INTRODUCTION

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.

PROBLEM DEFINITION

The rates of population growth are not the same, of course, in all parts of the world. Among the industrialized countries, Japan and most of the countries of Europe are now growing relatively slowly—doubling their populations in 50 to 100 years. Another group of industrialized countries—the United States, the Soviet Union, Australia, New Zealand, Canada, and Argentina—are doubling their populations in 30 to 40 years, approximately the world average. The pre-industrial, low-income, and less-developed areas of the world, with two thirds of the world's population—including Asia (except Japan and the Asiatic part of the Soviet Union), the southwestern Pacific islands (principally the Philippines and Indonesia), Africa (with the exception of European minorities), the Caribbean Islands, and Latin America (with the exception of Argentina and Uruguay)—are growing at rates ranging from moderate to very fast. Annual growth rates in all these areas range from one and one-half to three and one-half per cent, doubling in 20 to 40 years.

EMPATHY MAP

Visualizing user attitudes and behaviors in an empathy map helps UX teams align on a deep understanding of end users. The mapping process also reveals any holes in existing user data.

An **empathy map** is a collaborative visualization used to articulate what we know about a particular type of user. It externalizes knowledge about users in order to 1) create a shared understanding of user needs, and 2) aid in decision making.

This article is a guide to empathy mapping and its uses.

Format

Traditional empathy maps are split into 4 quadrants (Says, Thinks, Does, and Feels), with the user or persona in the middle. Empathy maps provide a glance into who a user is as a whole and are **not** chronological or sequential.

Our users are complex humans. It is natural (and extremely beneficial) to see juxtaposition between quadrants. You will also encounter inconsistencies — for example, seemingly positive actions but negative quotes or emotions coming from the same user. This is when empathy maps become treasure maps that can uncover nuggets of understanding about or user. It is our job as UX professionals to investigate the cause of the conflict and resolve it.

ADVANTAGES & DISADVANTAGES

ADVANTAGES

More people leads to greater human capital. If there are more people, the probability of finding a genius like Einsterin, Marie Curie, Beethoven increase. These exceptional people can lead to technological and cultural masterpieces which enrich our lives. The past 200 years have shown exponential growth in technical development and innovation. There are many factors behind this, but the world's growing population means we have a bigger pool of human capital and the possibility of these cutting edge discoveries increase.

Higher economic growth. Population growth will lead to economic growth with more people able to produce more goods. It will lead to higher tax revenues which can be spent on public goods, such as health care and environmental projects

DISADVANTAGES

Congestion. Too many people in a small space will lead to various types of congestion. Road congestion is a major problem across the world. One study suggested congestion cost the EU €111bn (1% of GDP) in 2012. WIth population growth, the costs of congestion will only increase leading to time lost, more pollution and lost output.

Water shortages. Already up to 40% of the world's population face water scarcity and the risk of drought. According to the UN water shortages could lead to 700 million people at the risk of displacement. A growing population will put pressure on scarce water supplies and this is a factor behind many minor and major conflicts with countries having to find ways around the shortage of water.

APPLICATION

The Department of Economic and Social Affairs of the United Nations Secretariat is a vital interface between global policies in the economic, social and environmental spheres and national action. The Department works in three main interlinked areas: (i) it compiles, generates and analyses a wide range of economic, social and environmental data and information on which States Members of the United Nations draw to review common problems and take stock of policy options; (ii) it facilitates the negotiations of Member States in many intergovernmental bodies on joint courses of action to address ongoing or emerging global challenges; and (iii) it advises interested Governments on the ways and means of translating policy frameworks developed in United Nations conferences and summits into programmes at the country level and, through technical assistance, helps build national capacities.

CONCLUSION

The Earth's current population is almost 7.6 billion people, and it is expanding. **It is expected to surpass 8 billion people by 2025, 9 billion by 2040, and 11 billion by 2100**. The population is quickly increasing, far surpassing our planet's ability to maintain it, given existing habits.

World Population Trends

In 2011, the global population reached the 7 billion mark, 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.

FUTURE SCOPE

World population growth – This article is focusing on the history of population growth up to the present. We show how the world population grew over the last several thousand years and we explain what has been driving this change.

Life expectancy – Improving health leads to falling mortality and is therefore the factor that increases the size of the population. Life expectancy, which measures the age of death, has doubled in every region in the world as we show here.

Fertility rates – Rapid population growth has been a temporary phenomenon in many countries. It comes to an end when the average number of births per woman – the fertility rate – declines. In the article we show the data and explain why fertility rates declined.

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File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Dashboard Layout

Default
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Device Preview

Size

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Sheets

- Record types of...
- Population tren...
- Popultion Trend...
- Cities with ...
- Countries by ...
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- Population of ...

Objects

- Horizontal Container
- Vertical Container
- Text
- Extension
- Ask Data
- Data Story
- Image
- Blank
- Workflow
- Web Page

Tiled Floating

Show dashboard title

Population of cities by Year

City	Country or Area								
	Brazil	China	Egypt	India	Japan	Pakistan	Republic of ..	United King..	United Stat.
6th of October City			154,093						
AÂ§ailÃ¢ndia	156,474								
Abaeteluba	163,802								
Abbotabad						106,101			
Aberdeen								212,125	
Aberdeenshire								226,871	
Abiko					654,213				
Abilene (TX)									232,993
Abo Keber			103,175						
Abohar				124,339					
Achalpur				107,316					
Acheng		638,894							
Adilabad				238,932					
Adityapur				119,233					
Adoni				319,763					
Agartala				189,998					
Ageo					1,093,308				
Agra				2,606,473					
Aguas Lindas de GoiÃis	318,276								
Ahmedabad				8,045,098					
Ahmednagar				655,164					
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Data Analytics

UN population data (UN ...

Search

Tables

- Abc Area
- City
- City type
- City type (group)
- Country or Area
- Abc Record Type
- Abc Reliability
- Abc Sex
- # Source Year
- Abc Value Footnotes
- # Year
- Abc *Measure Names*
- # Population
- *Latitude (generated)*
- *Longitude (generated)*
- # *UN population data (Count)*
- # *Measure Values*

Pages

Filters

Marks

Line

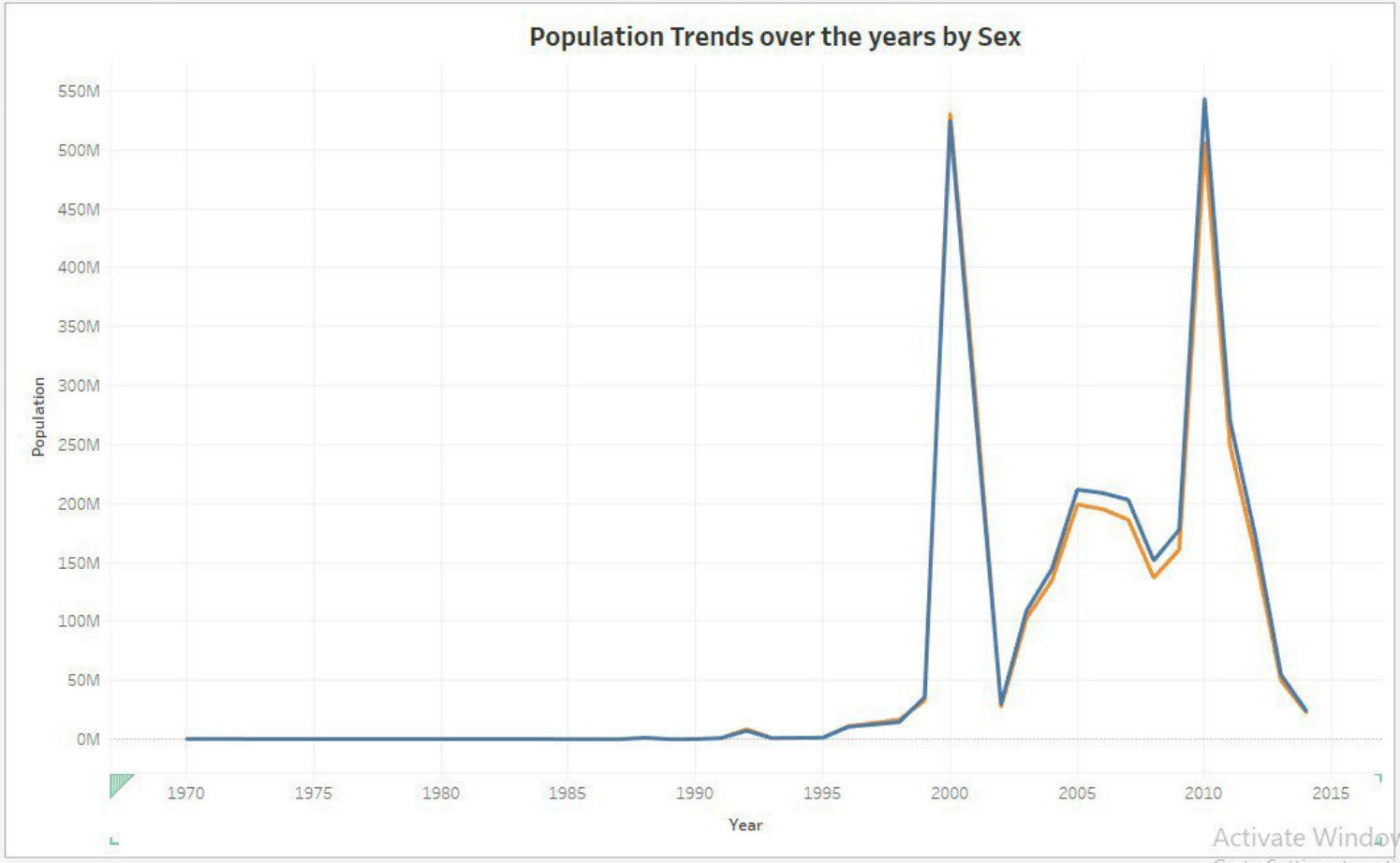
Color Size Label

Detail Tooltip Path

Sex

Columns: Year

Rows: SUM(Population)



Sex
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Objects

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- Web Page

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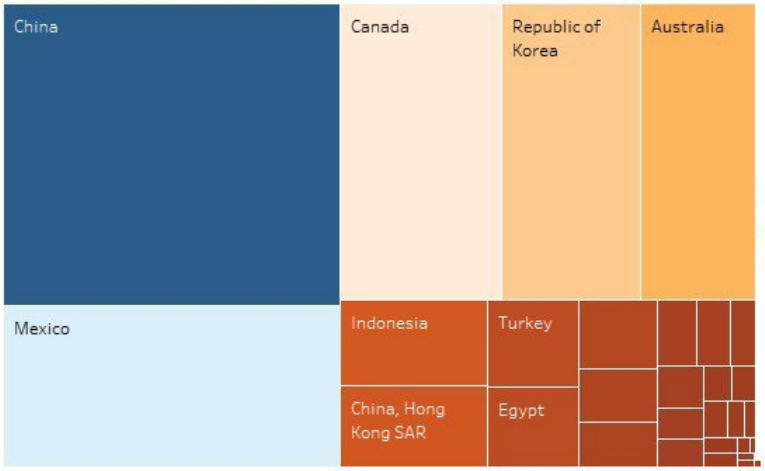
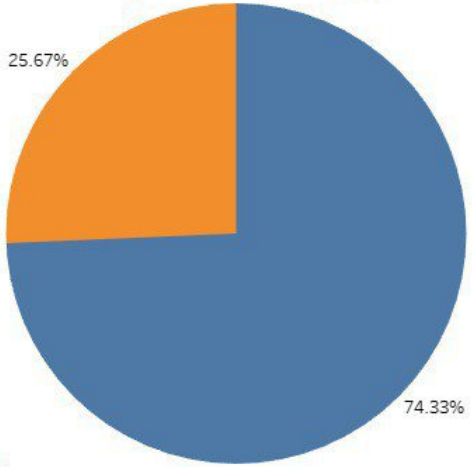
Show dashboard title

Countries by highest avg population from 2000-2014



Population by city type



Cities with highest average populations

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Show Me

Story Layout

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- Population tren...
- Popultion Trend...
- Cities with ...
- Countries by ...
- Population by ci...
- Population of ...
- Dashboard 1
- Dashboard 2
- Dashboard 3

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Size

Story (1016 x 964)

Story 1

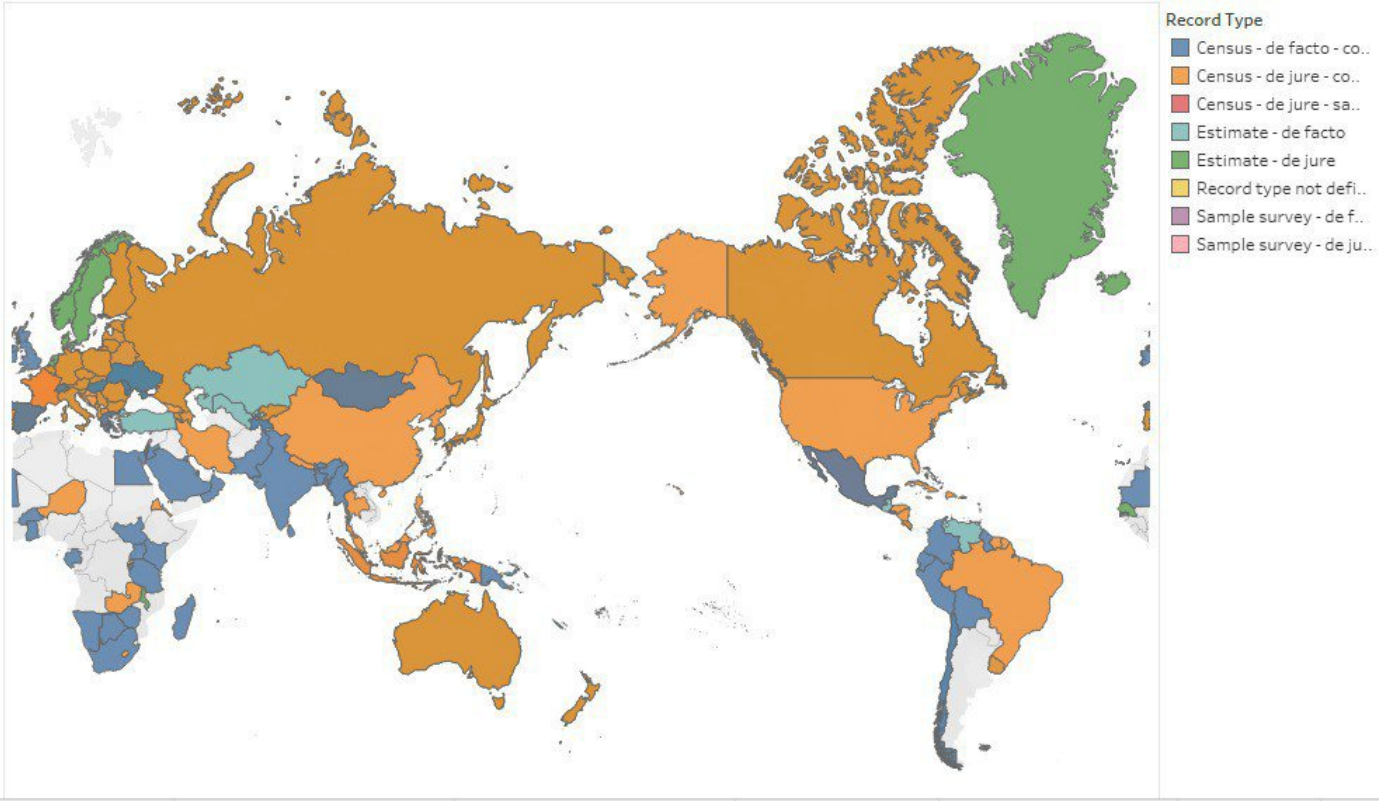
This is a Geographic map,it shows all the countries according to their population record types

This line graph shows the population trends ovr the years

This line graph compares the trend of male and female

This colunm chart shows the average population of the cities

This tree ma average pop countries



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Dashboard Layout

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- Cities with ...
- Countries by ...
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Objects

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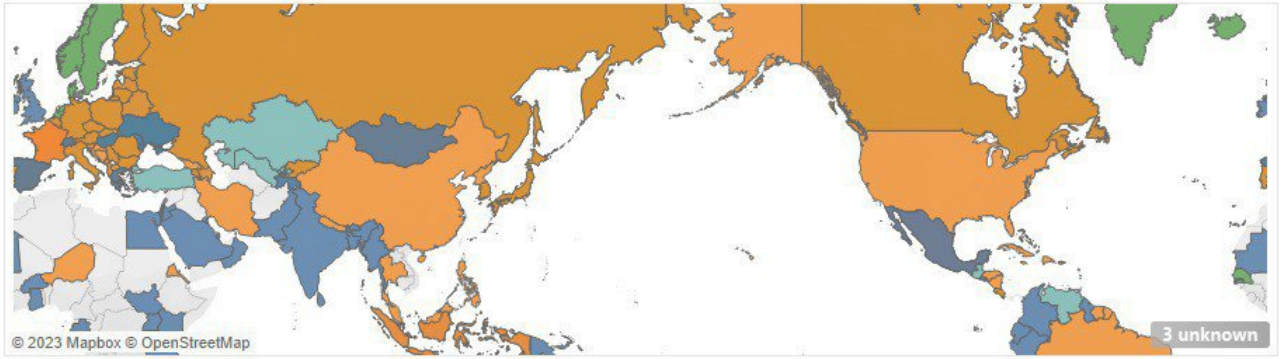
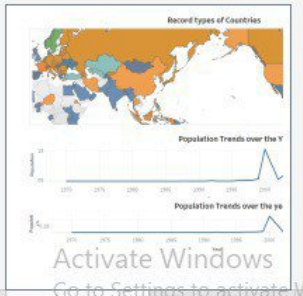
Record types of Countries



Population Trends over the Years

Population Trends over the years by Sex

D2



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Data Analytics

UN population data (UN ...

Search

Tables

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- Value Footnotes
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- *Measure Names*
- Population
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- *Measure Values*

Pages

Filters

Country or Area

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Columns: Country or Area

Rows: City

Population of cities by Year

	Country or Area								
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Abo Keber			103,175						
Abohar				124,339					
Achalpur				107,316					
Acheng		638,894							
Adilabad				238,932					
Adityapur				119,233					
Adoni				319,763					
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Ageo					1,093,308				
Agra				2,606,473					
Aguas Lindas de GoiÃis	318,276								
Ahmedabad				8,045,098					
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2218 marks 2216 rows by 9 columns SUM(Population): 2,180,651,855 vidhya r

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Data Analytics

UN population data (UN ...

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Pages

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Map

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Record Type

Country or Area

Columns: Longitude (generated)

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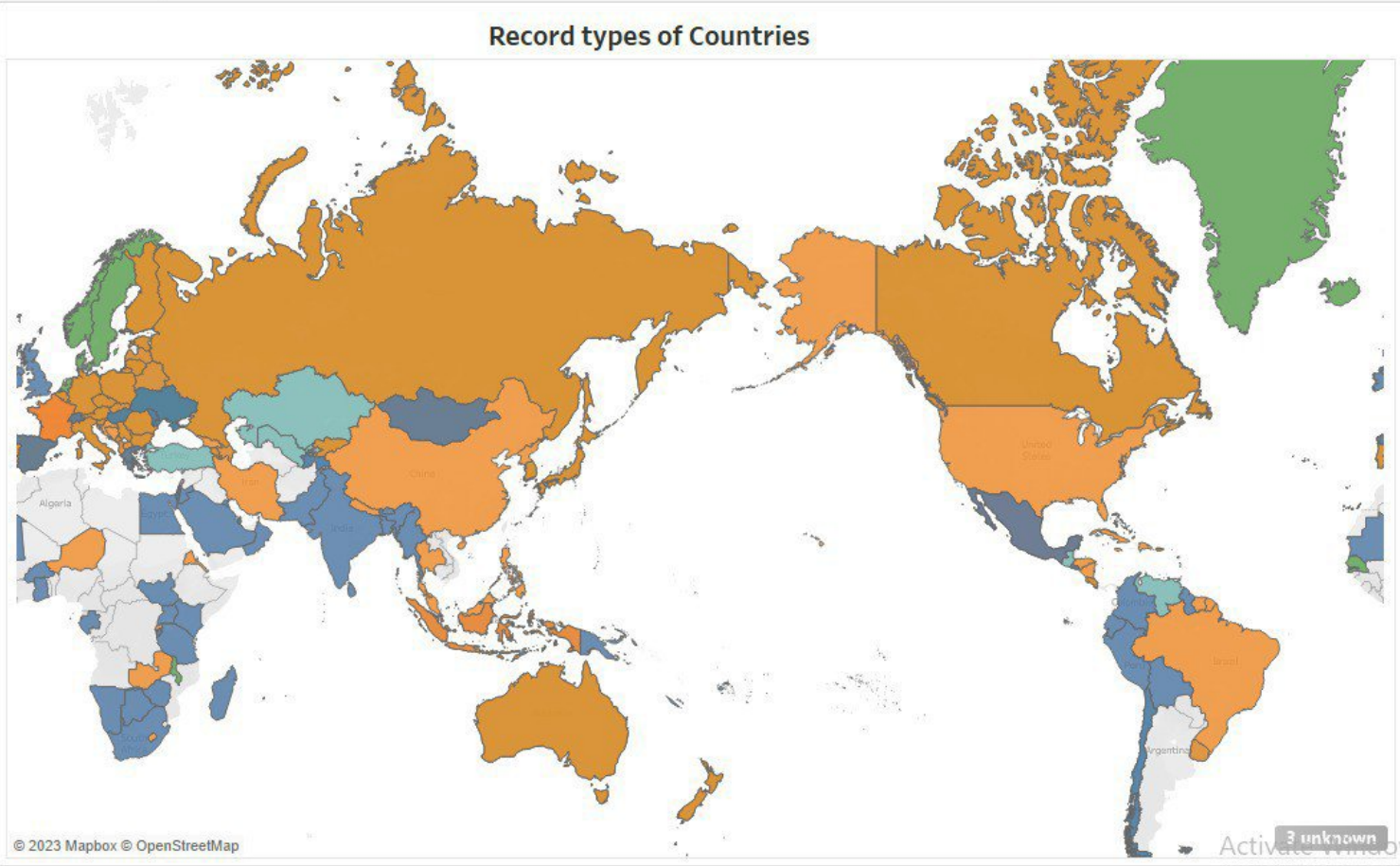

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vidhya r

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Data Analytics

UN population data (UN ...

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Tables

- Area
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- *UN population data (Count)*
- *Measure Values*

Pages

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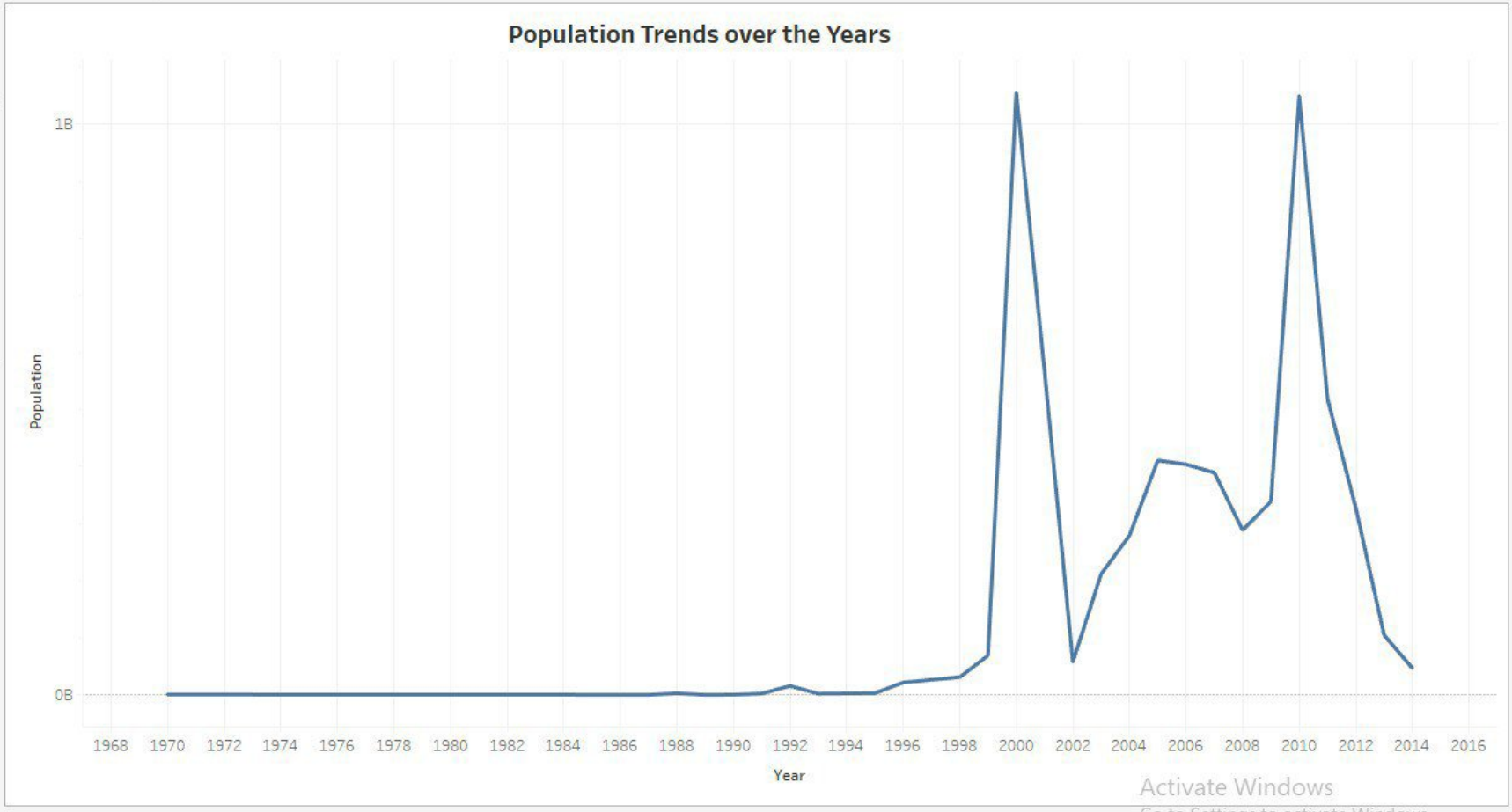
Detail Tooltip Path

Columns: Year

Rows: SUM(Population)



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30 marks 1 row by 1 column SUM(Population): 6,199,282,491

vidhya r

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Search

Tables

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- Record Type
- Reliability
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- *Measure Values*

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Color | Size | Label | Detail | Tooltip | Angle

City type

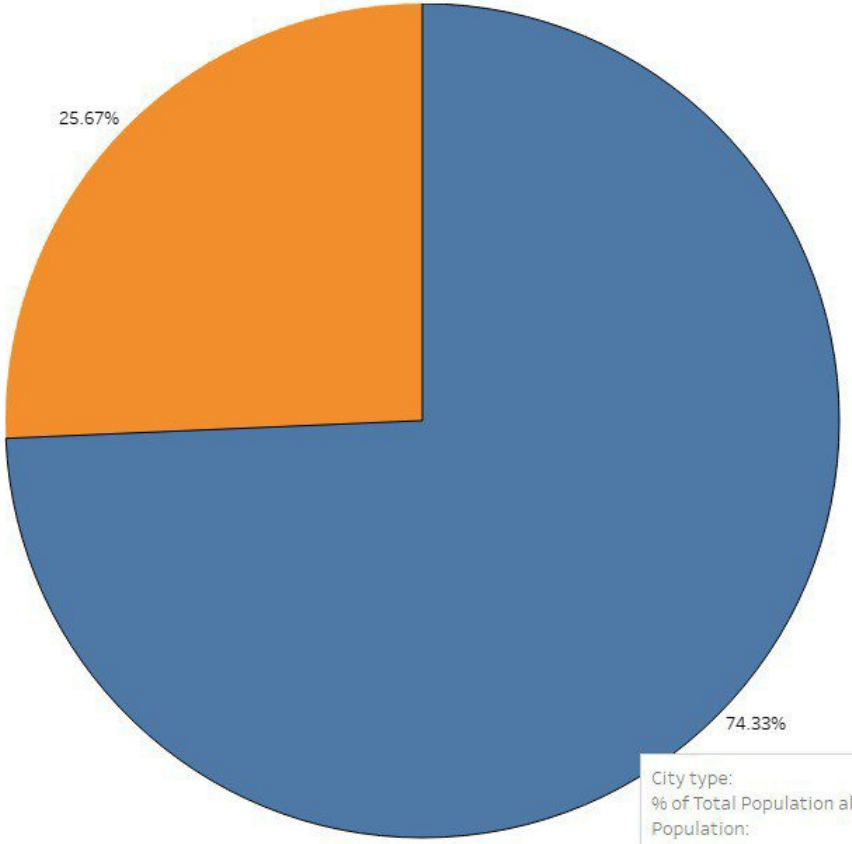
SUM(Popul..

SUM(Populati..

Columns

Rows

Population by city type



City type: City proper
% of Total Population along Table (Across): 74.33%
Population: 4,607,904,318

SUM(Population)
6,199,282,491

City type
City proper
Urban agglomeration

Activate Windows
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Data Source | Population trends over the years | Popultion Trends over the years ... | Cities with highest average popu... | Countries by highest avg popula... | Population by city type | Population of cities by Year | Dashboard 1 | Dashboard 2

2 marks 1 row by 1 column SUM(Population): 6,199,282,491

vidhya r

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Data Analytics

UN population data (UN ...

Search

Tables

- Area
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- Country or Area
- Record Type
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- *Measure Values*

Pages

Filters

Country or Area

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SUM(Populati..

SUM(Populati..

Country or Area

Columns

Rows

Countries by highest avg population from 2000-2014

China
Canada
Republic of Korea
Australia
Mexico
Indonesia
Turkey
Pakistan
Peru
Saudi Arabia
China, Hong Kong SAR
Egypt
Azerbaijan

SUM(Population)

558,195 588M

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Data Source | Population trends over the years | Popultion Trends over the years ... | Cities with highest average popu... | Countries by highest avg popul... | Population by city type | Population of cities by Year | Dashboard 1 | Dashboard 2

30 marks 1 row by 1 column SUM(Population): 2,035,664,674

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Data Analytics

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- *UN population data (Count)*
- *Measure Values*

Pages

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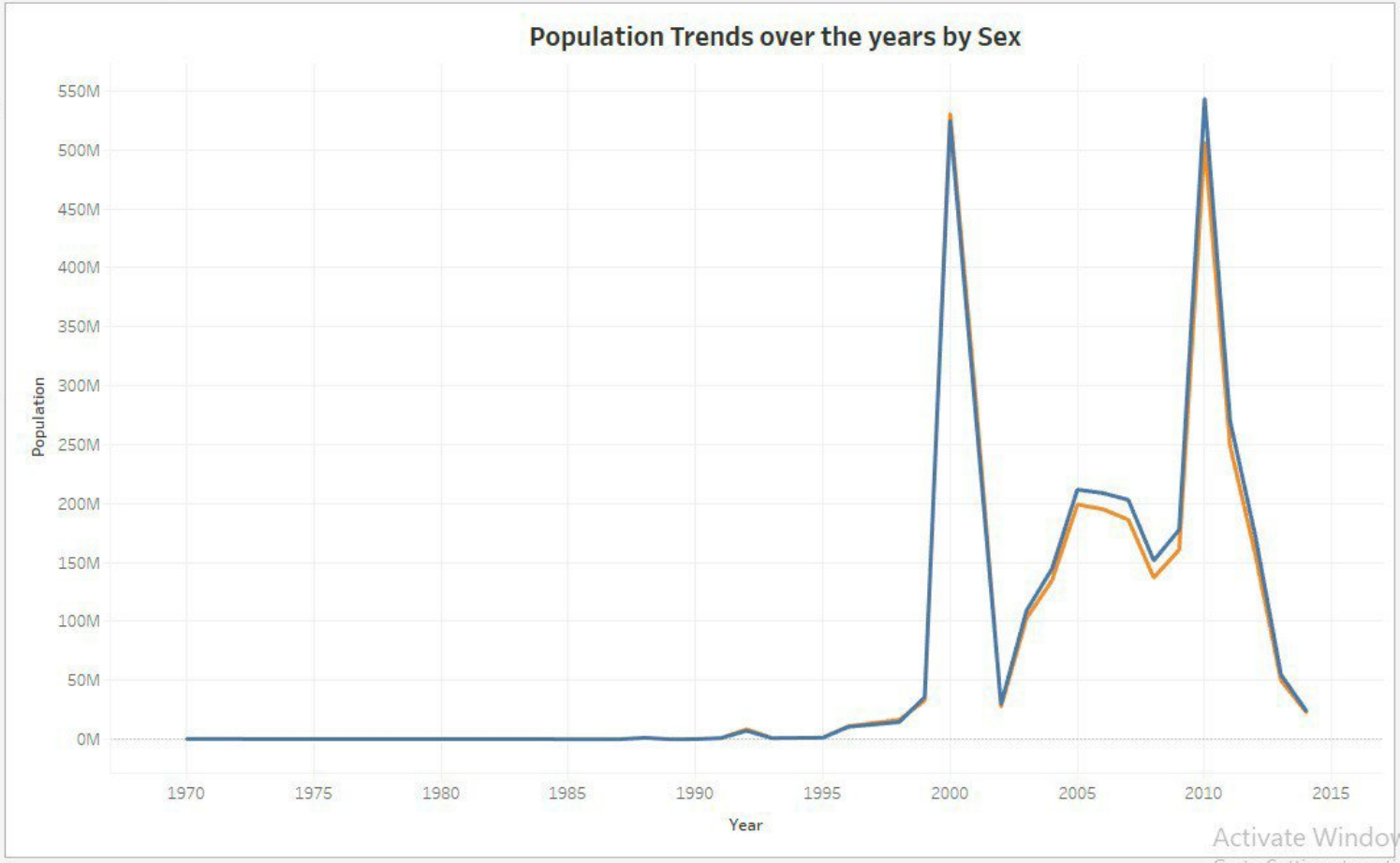
Detail Tooltip Path

Sex

Columns: Year

Rows: SUM(Population)



Sex

Female

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Activate Windows

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Data Source | Population trends over the years | Popultion Trends over the year... | Cities with highest average popu... | Countries by highest avg popula... | Population by city type | Population of cities by Year | Dashboard 1 | Dashboard 2

60 marks 1 row by 1 column SUM(Population): 6,199,282,491

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