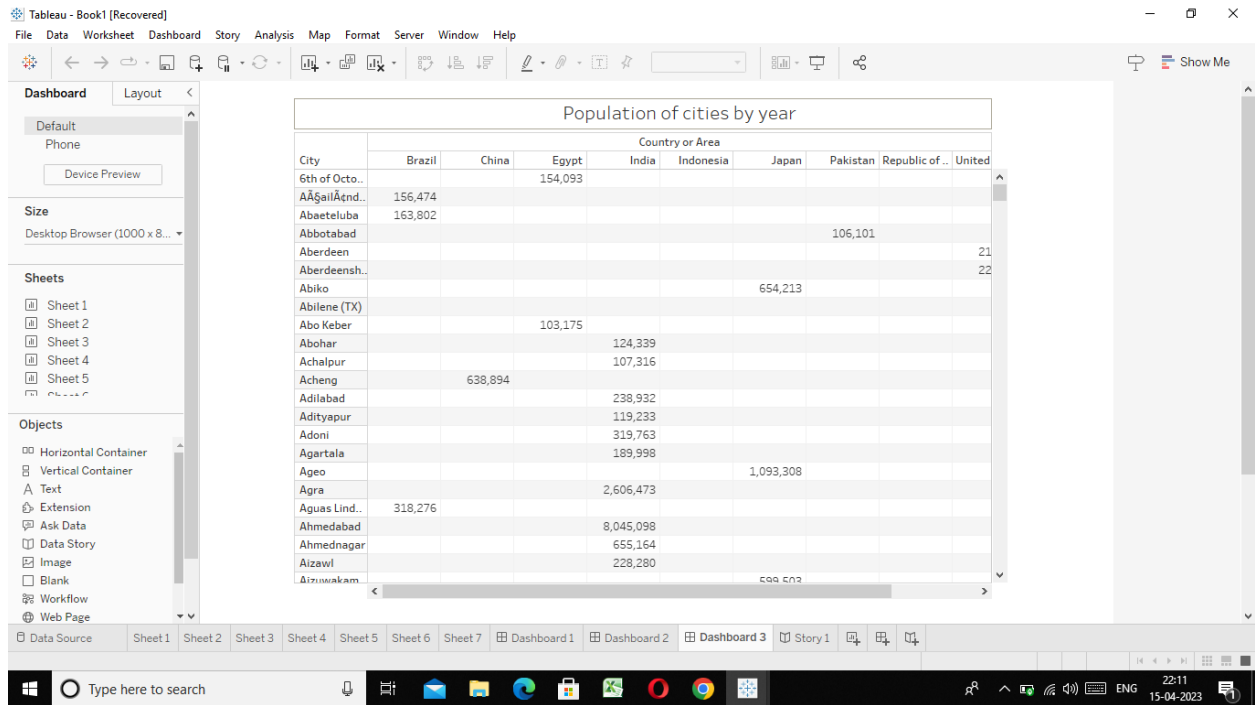
TIP

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

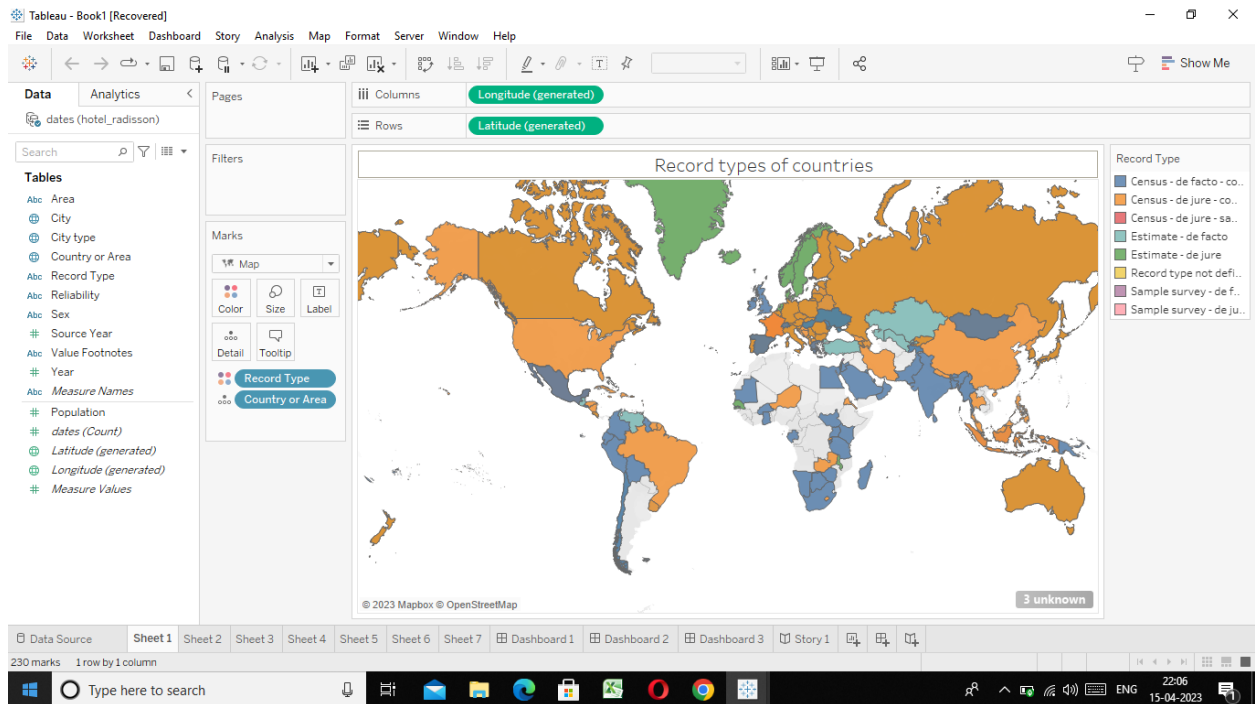
Through the Global community support, we can achieve peace through united activities of working towards the humanity and can act against the human rights violation, racial discrimination, gender Discrimination, environmental degradation, etc. This global community can destroy the barriers such as race, language, religion, caste, etc., and it will strengthen the bond between the worldly nations.

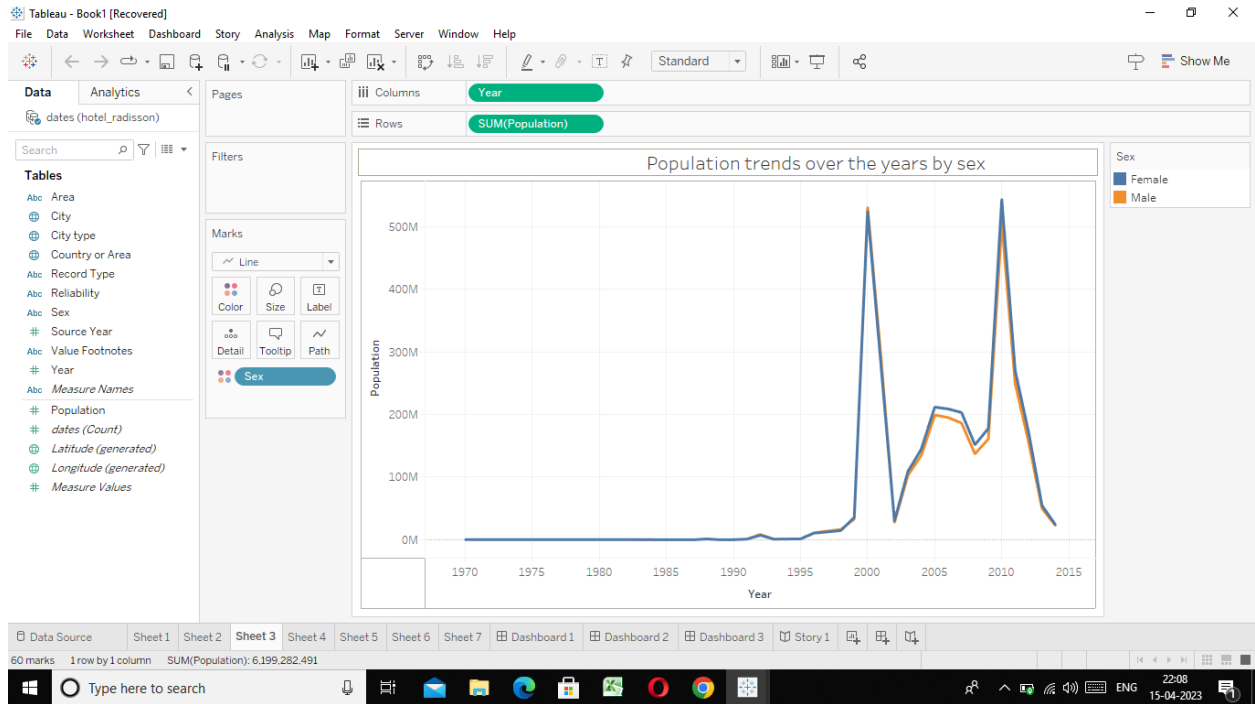
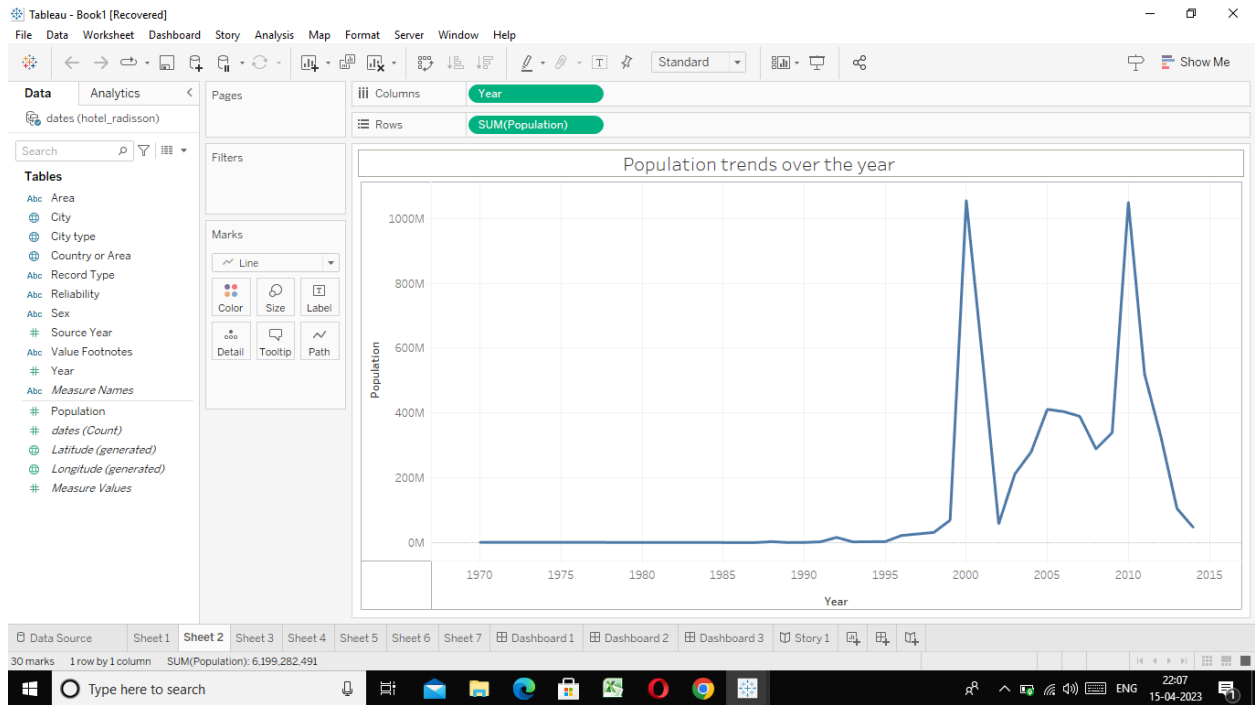
DASHBOARD:

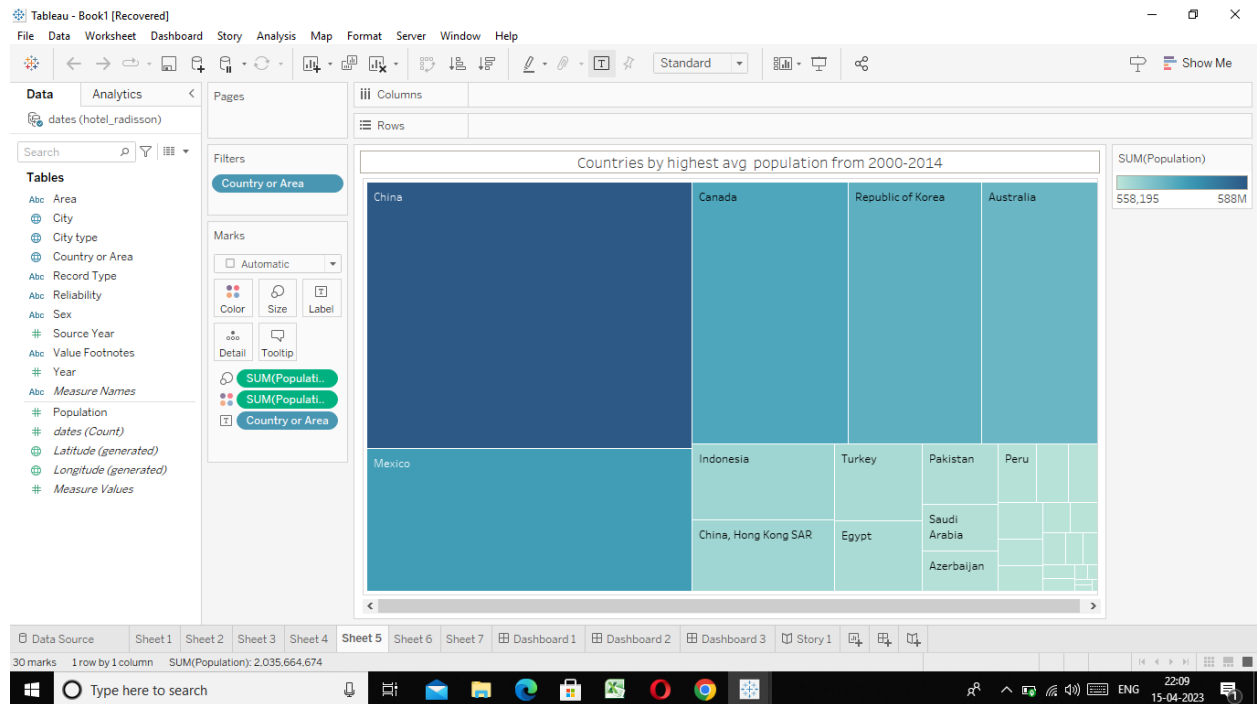
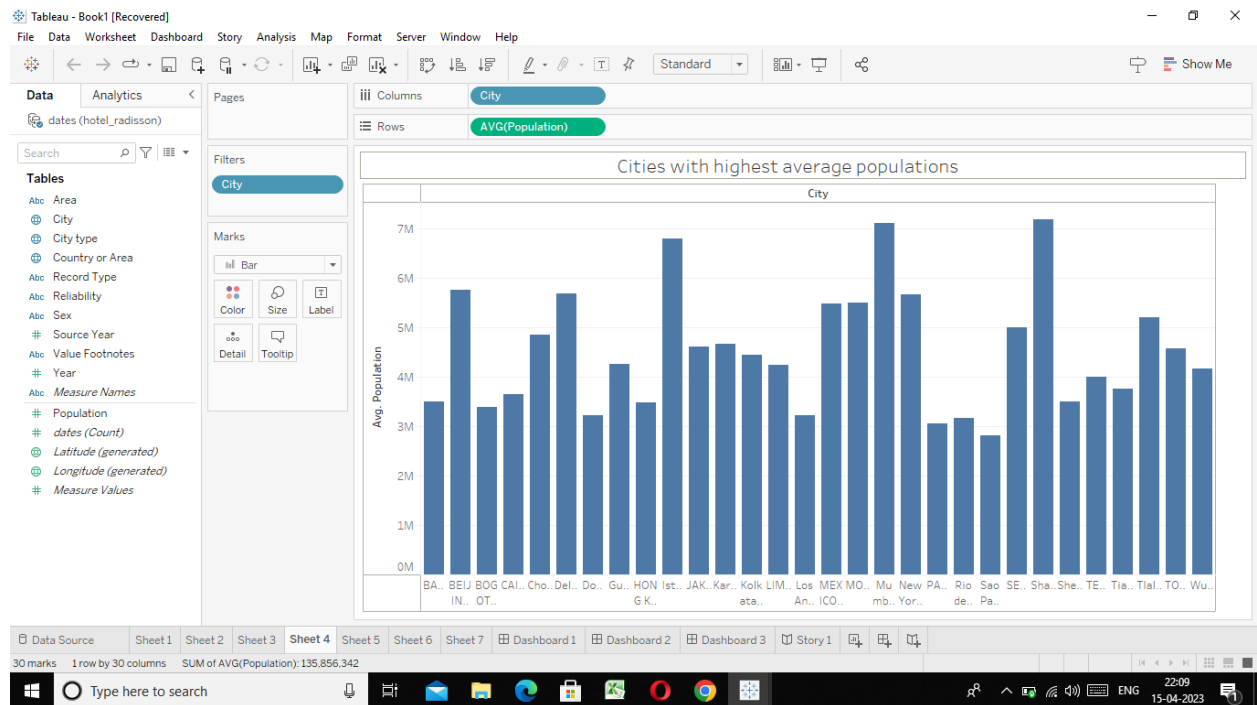


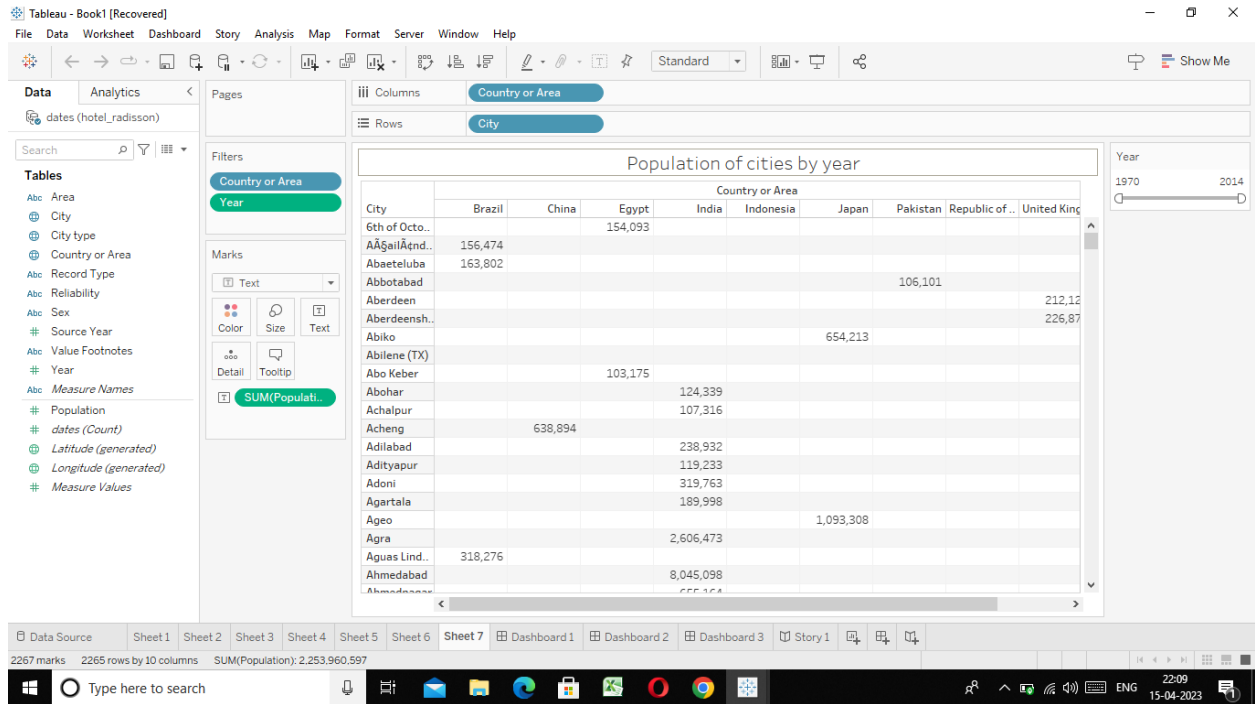
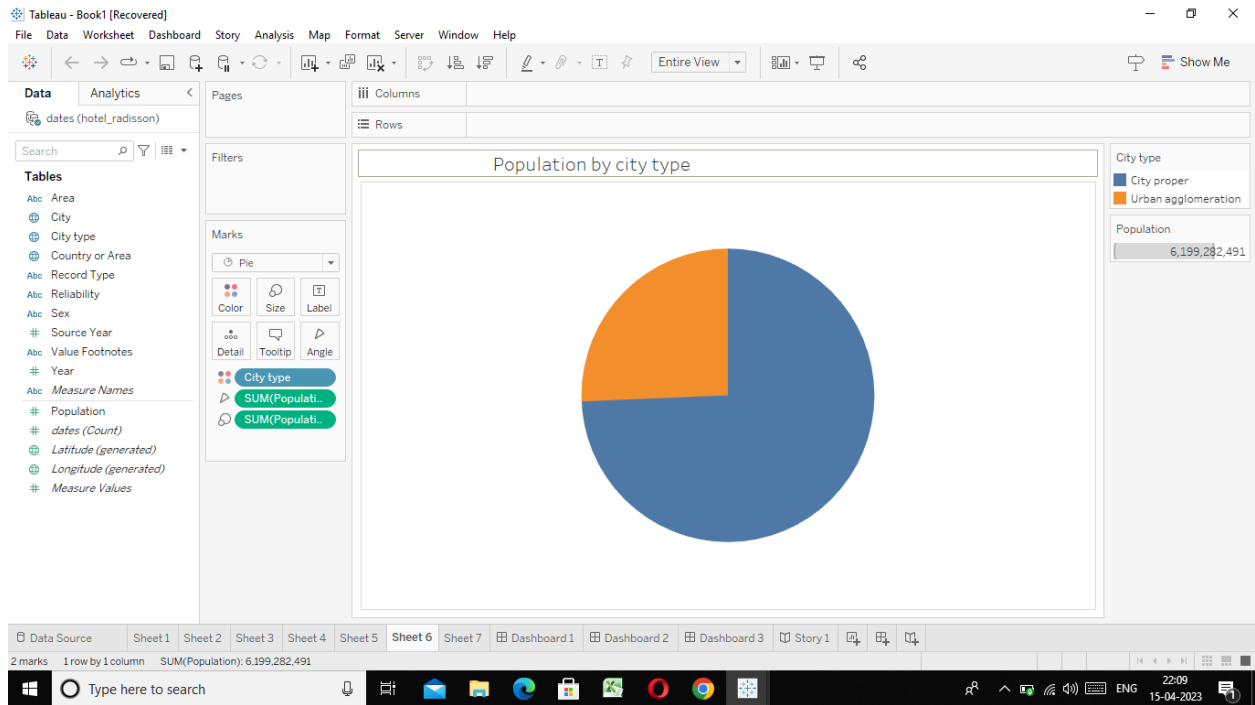


VISUALIZATIONS:

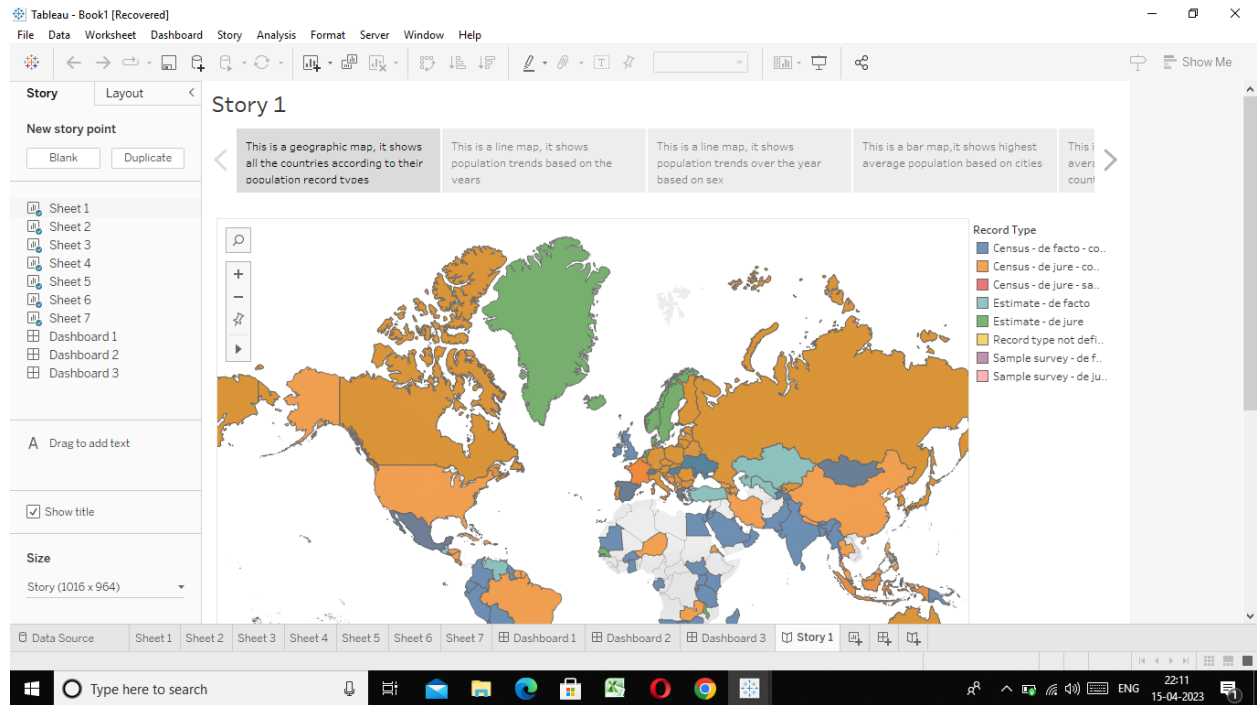




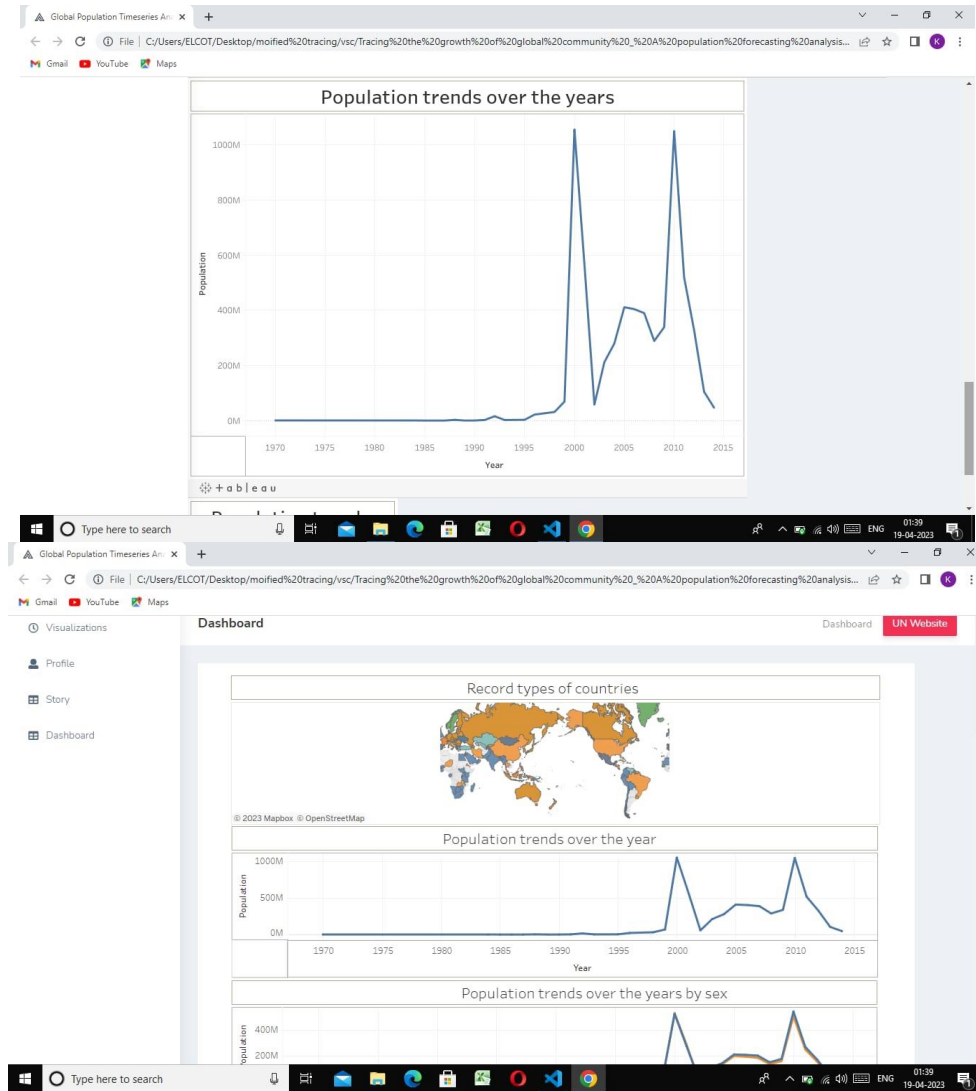


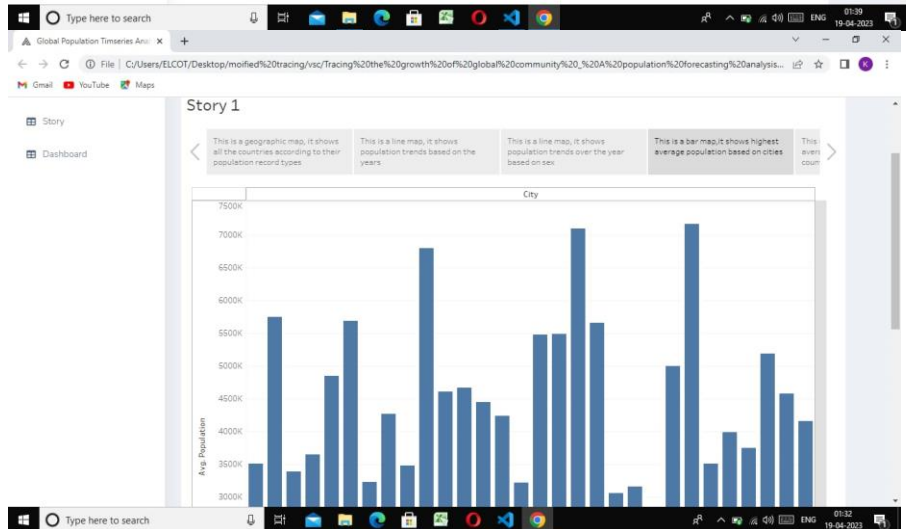
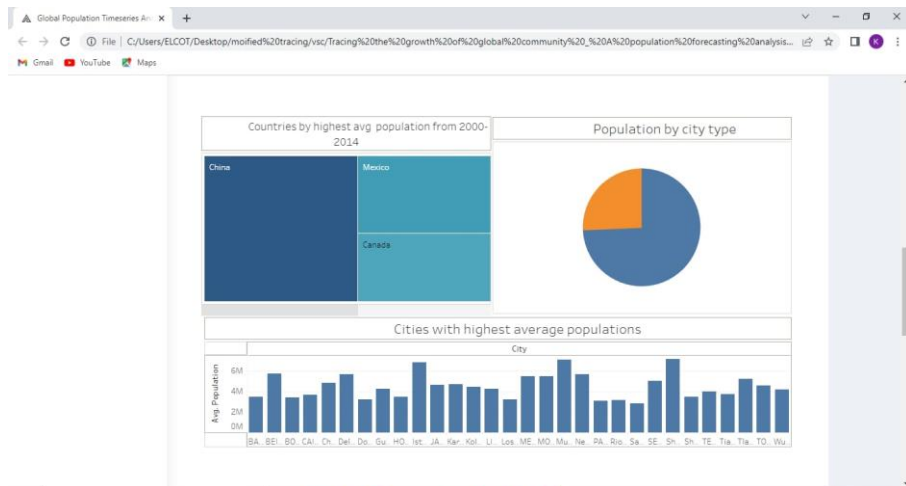
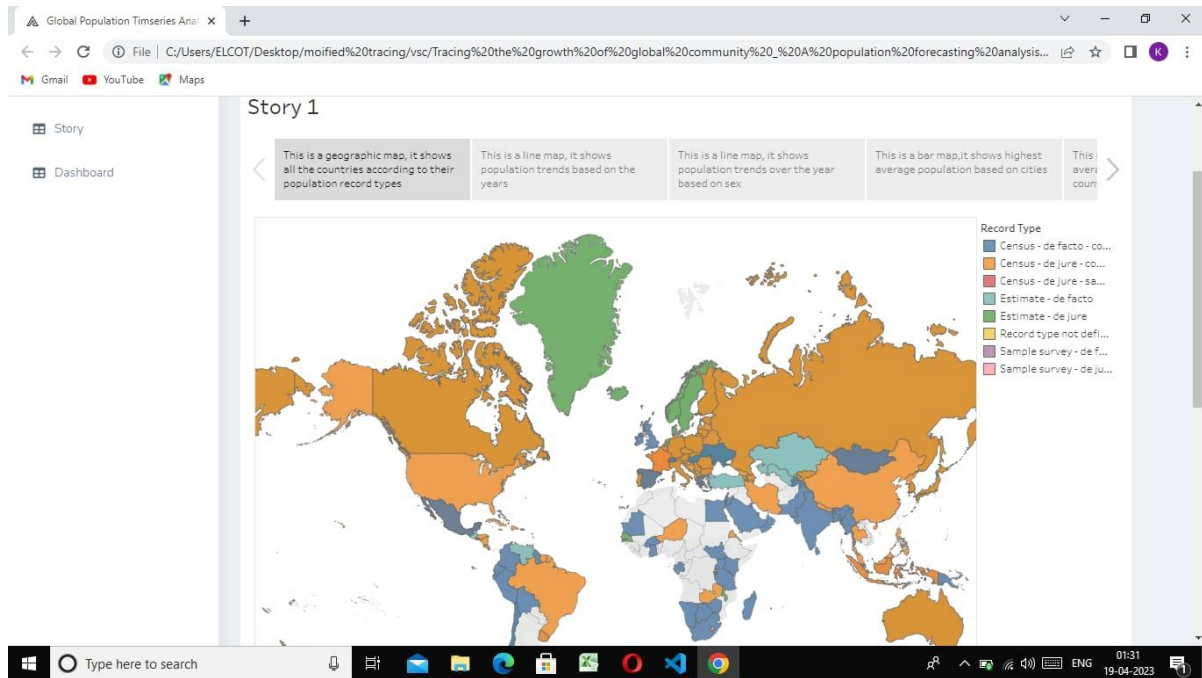


STORY:

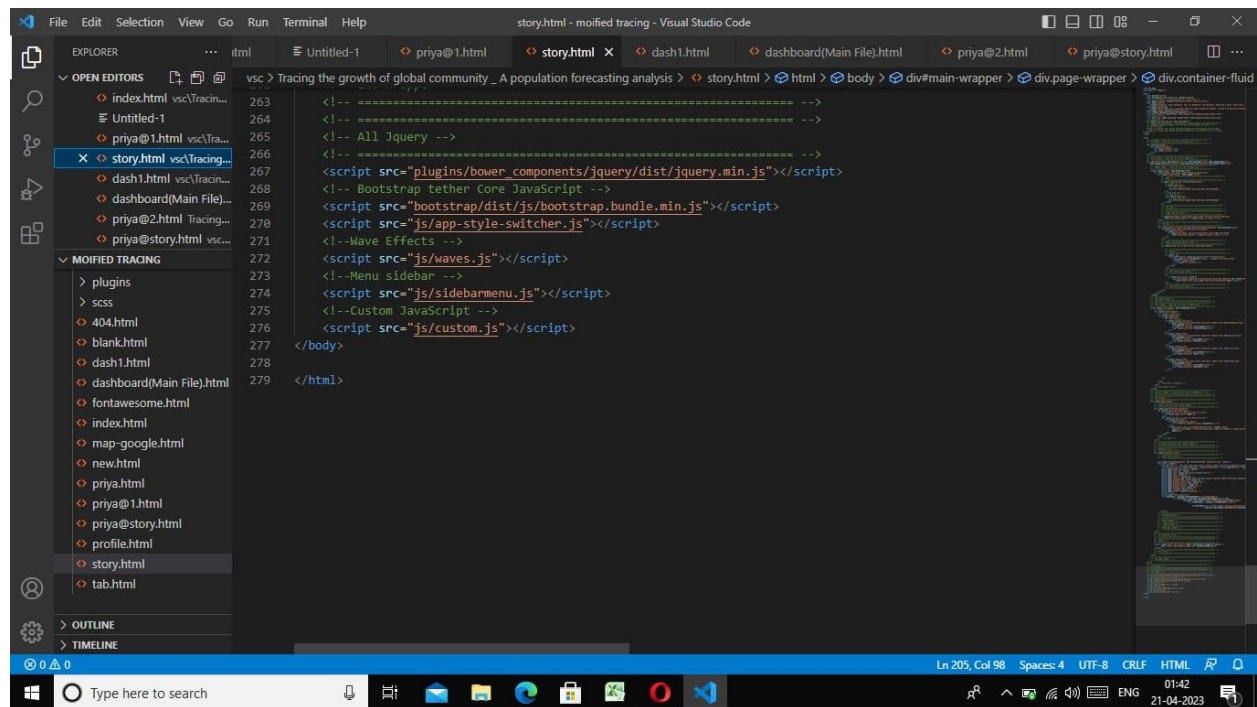


WEB INTEGRATION:





APPENDIX:



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264 <!-- ===== -->
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266 <!-- ===== -->
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268 <!-- Bootstrap tether Core JavaScript -->
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271 <!--Wave Effects -->
272 <script src="js/waves.js"></script>
273 <!--Menu sidebar -->
274 <script src="js/sidebarmenu.js"></script>
275 <!--Custom JavaScript -->
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278 </html>
279
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ADVANTAGES:

Population growth may have a positive effect on the economy. For example, an increase in the number of people in the United States will lead to more access to labor, which will lead to higher productivity, which then will lead to more goods being produced.

Advantages of population growth. More people leads to greater human capital.

Higher economic growth.

Economies of scale.

The efficiency of higher population density.

The improved demographic structure of society.

Critical mass.

DISADVANTAGES:

Higher population will lead to a greater consumption of non-renewable resources, leading to a faster depletion of natural resources. Higher population will lead to greater pollution levels in air, water and land. Higher pollution is associated with a range of health issues, such as cancer and asthma.

CONCLUSION:

Population projections, like master plans, must be revised quite frequently. It has been suggested in this report that several alternative projections be made on the basis of different sets of assumptions. It has also been recognized that in the last analysis, the planner must use as a working guide that population projection he considers most feasible. In making population projections, the planner need not be so much worried about errors in forecasting the numbers of persons (a five percent under or over-estimation of population should not disrupt a community!) but he should be concerned about an error in the kinds of anticipated persons. For example, in a community of anticipated 100,000 population, 5,000 additional persons could be absorbed; if all 5,000 additional persons were children of school age, however, the effects on community facilities might be disastrous.

There is no easy method to population forecasting. Some demographers feel that fertility and mortality rates are nearing some sort of stability. Should this actually happen, a series of formulae might be developed by which fertility and mortality might be projected, leaving migration as the field for most intensive scrutiny. The "stability" does not yet exist. Given though the planner of today must resort to "enlightened guesses", he must be aware of the many complex interacting forces that influence future population numbers, composition and place of residence.