**National College of Ireland**

Project Proposal

**Country’s Economy Monitoring & Management**

**Dashboard**

**Penuel Maypa**

**x16382003**

**x16382003@student.ncirl.ie**

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# Objectives

The objective of the project is to develop a dashboard application that monitors, analyze and manage a country’s economy. The software application should provide a visualization that will give an insight of how the country is doing. The application should also provide descriptive, diagnostic, predictive and prescriptive analysis.

# Background

Technologies are becoming a part of people’s live. The world is more connected than ever. With information technologies used in all areas of industries, there are tons of data out there to be analyzed and use it to solve problems in all areas of life.

This project will look at how Data Analytics can be applied to help improves people’s quality of life and standard of living. One of the biggest factor is how the country is being managed by leaders and governments. This project will focus on assisting leaders and governments in Ireland to help manage the country by applying Data Analytics and Software Development.

This project taps into all the available data about a Ireland; data includes economic data, business data, census, market data, resources data etc. These data sets will then be analysed, processed and combined to produce descriptive, diagnostic, predictive and prescriptive analysis.

# Technical Approach

## Approaches

This project will be using the KDD process. The first step is to gather the available data sets. The data sets will likely be extracted from a website : <https://data.gov.ie/>. This website *“is intended to provide easy access to datasets that are free to use, reuse, and redistribute.”* (data.gov.ie [Access 2019]). The data sets that are available includes Ireland’s data in the area of environmental, society, economy, health, government, housing, transport, science, education and sport, agriculture, energy, arts, towns and crime.

The second step is to review the data collected and clean it. This step is called Data Cleaning. This is where the the student (the project owner) removes irrelevant data and clean it from the collection (Rajput, 2019).

The third step is to combine multiple sets of data from different sources. The sets of data could be from different areas or domain.

The next step is data selection. This is where data is decided and retrieved in relevance to the analysis. Then Data is being transformed into appropriate requirement; this process has two steps; data mapping and code generation (Rajput, 2019).

The final step is Data Mining, which is a technique that are used to extract patterns potentially useful. Then these processed data are then used to generate reports and visualization about the country's economy. (Rajput, 2019)

# Special Resource Required

# Project Plan

# Technical Details

# Evaluation