



Singapore's Employment Landscape

CS5346 Group Project

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ABSTRACT

The dynamics of Singapore's employment market are vital for understanding the country's economic health and individual career prospects.

The intricate nature of Singapore's employment data presents a challenge for various stakeholders, including job seekers, employers, and policymakers.

Existing resources typically present information in static formats, limiting the depth of analysis and trend identification.

This project aims to bridge this gap by creating an interactive data visualisation that offers an insightful and engaging exploration of Singapore's employment landscape using data from Ministry of Manpower (MOM) employment data

Tableau link:
https://public.tableau.com/views/Team13_CS5346_Project/Story3?language=en-GB&:sid=&:display_count=n&:origin=viz_share_link

INTRODUCTION

Through the integration of insightful analyses and interactive visualisations, our Tableau story provides a comprehensive narrative of Singapore's labour force dynamics.

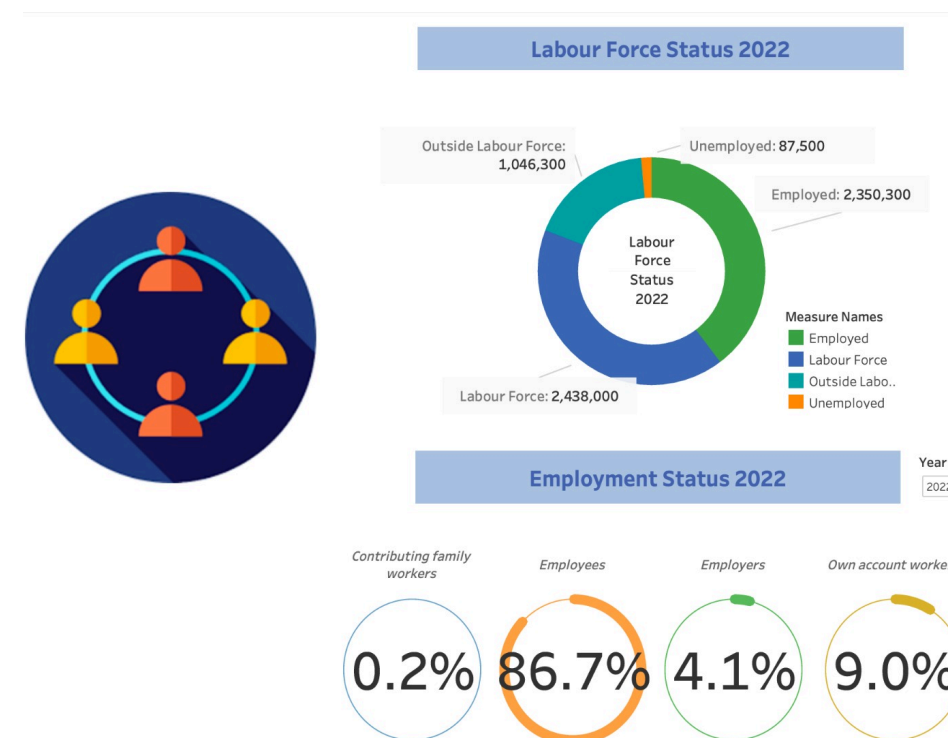
By combining key metrics, industry trends, and workforce insights, we offer a detailed exploration of Singapore's employment landscape.

This interactive journey allows users to delve into the nuances of the data, gaining valuable insights into the distribution of employment rates, trends in unemployment, education-employment dynamics, occupation trends, and industry employment changes.

Through this Tableau story, we aim to offer a compelling and informative overview that sheds light on Singapore's evolving labour market, catering to the diverse needs of job seekers, employers, policymakers, and the general public.

Singapore's Labour force

This section offers an in-depth analysis of Singapore's labor force and employment status. These visuals depict shifts in workforce participation, employment patterns, and unemployment figures over time, providing stakeholders with a comprehensive view of Singapore's job market dynamics.

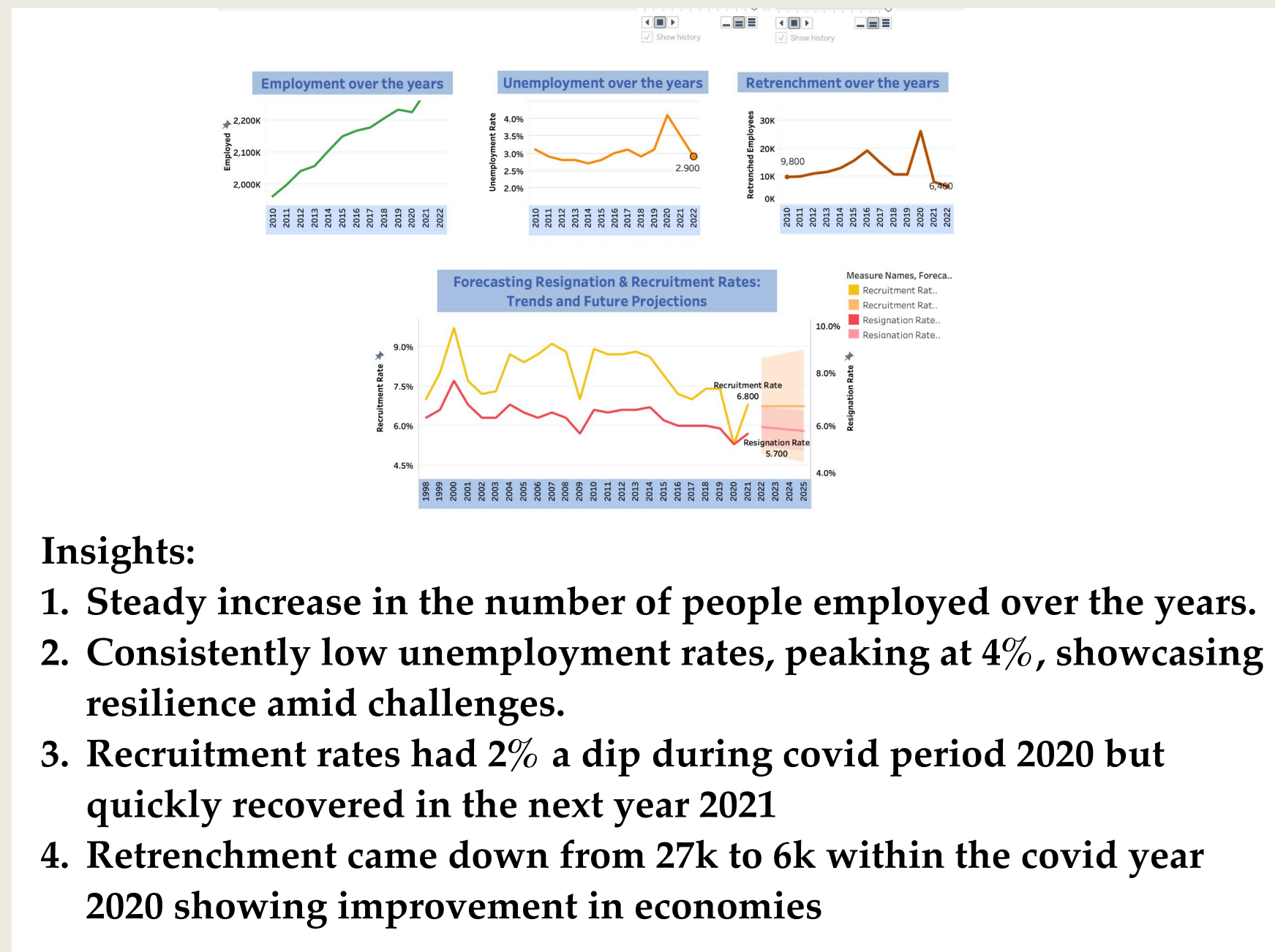


Insights:

1. Approx 96.6% of the residents (citizens and PRs) labour force is employed.
2. Approx 3.4% of the residents are unemployed.
3. Outside Labour Force is equivalent to 31.4% of the country's LF.
4. Most of the population are employed (86.7%).

Key Metrics Overview

The "Key Metrics" section analyses Singapore's labor market with visualizations of employment and unemployment rates over time, along with forecasts for resignation and recruitment rates, and insights into workforce stability through retrenchment rates.

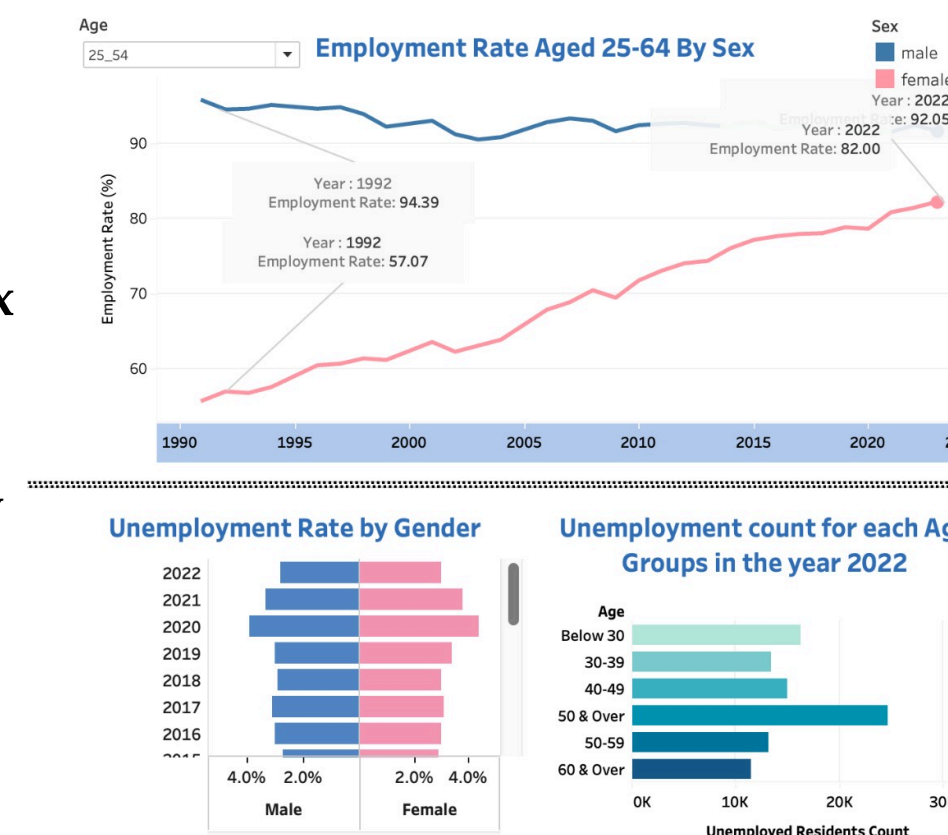


Insights:

1. Steady increase in the number of people employed over the years.
2. Consistently low unemployment rates, peaking at 4%, showcasing resilience amid challenges.
3. Recruitment rates had 2% a dip during covid period 2020 but quickly recovered in the next year 2021
4. Retrenchment came down from 27k to 6k within the covid year 2020 showing improvement in economies

Demographic Analysis

The "Demographic Analysis" section provides a detailed examination of Singapore's labour force composition by sex and age group over the years. It includes visualisations of the employment and unemployment rates, showcasing trends and patterns among different demographic segments.



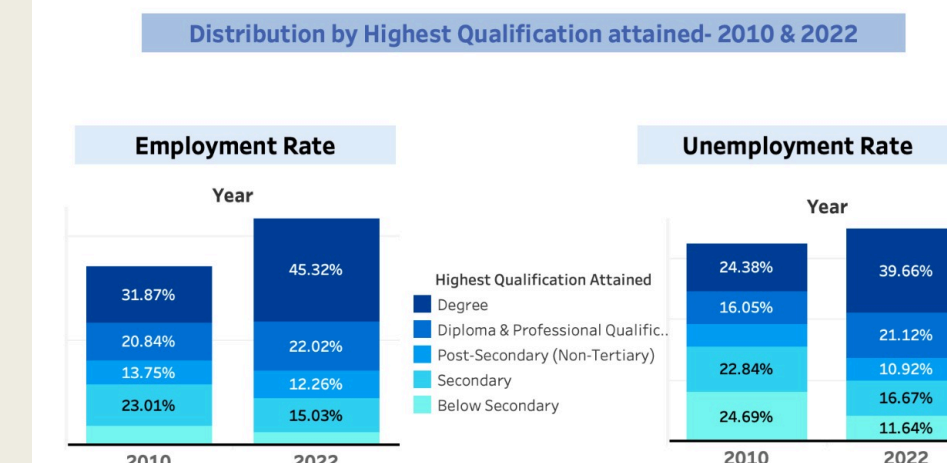
Insights:

1. Consistent growth in female employment rates over time.
2. Slight elevation in female unemployment rate, yet nearly equal to male rates, indicating gender parity in overall unemployment.
3. Highest unemployment observed among individuals aged 50 and above.

Career Trends & Opportunities

The "Career Trends & Opportunities" section explores employment trends in Singapore, focusing on PMETs and Non-PMETs, education-employment trends, occupation trends, and industry changes, providing insights into career paths and opportunities.

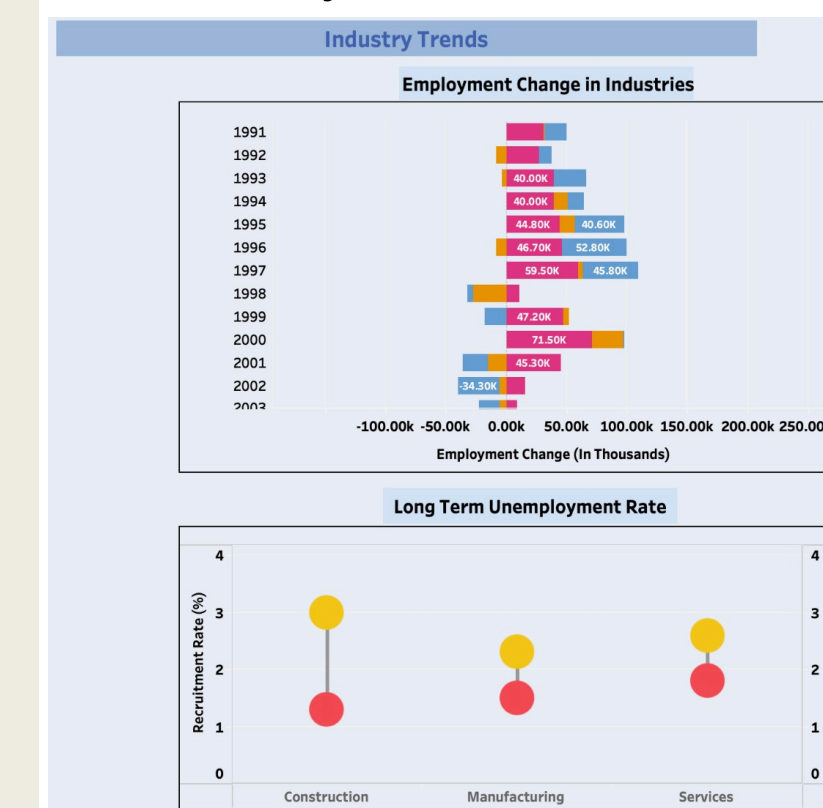
Education



Insights:

1. Max Employment: Tertiary-educated individuals.
2. Unemployment Peak: Notably high among educated, signalling a potential surplus of skilled labor, necessitating a focus on aligning education with market demand.
3. Shift in PMETs: Previously non-PMETs dominated, but now PMETs form the majority, indicating more skilled labour force.
4. Unemployment Rate is usually higher among non skilled workers.

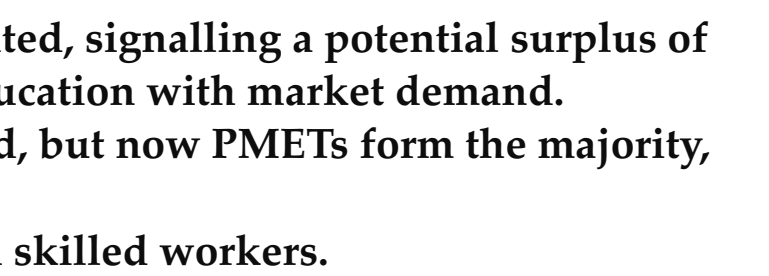
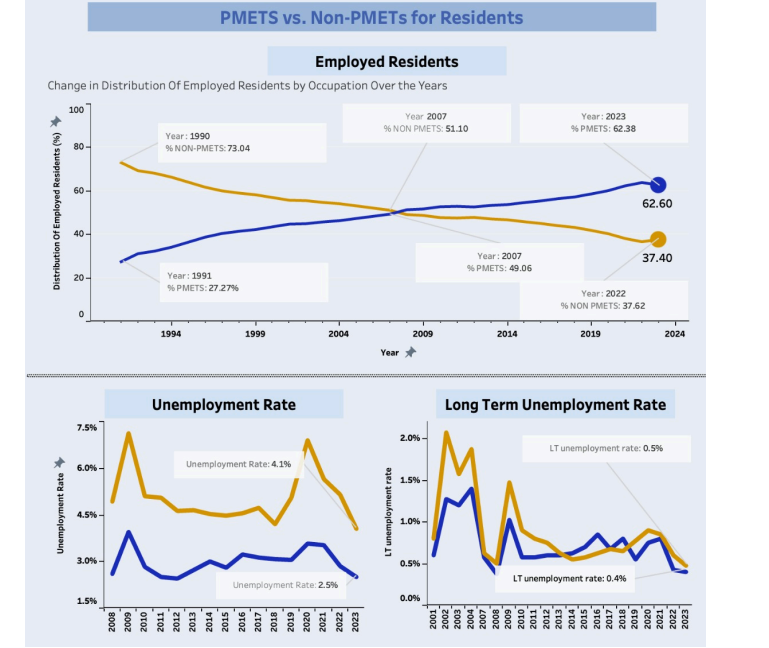
Industry Trends



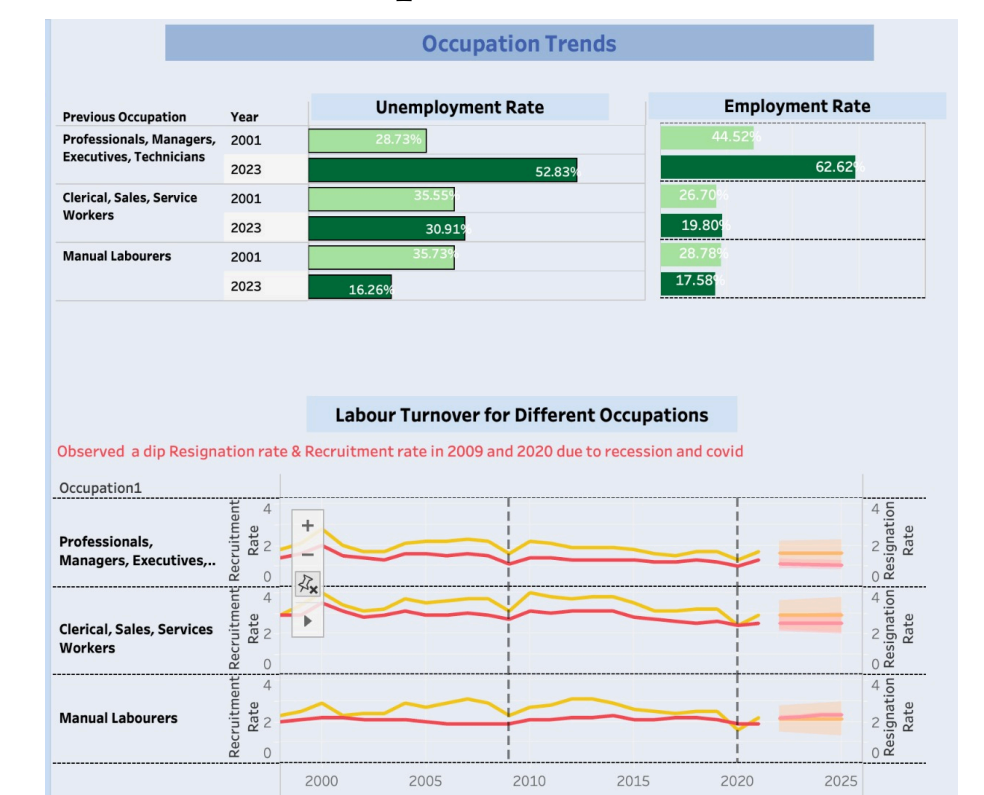
Insights:

1. Demonstrates resilience and steadiness over time, less susceptible to economic downturns.
2. Highest Employment/Unemployment: Observed within professional occupations, indicating the sector's significance and potential labor market challenges.
3. In periods of recession 2008 and 2020, production/transport operators/cleaners/labourers faced lower labour turnover. This could have been due to immigrant control measures taken by the government.
4. Labour Turnover increased for professionals soon after 2020. Professionals' mobility increased, could have been due to more jobs and higher demand.

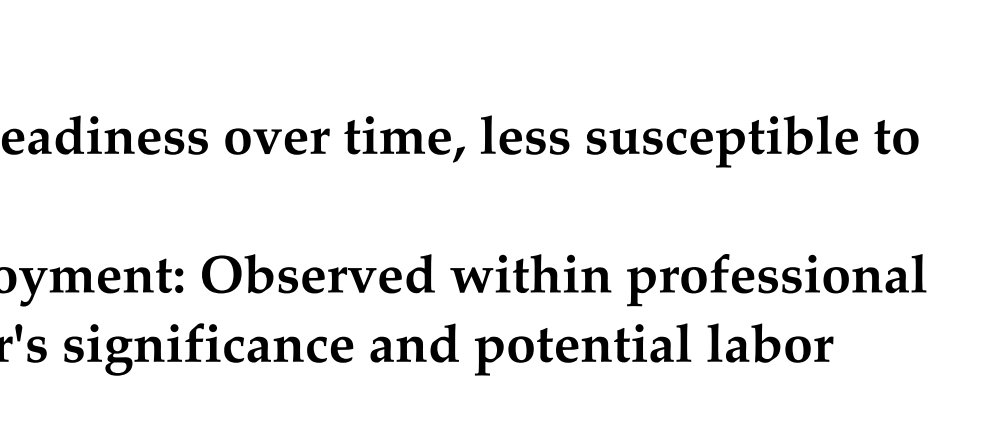
PMETs vs Non-PMETs



Occupation Trends



Observed a dip Resignation rate & Recruitment rate in 2009 and 2020 due to recession and covid



CONCLUSION

This project offers a detailed analysis of Singapore's job market using Ministry of Manpower data. The interactive visualizations provide insights into industry trends, talent availability, and economic factors affecting employment. By bridging this understanding gap, stakeholders can make informed decisions, contributing to Singapore's economic growth and workforce development.