

# SHARK DEFENSE



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# PROJECT OVERVIEW

## **Business case**

We have developed protective gear against shark attacks, particularly those with **fatal outcomes**.

## **Problem**

Identifying the most severely affected countries by shark attacks, especially with fatal outcomes.

# PROJECT OVERVIEW

## Hypothesis

1. Shark attacks occur more in Southern Hemisphere countries.
2. The number of fatal attacks increased over the last decade.

# DATA WRANGLING



## CLEANING CHALLENGES

- Missing values
- Entire null rows
- Duplicated values

## CLEANING TECHNIQUES

- Dropped irrelevant columns
- Deleted null values in “Injury” column (< 10%)

# EXPLORATORY DATA ANALYSIS

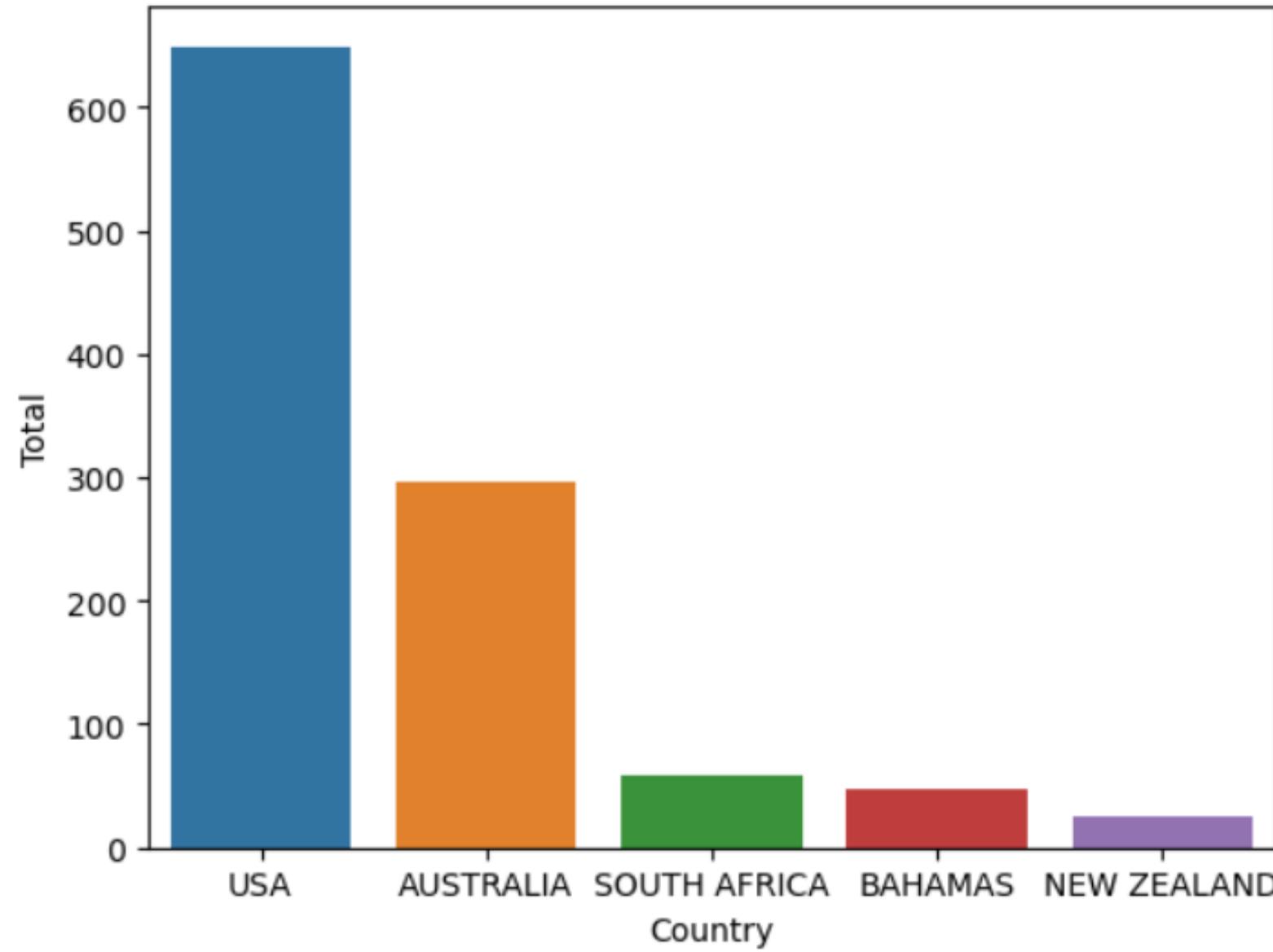
## TECHNIQUES

### Filtering:

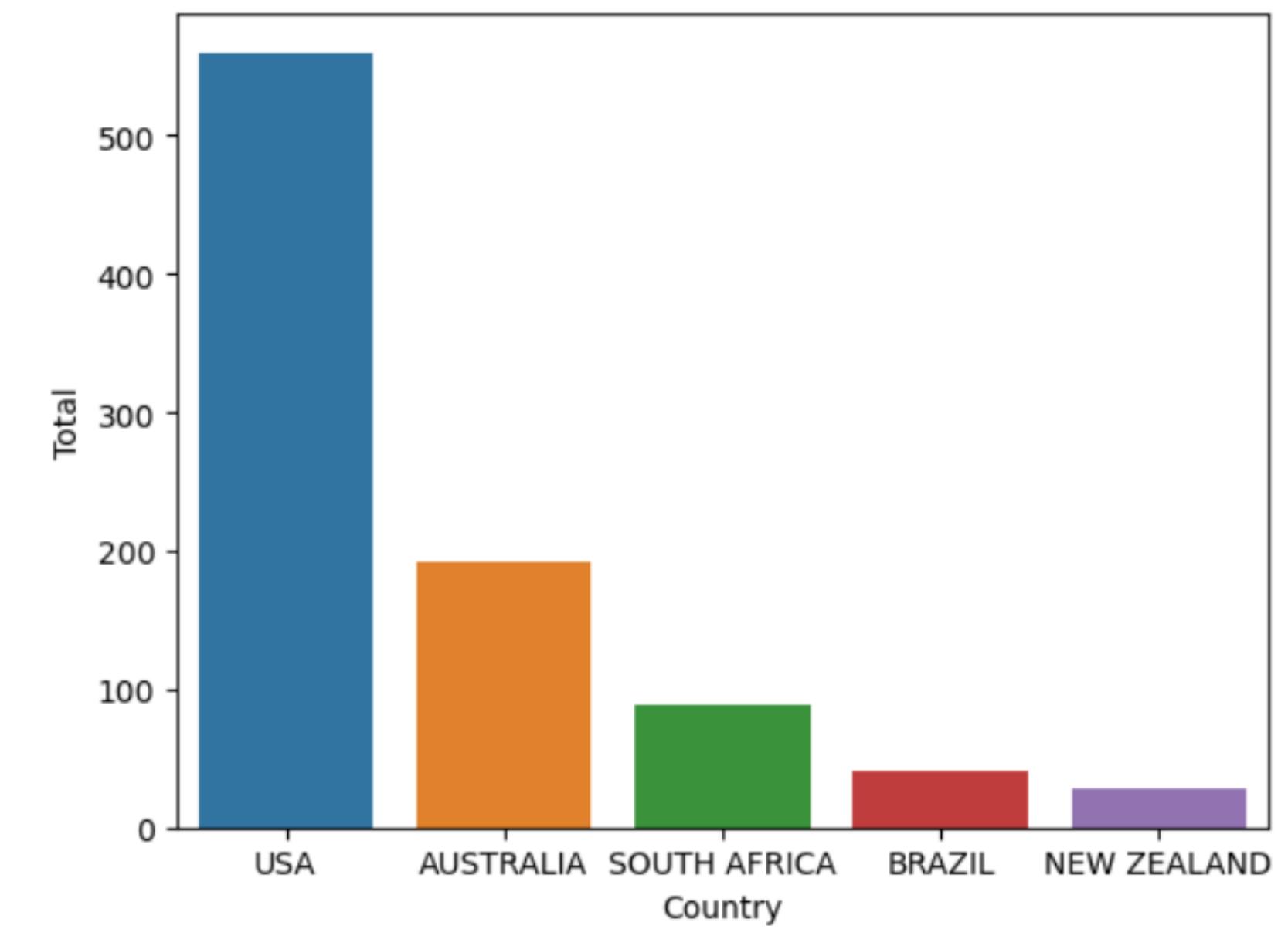
- Total number of **attacks** by country and decade.
- Total number of **fatal incidents** by country and decade.
- Extracting **top 5 countries** and comparing the results

# OVERALL ATTACKS

2012-2022

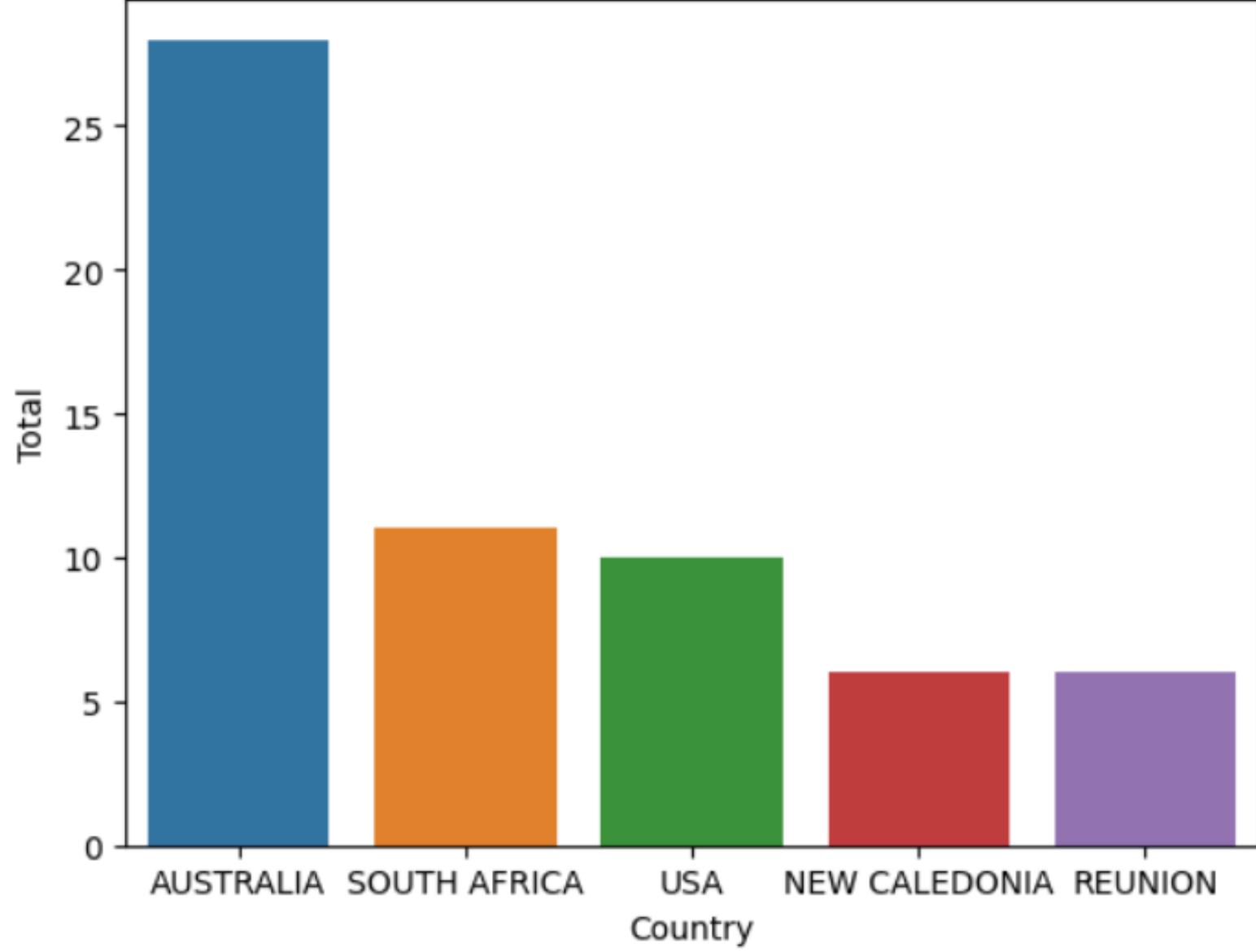


2001-2011

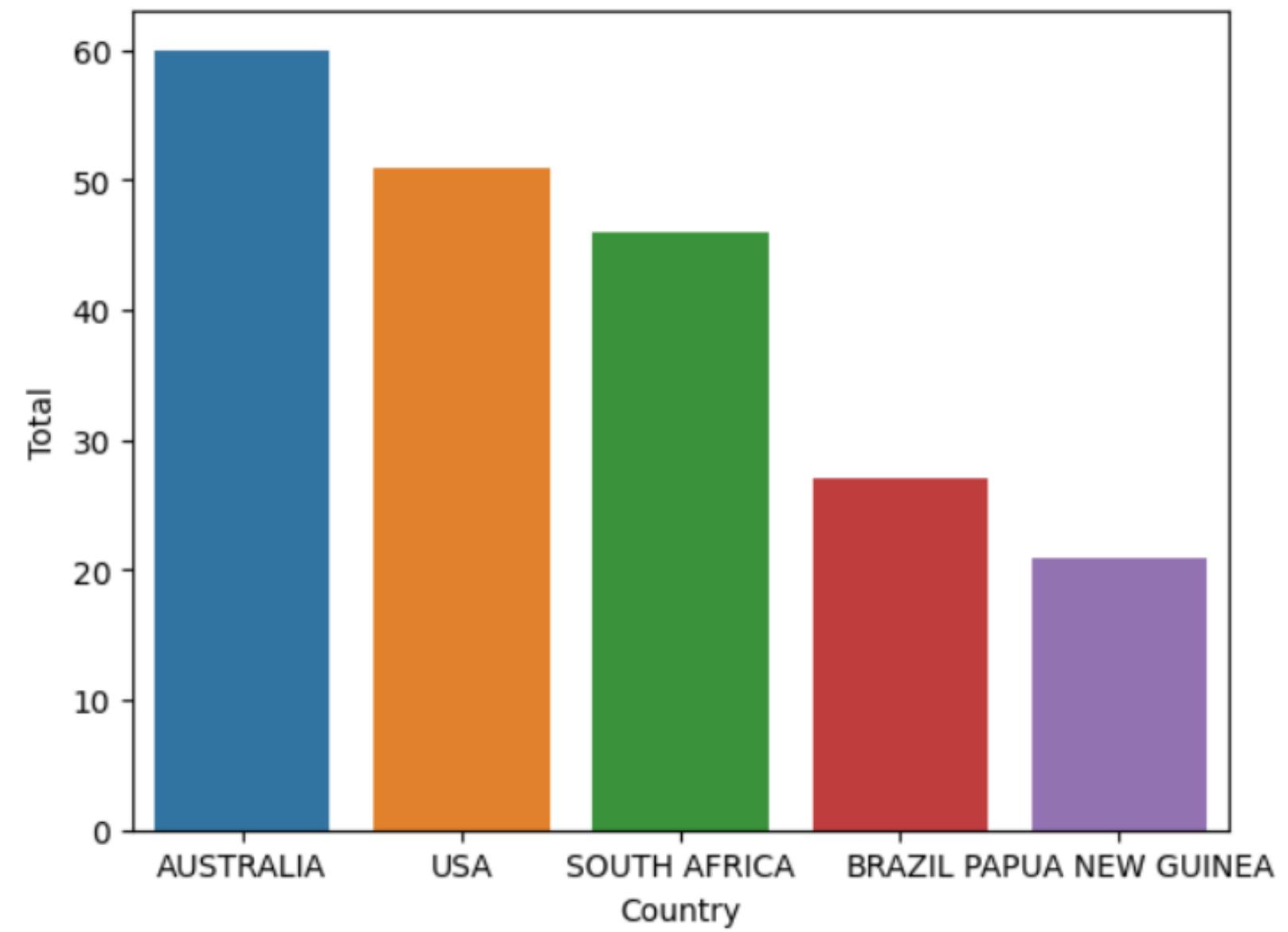


# FATAL ATTACKS

2012-2022



2001-2011



# MAJOR OBSTACLES

- **Making the graphs match !**
- Importing Dataset
- Cleaning Dataset

# CONCLUSION

Hypothesis semi-proven.

Business case solution:  
AUSTRALIA

