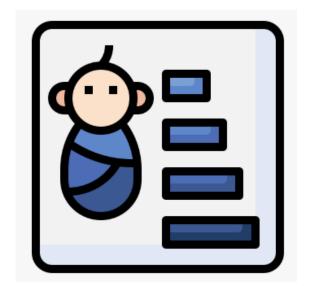


#### MCST1043 | Research Design & Analysis

# RESEARCH PROPOSAL



FORECASTING FUTURE FERTILITY TRENDS IN MALAYSIA
THROUGH REGRESSION MODEL

Presented by Wan Nur Syazana Wan Ruslan MCS241016

## ABSTRACT

The issue of an ageing population is on the rise globally, and Malaysia is not excluded from facing this issue. Past literature has recognized that the declining fertility rate is one of the main factors that lead to this problem. However, along with the declining fertility rate in Malaysia over time, will impact the country's economic landscape. This has become a concern by the governments to take several capable measures to sustain the economic growth.

## OVERVIEW

01

04

07

10

INTRODUCTION

RESEARCH SCOPE

EXPLORATORY DATA ANALYSIS (EDA)

**FUTURE WORKS** 

02

05

80

11

**PROBLEMS** 

LITERATURE REVIEW

**INITIAL FINDINGS** 

**RECOMMENDATIONS** 

03

**AIM & OBJECTIVES** 

06

**METHODOLOGY** 

09

CONCLUSION

#### INTRODUCTION

Rafizi Ramli, a Minister of Economics of Malaysia said where Malaysia is expected to reach the status of an old country in 2044.

This issue needs to be emphasized, and a study needs to be done to address the declination of fertility rates that happen year by year.



#### PROBLEM SCENARIO

#### 01

Generation Z who born in the year 1997 to 2012 seems faced difficulties in developing their social skills in the real world as they have spent most of their time by surfing the internet



- Making them socially incompetent
- Obstacles in finding a life partner due to lack of communication skills & quarter life crisis



- Decline fertility rates
- Aging Populations









### PROBLEM STATEMENT

#### 01

Malaysia is reaching a turning point in its demographic transition towards an increasingly ageing population

#### 02

Department of Statistics Malaysia (DOSM), the proportion of the population aged 65 and older is expected to increase significantly, from 8.1% in 2024 to 14.5% by 2040.





#### **OBJECTIVES**

01

To analyse the current population trends in Malaysia from year 1970 to 2023.

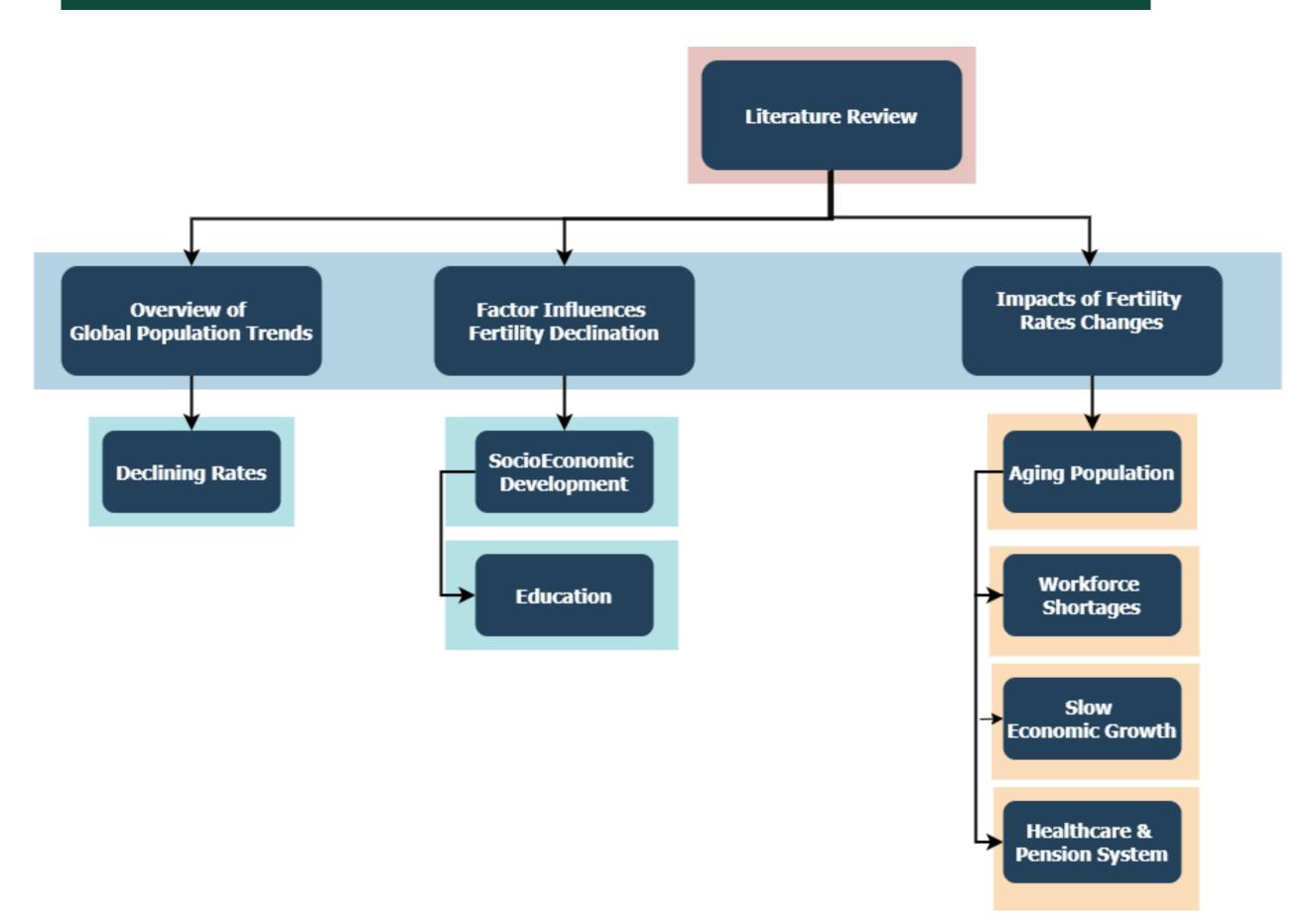
02

To determine the direction of the causal relationship between declining fertility rate (TFR) to economic performance of a country

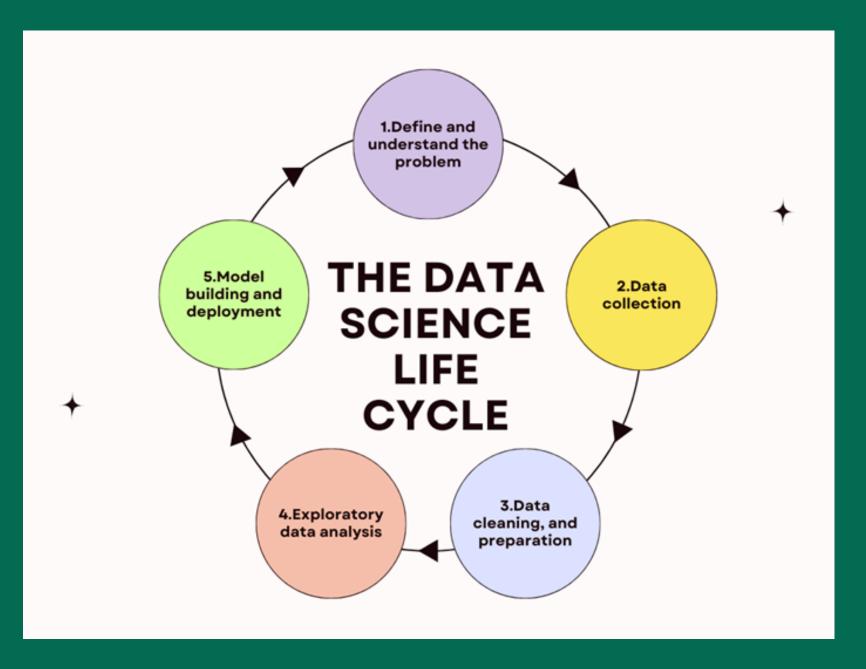
03

To forecast future fertility trends in Malaysia through regression model approach.

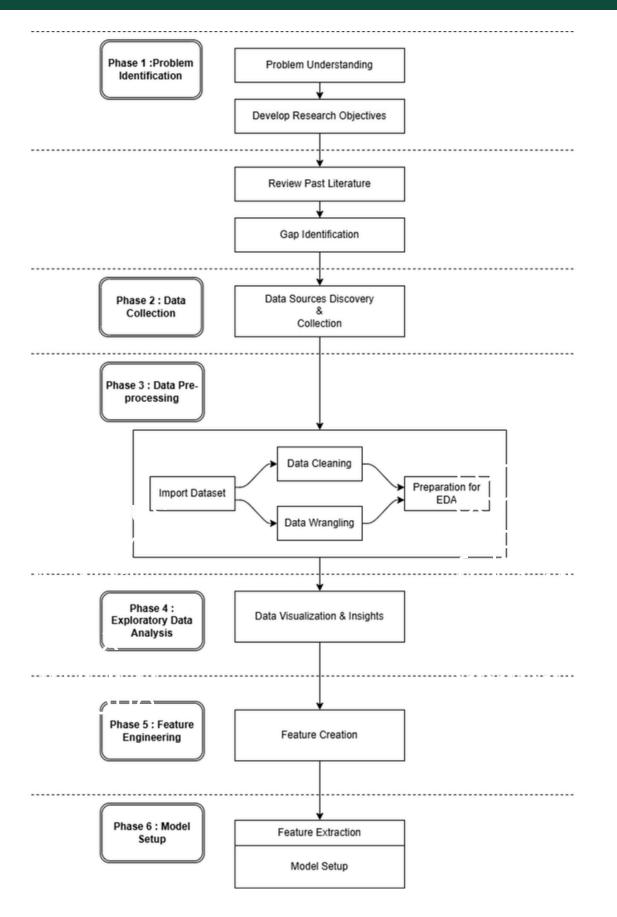
## LITERARY PREVIEWS



#### METHODOLOGY

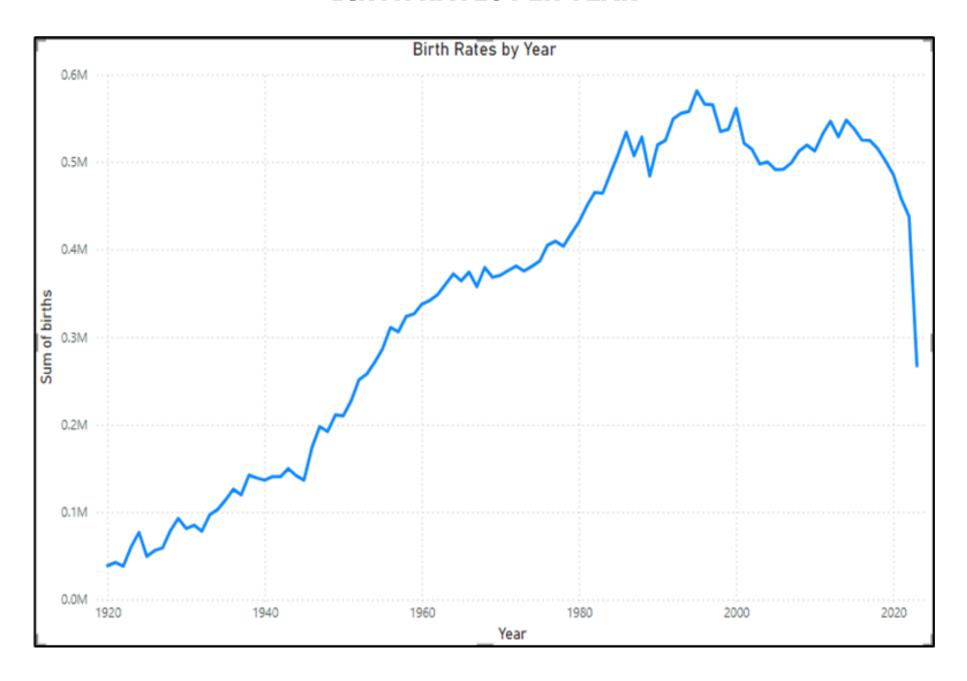


#### FRAMEWORK

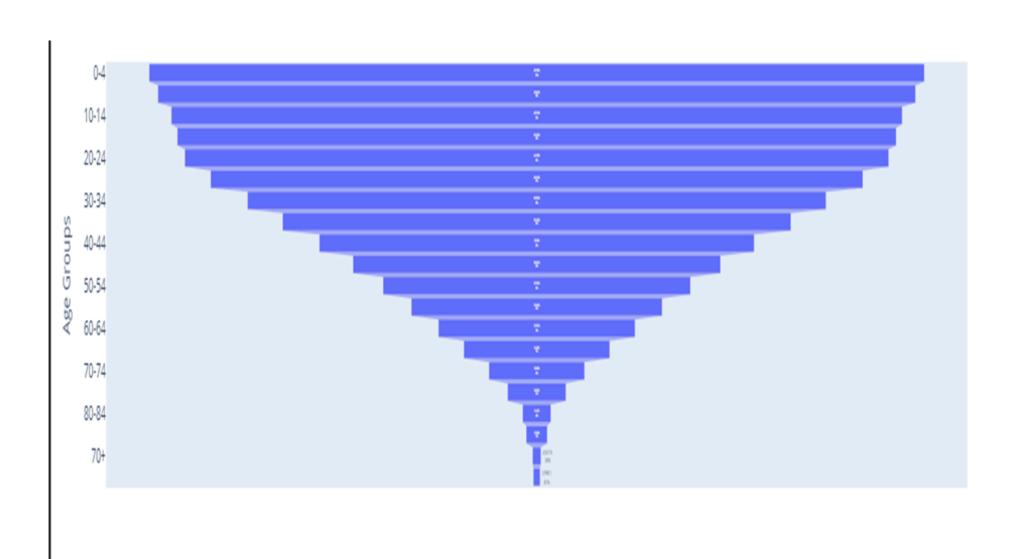


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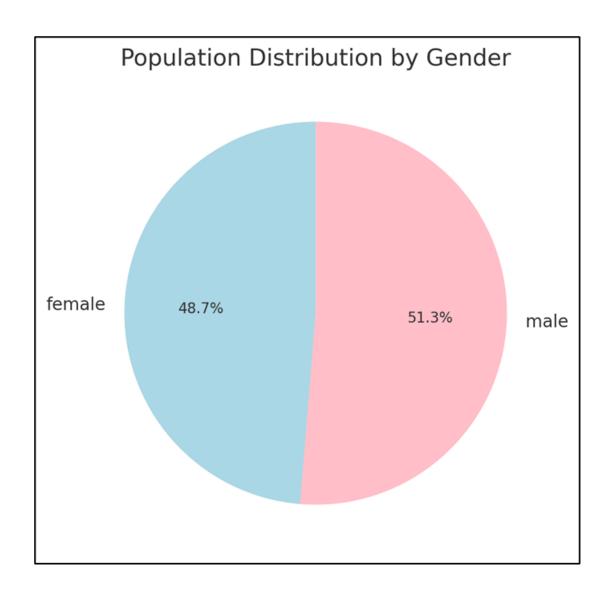
#### **BIRTH RATES PER YEAR**



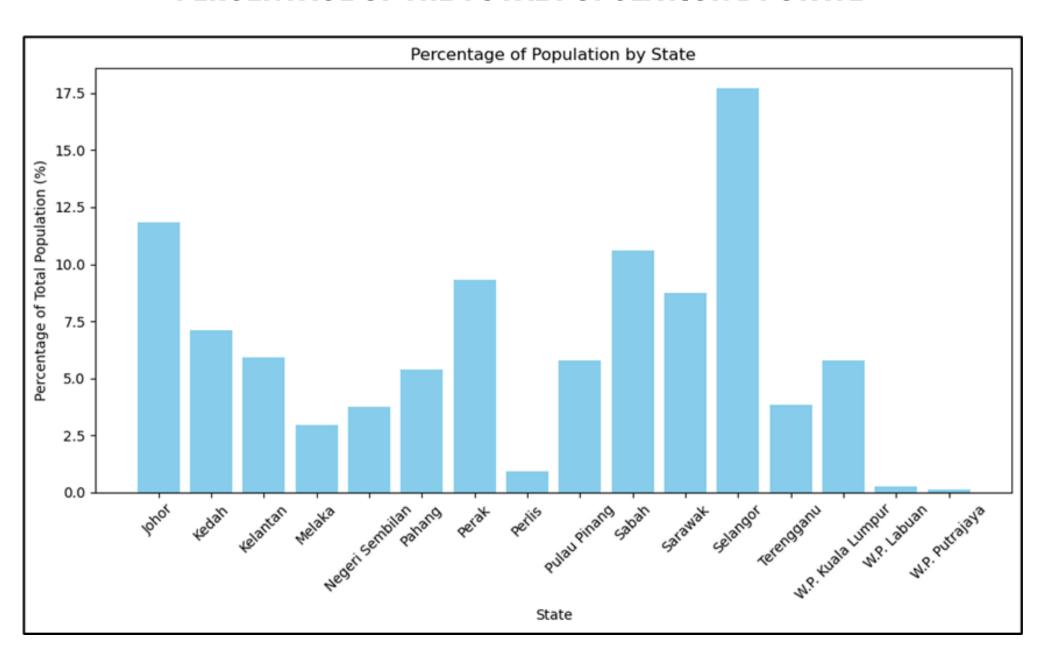
#### **AGE DISTRIBUTION PER POPULATION**



#### **POPULATION DISTRIBUTION BY GENDER**



#### PERCENTAGE OF THE TOTAL POPULATION BY STATE



## CONCLUSION

World population are moving towards aging population as the fertility rates slowly decline.

Malaysia is not exceptional and expected to reach the status of an old country in 2044 claimed by

Minister of Economics of Malaysia, Rafizi Ramli in a conference. Therefore, this study aims to

analyse the current population of Malaysians citizen from year 1970 to 2023. This objective achieve

through EDA process.

### FUTURE WORKS

- For second objectives, the researcher intendeds to identify the direction of the causal relationship declining fertility rate (TFR) to economic performance of a country using Granger Causality test modelling
- Third objectives of this research are to achieve the aim of this research which is to predict the future birth rates.
- Autoregressive distributed lag (ARDL) model will be used to predict the future trends of fertility rates in Malaysia based on past historical data

# THANKYOU