

TRACING THE GROWTH OF GLOBAL CONNECTIVITY: A POPULATION
FORECASTING ANALYSIS

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INTRODUCTION

1.1 Overview

The world's population is more than three times larger than it was in the mid-twentieth century. The global human population reached 8.0 billion in mid-November 2022 from an estimated 2.5 billion people in 1950, adding 1 billion people since 2010 and 2 billion since 1998. The world's population is expected to increase by nearly 2 billion persons in the next 30 years, from the current 8 billion to 9.7 billion in 2050 and could peak at nearly 10.4 billion in the mid-2080s. This dramatic growth has been driven largely by increasing numbers of people surviving to reproductive age, the gradual increase in human lifespan, increasing urbanization, and accelerating migration. Major changes in fertility rate have accompanied this growth. These trends will have far-reaching implications for generations to come.

1.2 Purpose

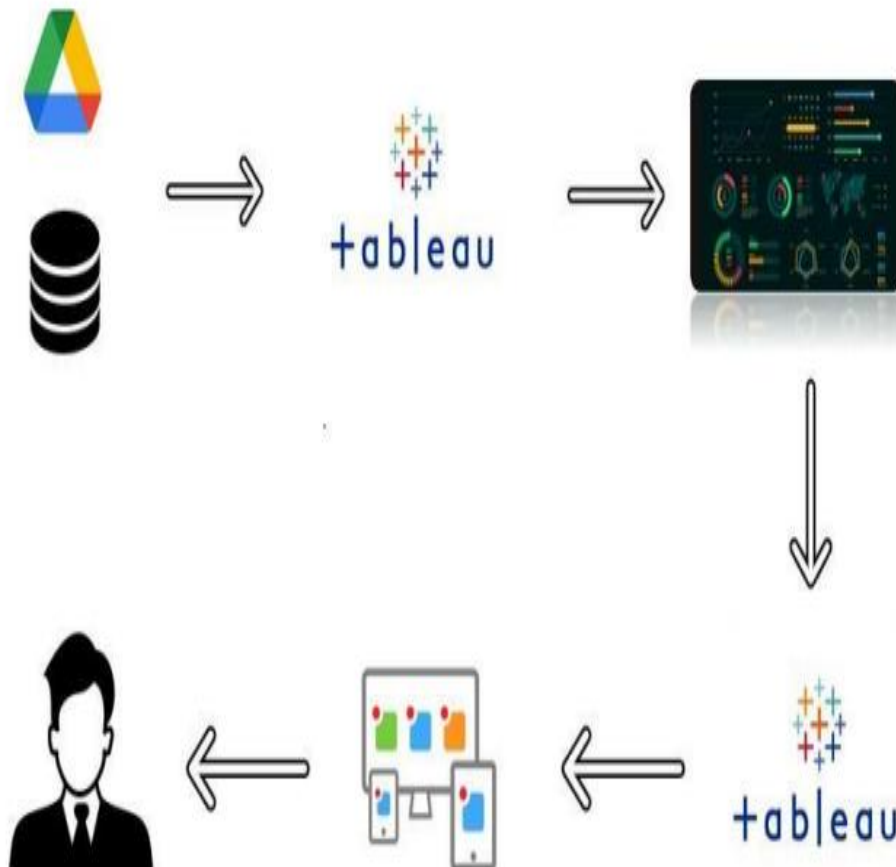
This method involves discovery of the factors that influence present and past population increase and decrease. On the basis of assumptions concerning the future of these factors, and of other factors that are just emerging in the community, projections of fertility, mortality and migration trends are made.

Population projections are 'what-if' scenarios that aim to show hypothetical developments of the population size and structure. These projections are based on a set of assumptions for future levels of fertility, mortality, and migration. They are presented for a long-term period, covering more than 50 years.

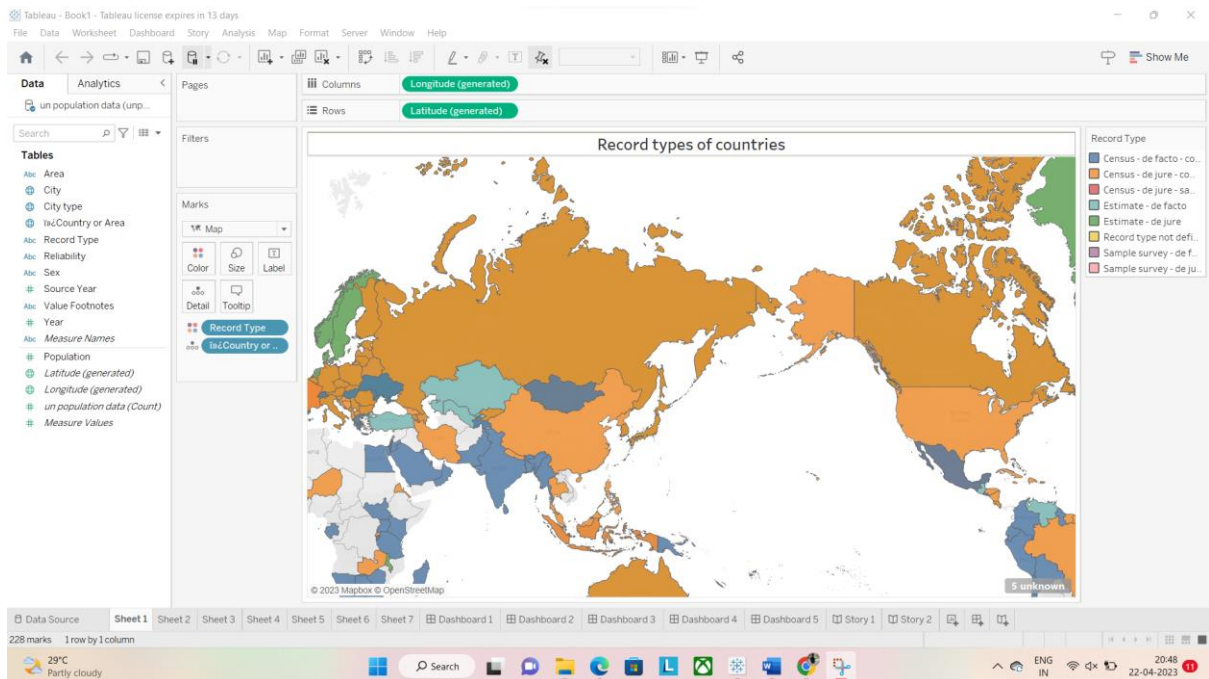
Demographic Analysis (DA) is a method used to evaluate the quality of the census. We use current and historical vital records, data on international migration, and Medicare records to produce national estimates of the population on April 1 by age, sex, the DA race categories, and Hispanic origin.

TECHNICAL ARCHITECTURE

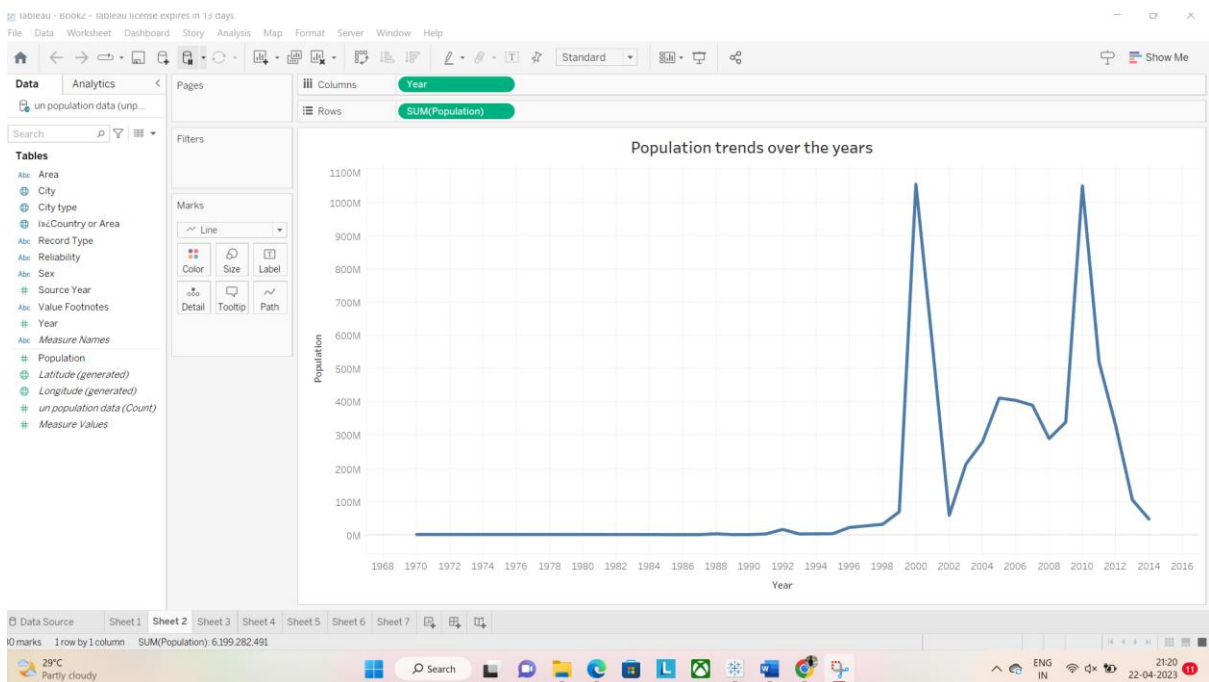
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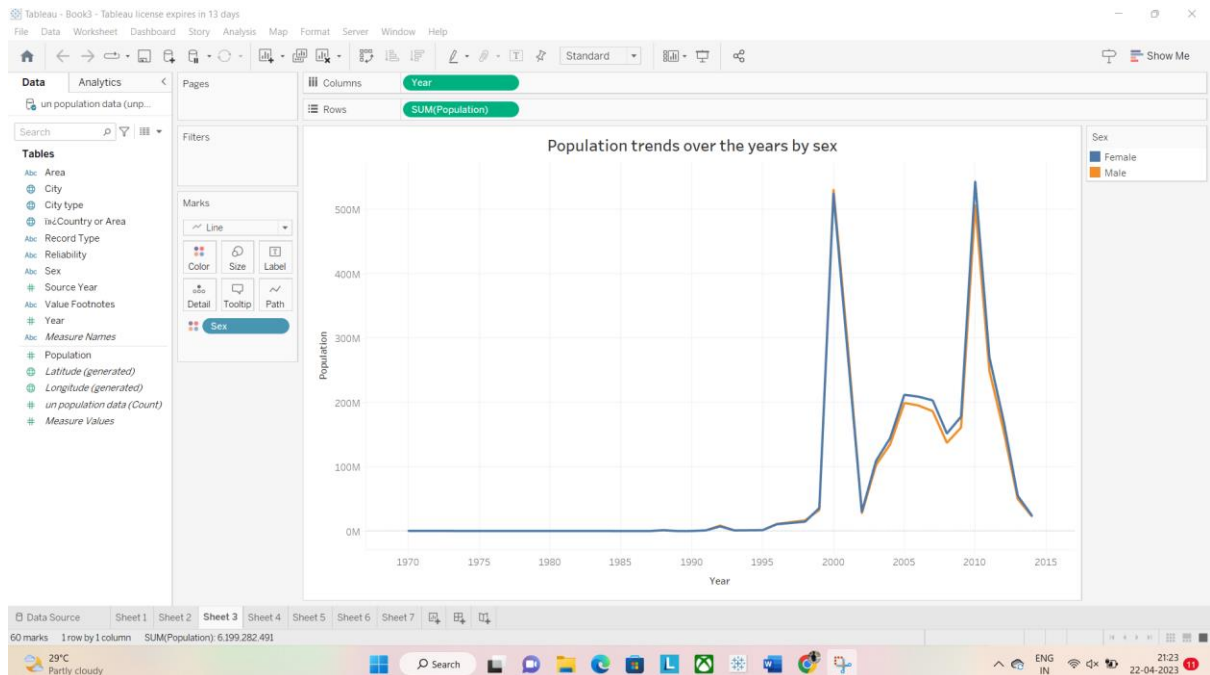
2.2 Sheet 1



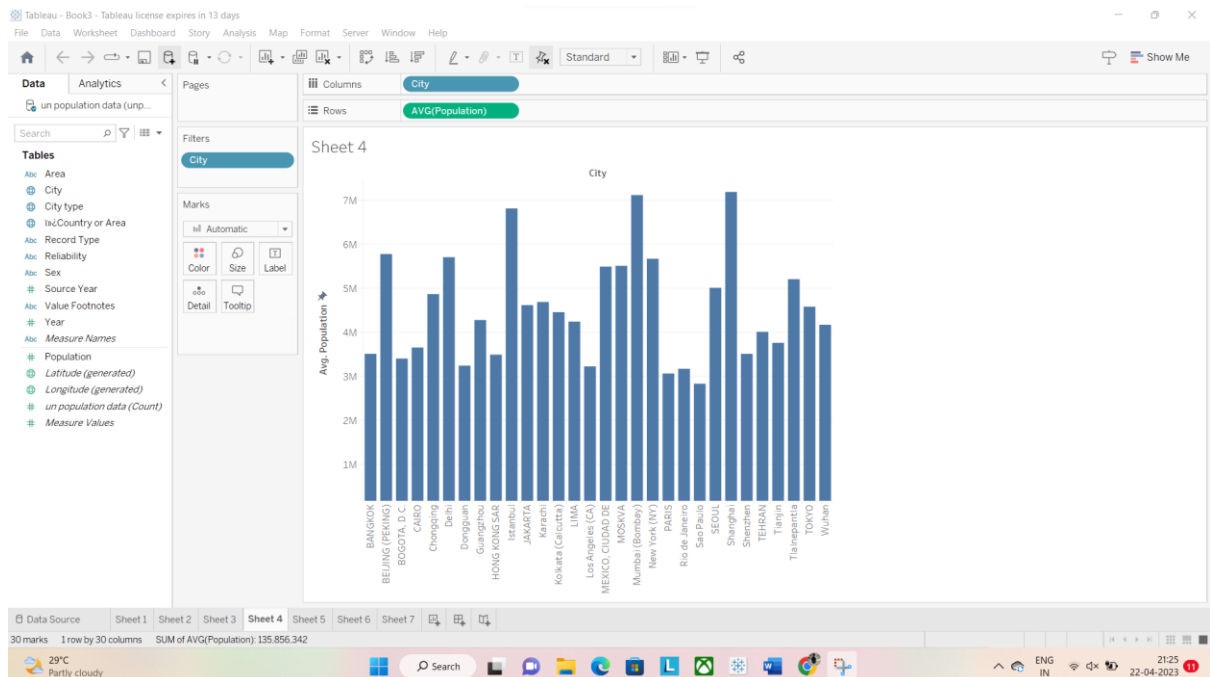
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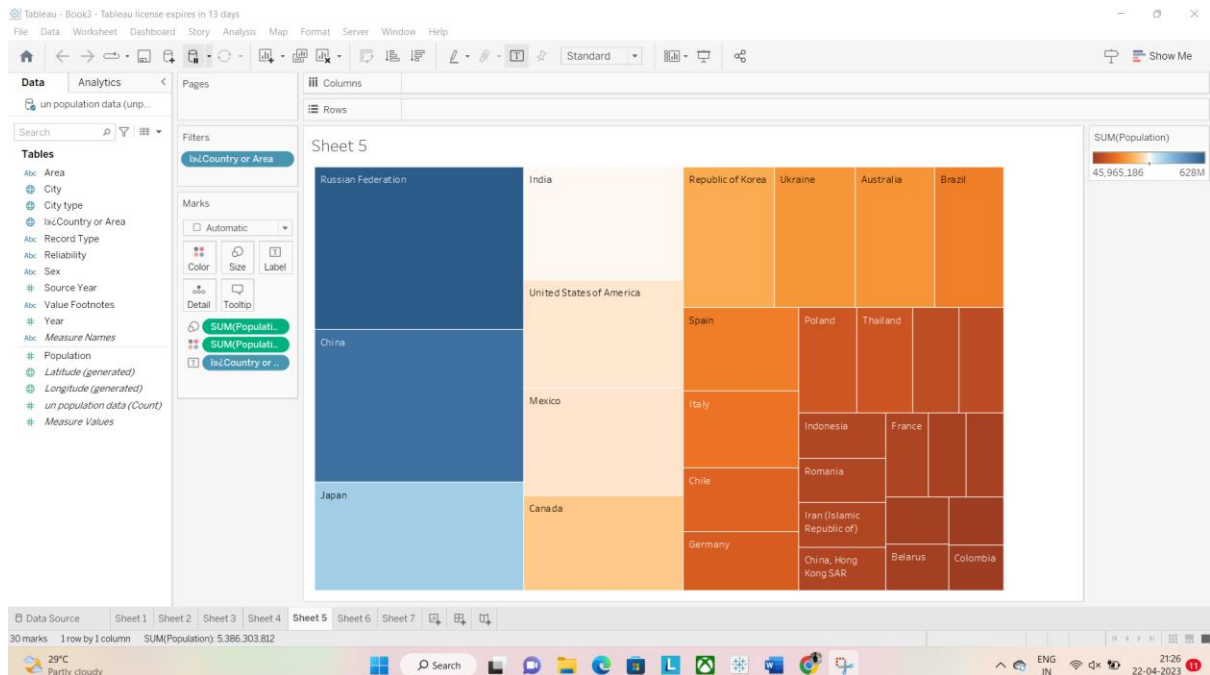
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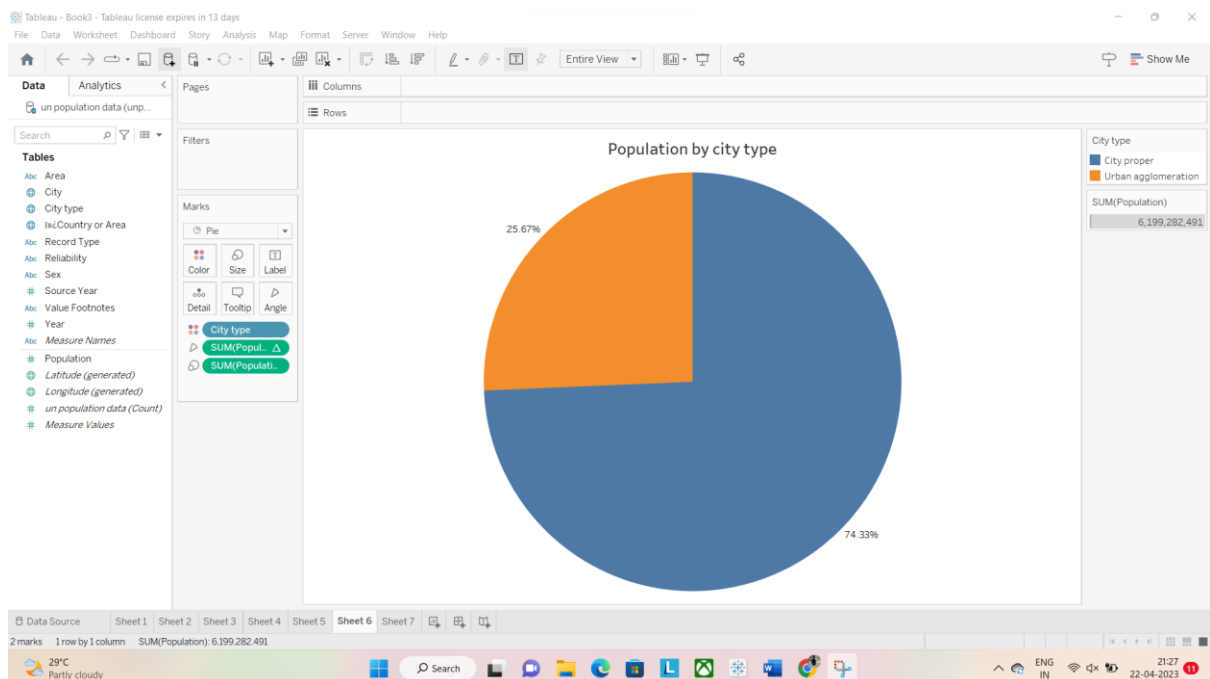
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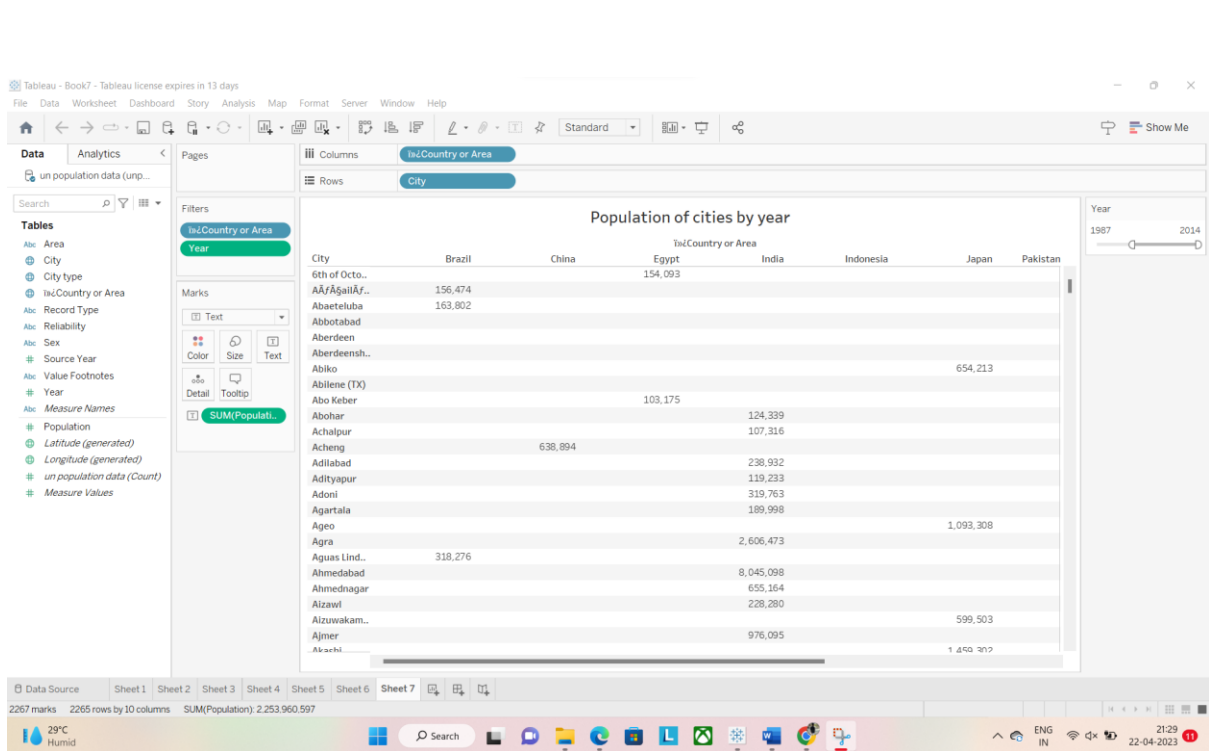
2.6 Sheet 5



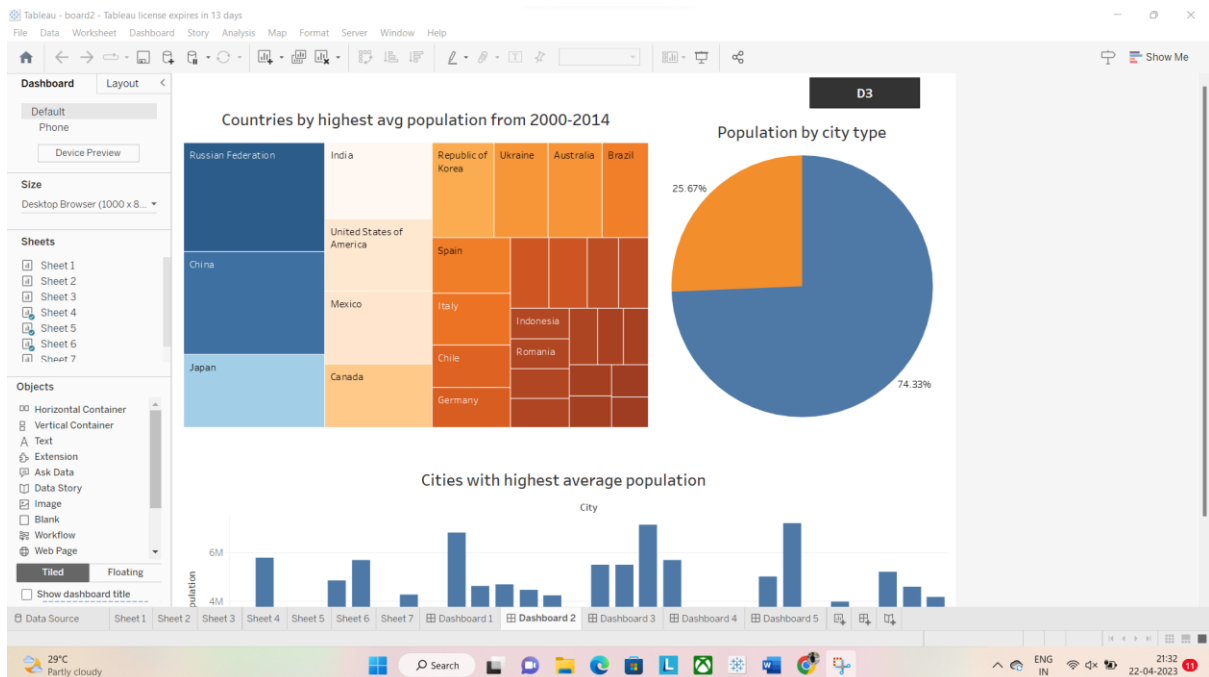
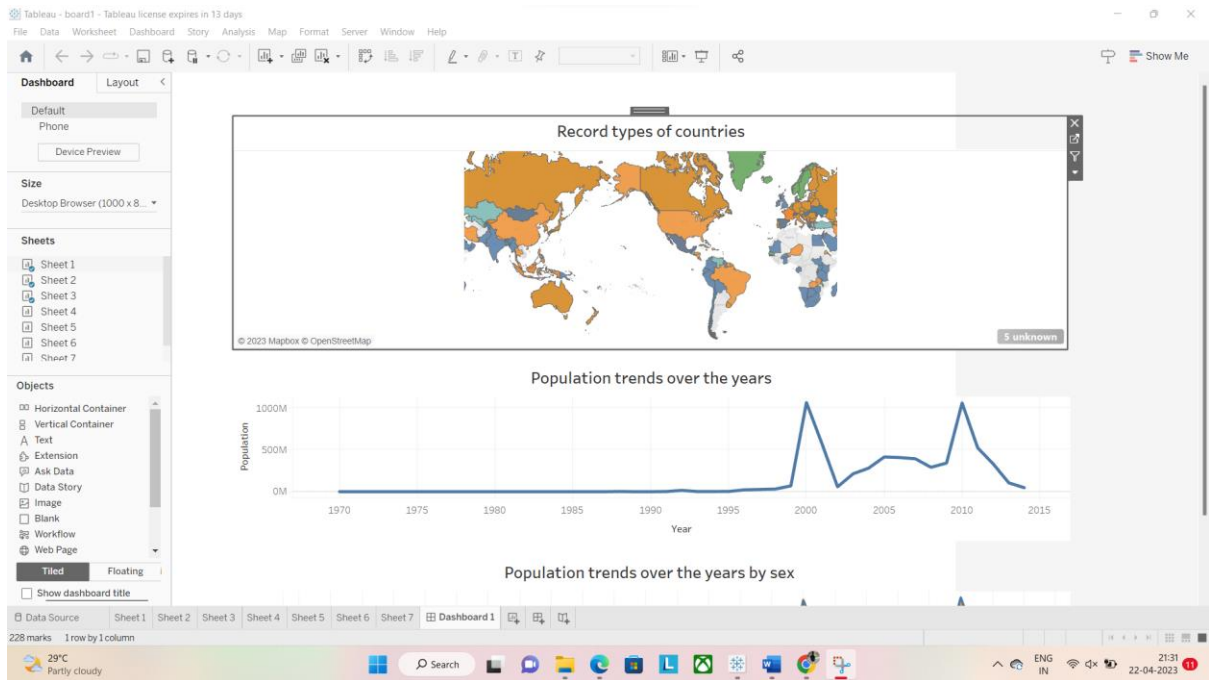
2.7 Sheet 6

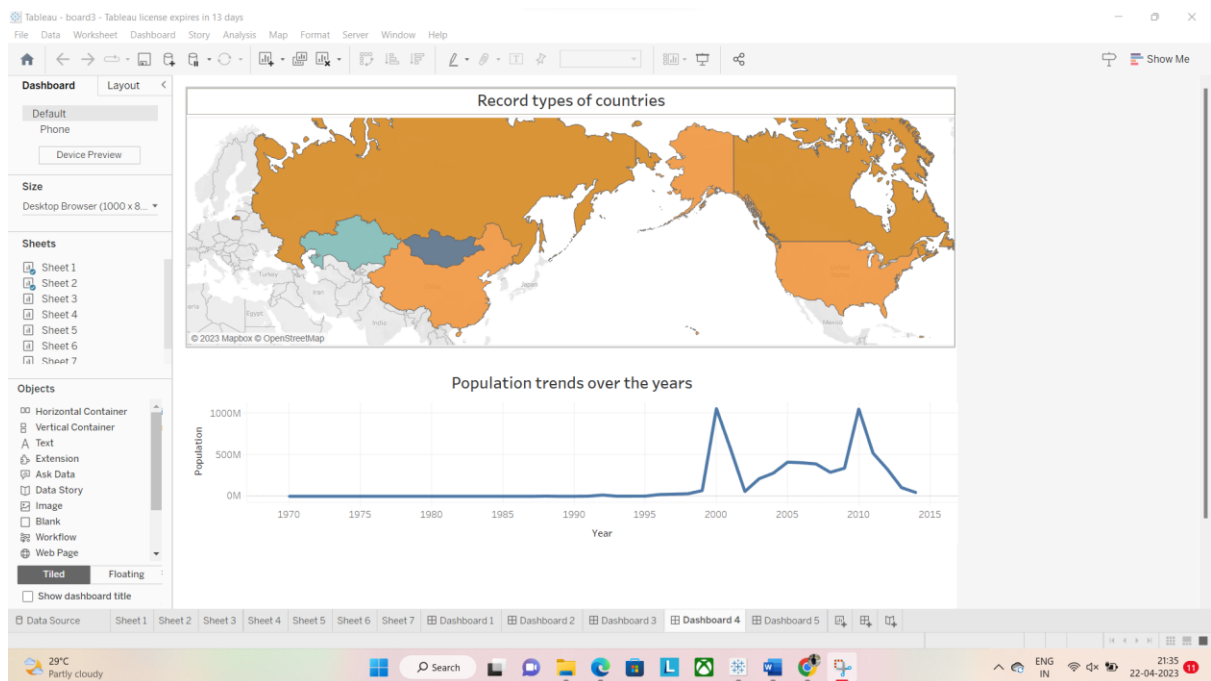
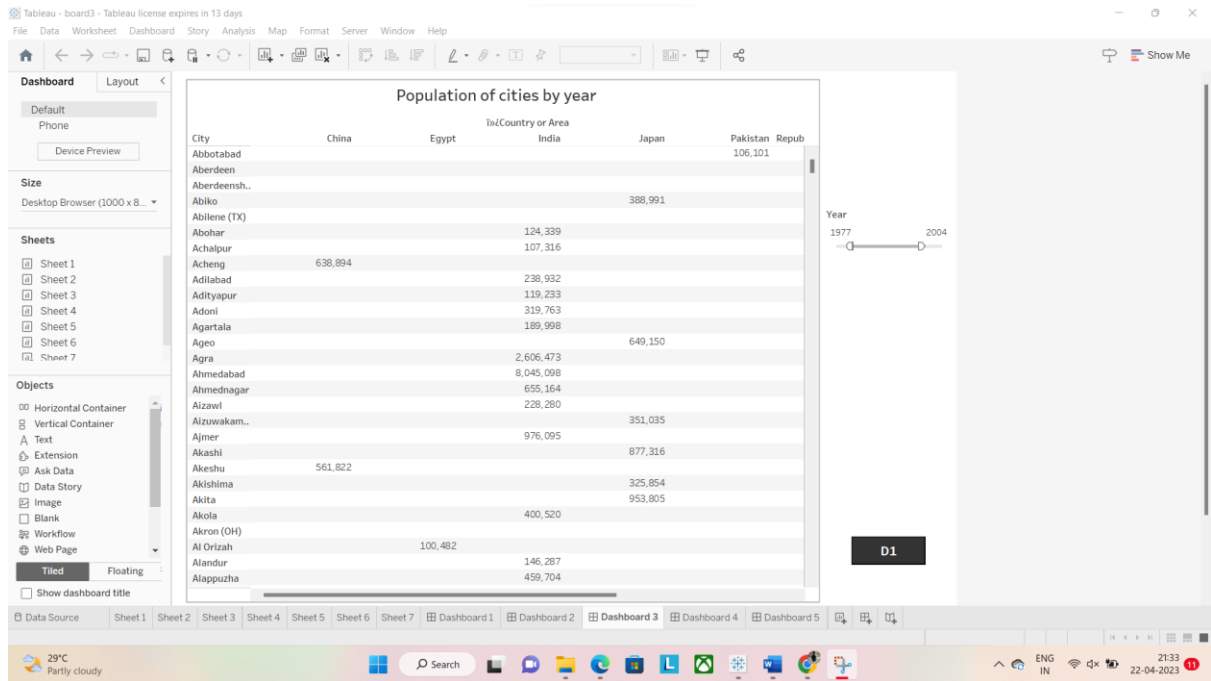


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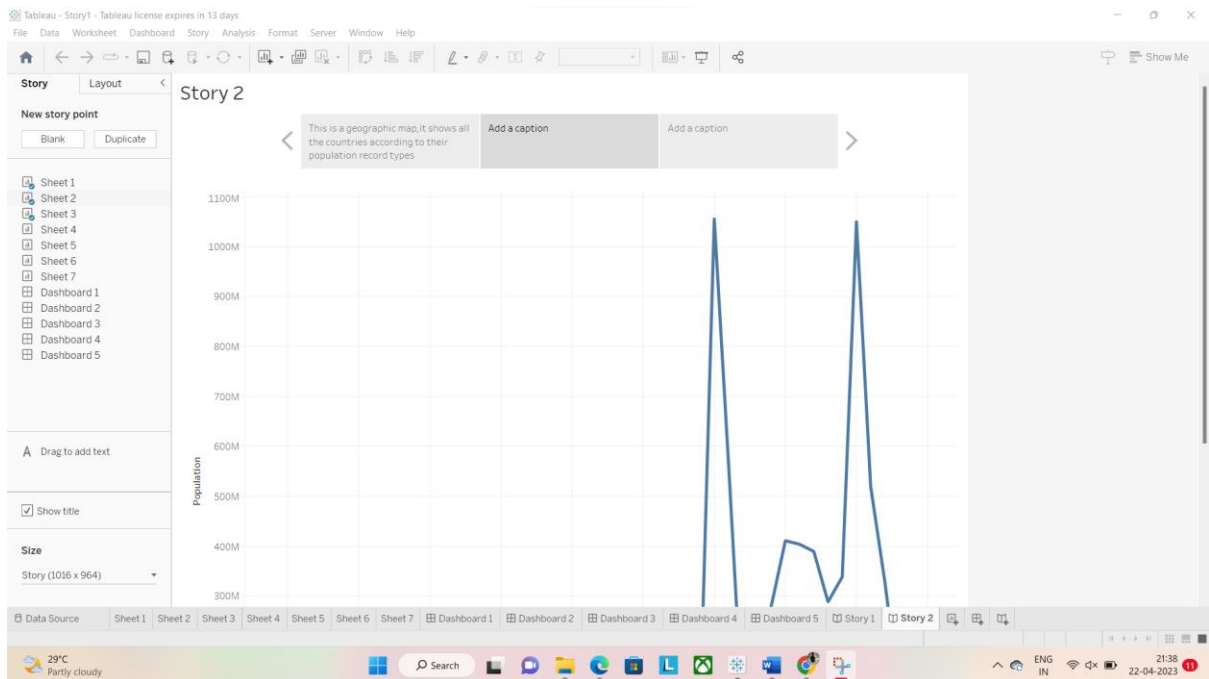
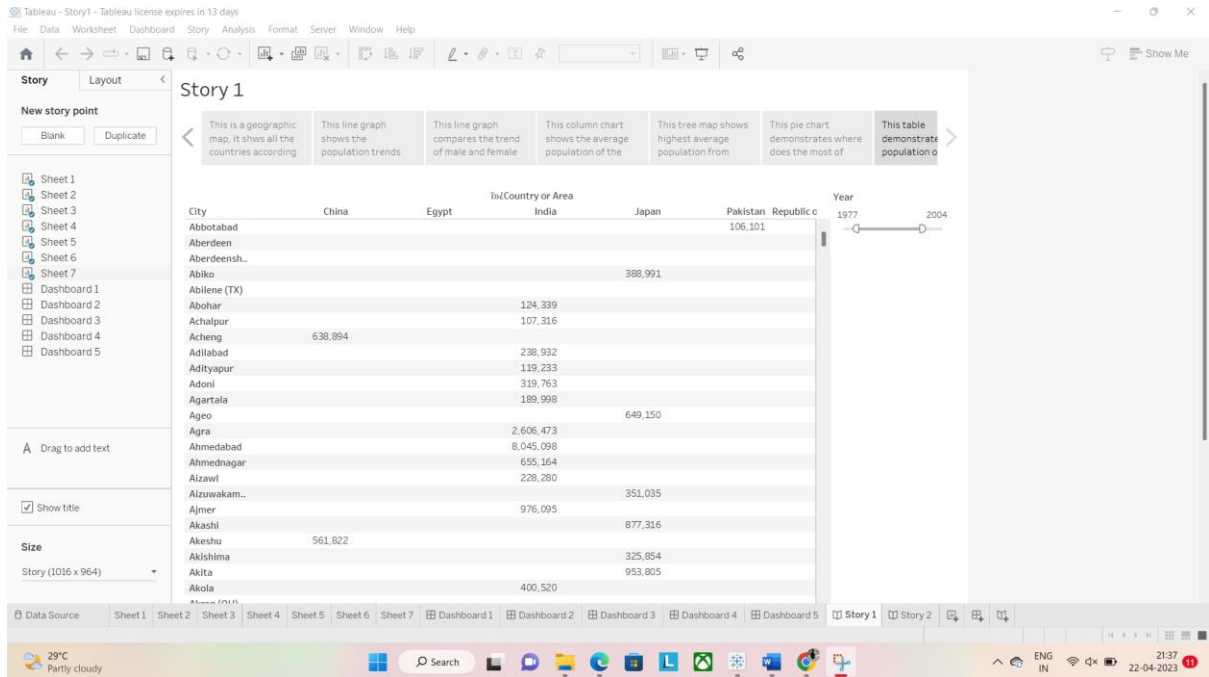


DASHBOARD





STORY



2.9 Advantages

1. You'll gain valuable insight

[Forecasting](#) gets you into the habit of looking at past and real-time data to predict future demand. And in doing so, you'll be able to anticipate demand fluctuations more effectively. But more than that, it'll give you insight into your company's health and provide you with an opportunity to course-correct or make adjustments.

2. You'll learn from past mistakes

You don't start from scratch after each forecast. Even if your prediction was nowhere close to what ended up coming to pass, it gives you a starting point. It's common to review where and why things didn't happen the way you predicted. Your forecasts should eventually improve. But more than that, you'll get into the habit of reflecting upon past performance as a whole. And self-reflection can be a powerful driver of company growth.

3. It can decrease costs

When done right, anticipating demand will help you tweak your processes to increase efficiency all along the supply chain. Because you're better able to predict what customers will want and when they'll want it, you may also be able to decrease excess inventory levels, thus increasing overall profitability.

2.10 Disadvantages

1. Forecasts are never 100% accurate

Let's face it: it's hard to predict the future. Even if you have a great process in place and forecasting experts on your payroll, your forecasts will never be spot on. Some products and markets simply have a high level of volatility. And in general, there is just an endless number of factors that influence demand.

2. It can be time-consuming and resource-intensive

Forecasting involves a lot of data gathering, data organizing, and coordination. Companies typically employ a team of demand planners who are responsible for coming up with the forecast. But in order to do this well, demand planners need substantial input from the sales and marketing teams. In addition, it's not uncommon for processes to be manual and labor-intensive, thus taking up a lot of time. Fortunately, if you have the right technology in place, this is much less of an issue.

3. It can also be costly

On a related note, hiring a team of demand planners is a significant investment. When you add to that the cost of using good quality tools, upfront costs can add up. But investing in advanced software, high-quality talent and solid forecasting processes is just that: an investment. We're confident you'll see a return when all of that is done right. Forecasting is a business practice that every company engages in to one extent or another. And it can be hugely valuable, providing those companies who have implemented a solid forecasting process with a leg up on their competition. What's more, even the disadvantages can be overcome with the right people, technology and processes. So learn how partnering with our Forecast Xperts and implementing our Atlas Suite can make a difference. [Schedule a free consultation with us now.](#)

CONCLUSION

Proper demand forecasting enables better planning and utilization of resources for business to be competitive. Forecasting is an integral part of demand management since it provides an estimate of the future demand and the basis for planning and making sound business decisions

Demand forecasting helps businesses make informed decisions that affect everything from inventory planning to supply chain optimization. With customer expectations changing faster than ever, businesses need a method to forecast demand accurately.

If demand decreases and supply remains unchanged, a surplus occurs, leading to a lower equilibrium price. If demand remains unchanged and supply increases, a surplus occurs, leading to a lower equilibrium price.