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Global Cost of Living and Economic Analysis

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ABC COMPANY

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Executive Summary

This report will provide an in-dept analysis on the cost of analysis of all types of costs in different countries. The analysis has been extracted from the dataset “Cost_of_Living_Index_by_Country_2024” from the Numbeo Website (Numbeo, 2024). Through the stories and visualization, we will provide insights of the costs on global scale where the company can use these insights to make strategic decisions.

Introduction

This report is intended to the executive management of the ABC company. The ABC Company can use this analysis to recommend their clients who wish to travel overseas as a Tourists, Expat, Digital Nomad or businesses who wants to relocate. These visualizations will provide information based on the client’s budget by filtering costs.

Data Analysis and Key Findings

Main Dashboard

This is the main dashboard where an introduction to every story board is given. This introduction will help the management of the ABC Company to quickly grasp the what other story boards are.

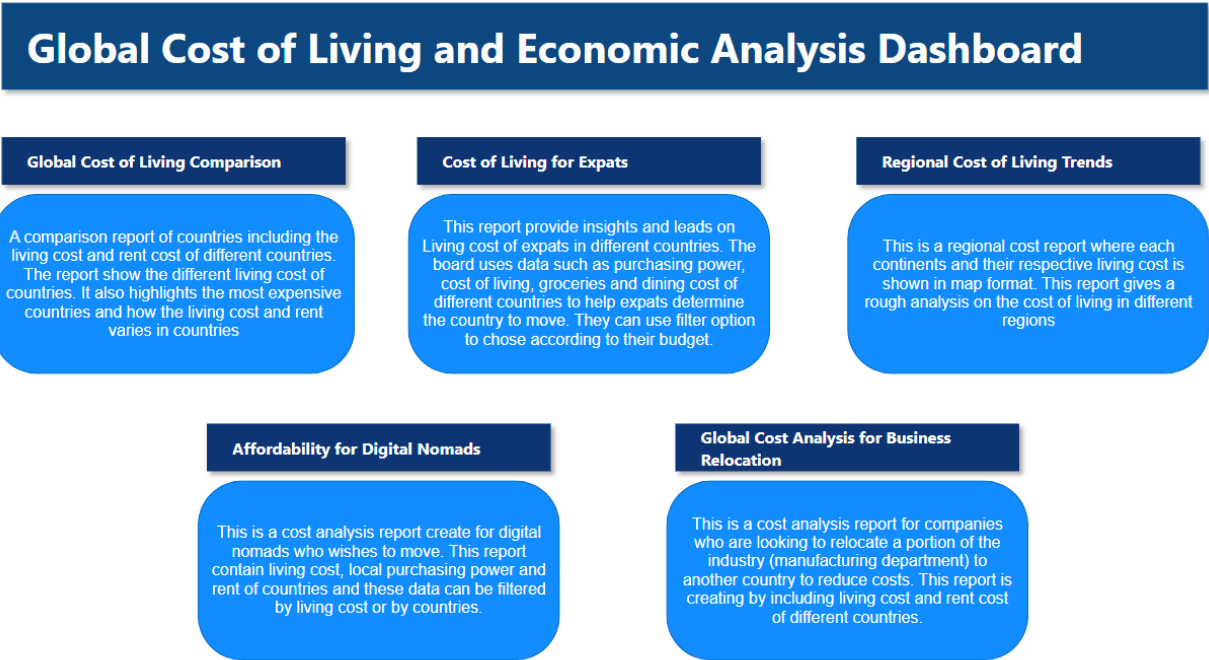


Figure 1-Main Dashboard

Storyboard 1 (Global Cost of Living Comparison)

This story board gives a rough idea on the living cost of different countries for the management. This story board will give show the living costs of the different countries along with some of the most expensive countries. There are 4 visualizations in the story board.

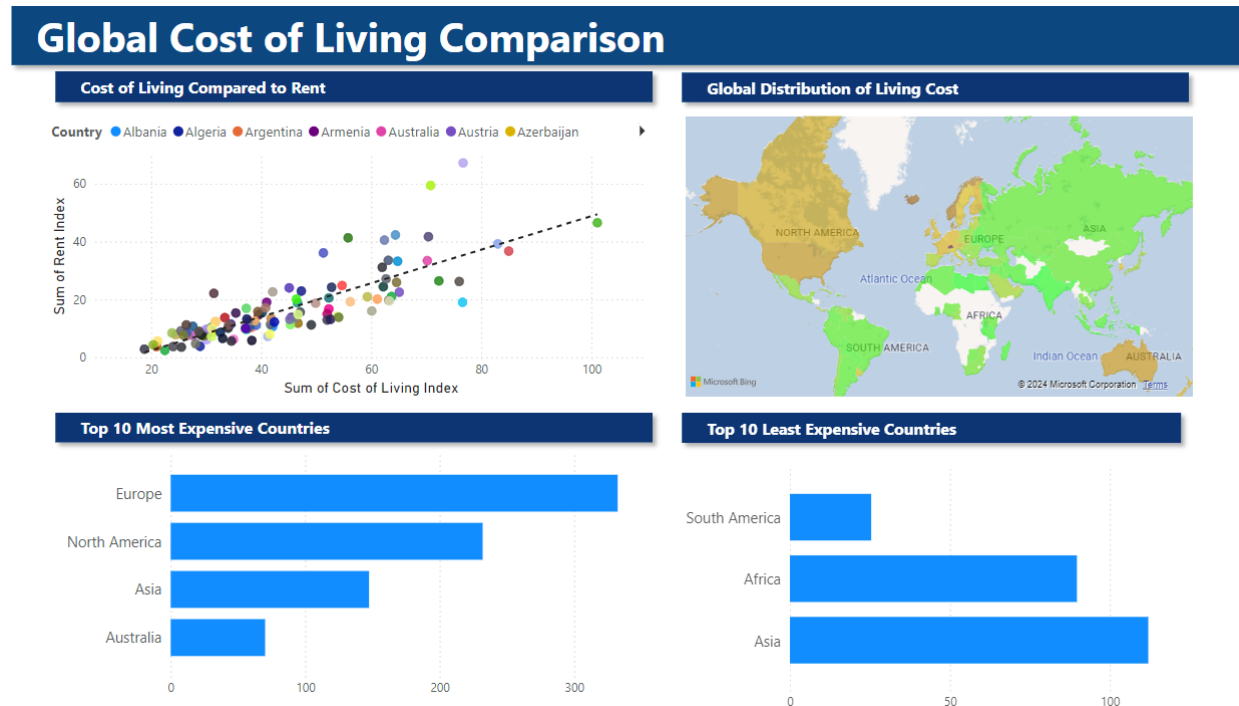


Figure 2- Storyboard 1 (Global Cost of Living Comparison)

Visual 1 (Cost of Living Compared to Rent)

This is a scatter chart where the chart represents the Cost of Living of different countries along with rental cost of those countries. The Scatter chart along shows a trend line where the management can use it to distinguish the countries use the trend line.

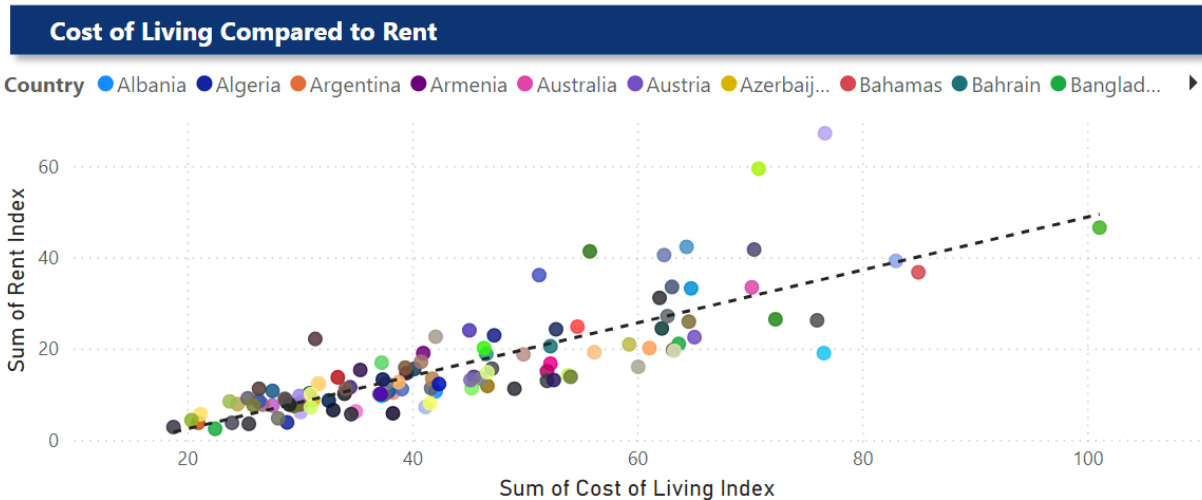


Figure 3-Visual 1 (Cost of Living Compared to Rent)

Visual 2 (Global Distribution of Living Cost)

This is a map visual where the living cost of the countries are presented in a gradient for easier understanding. The darker the green colour the lower the living cost of that particular country meanwhile darker the red colour higher the living cost of that particular country.

-Note-

The countries presented in white colour is because of no data collected by that nation.

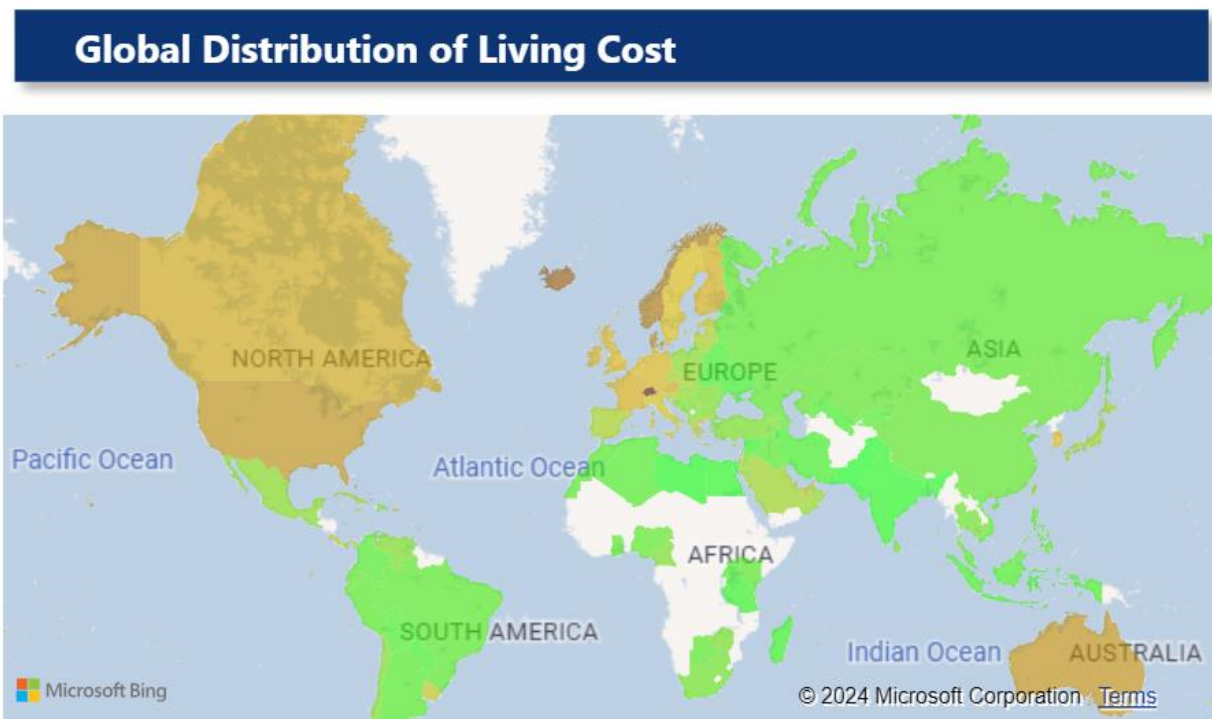


Figure 4-Visual 2 (Global Distribution of Living Cost)

Visual 3 (Top 10 Most Expensive Countries)

This visual is a clustered bar chart where it will show the difference in living cost of the most expensive countries. This chart will show regions for ease of the management. By clicking on “Europe”, “North America”, or “Asia” the management will be able to see the countries that are most expensive in the region. The user can see the countries by selecting the region bar.

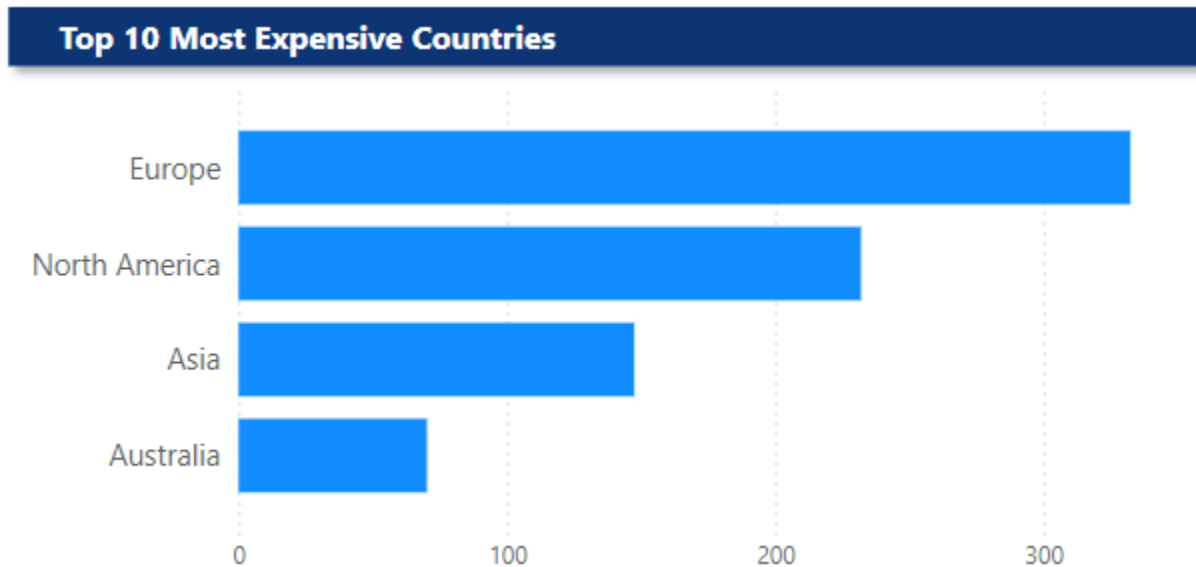


Figure 5-Visual 3 (Top 10 Most Expensive Countries)

Visual 4 (Top 10 Least Expensive Countries)

This visual is a clustered bar chart where it will show the difference in living cost of the least expensive countries. For the ease of management this chart too has filtered to regions. If the management needs to see the visual in countries follow the same step in the above chart.

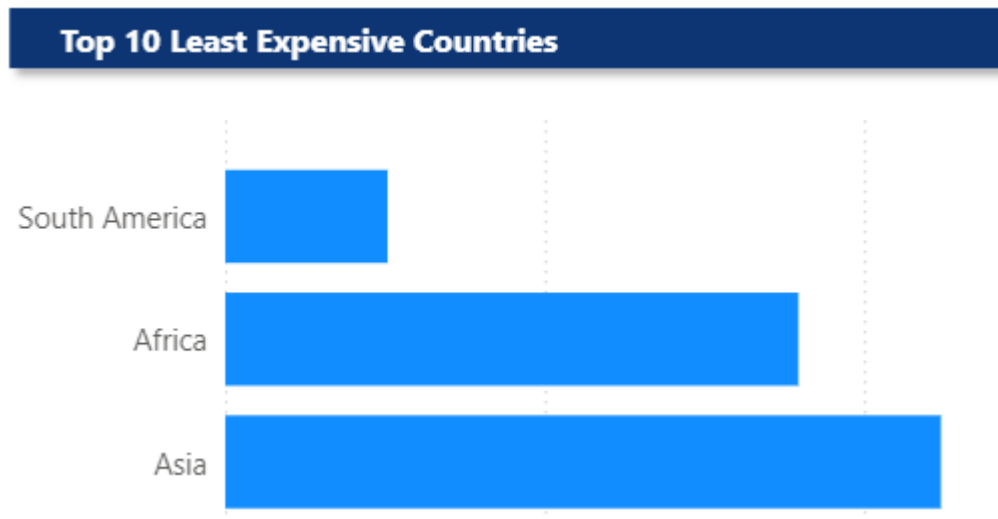


Figure 6- Visual 4 (Top 10 Least Expensive Countries)

Insights

The scatter plots show that cost of living and rental are proportional to most of the countries which means countries that has higher cost of living tend to have a very high rental cost too which is also reinforced by the trendline.

The filled map shows North America, Europe and Australia are very costly to live while South America, Africa and Asia gives a cheaper living cost.

The clustered bar charts give the most expensive countries where is they are located in Europe, North America and Asia has some of the expensive countries and cheapest countries to live in. The least expensive countries are located in Middle east and South America.

Recommendations

Considering the clients budget to recommend the countries for them to visit because travelling to North America, Europe and Australia need very careful financial planning while South America and Africa as whole tends to be a cheaper option. Meanwhile Asia offers a wide range of countries from most expensive in terms of cost to least expensive in terms of cost.

Storyboard 2 (Cost of Living for Expats)

This story board is created to help the expats who wants to move overseas. This board is created using living costs, purchasing power, rent, groceries and dining cost. There are 4 visualizations in story board. They are slicer, scatter chart and two clustered bar charts.

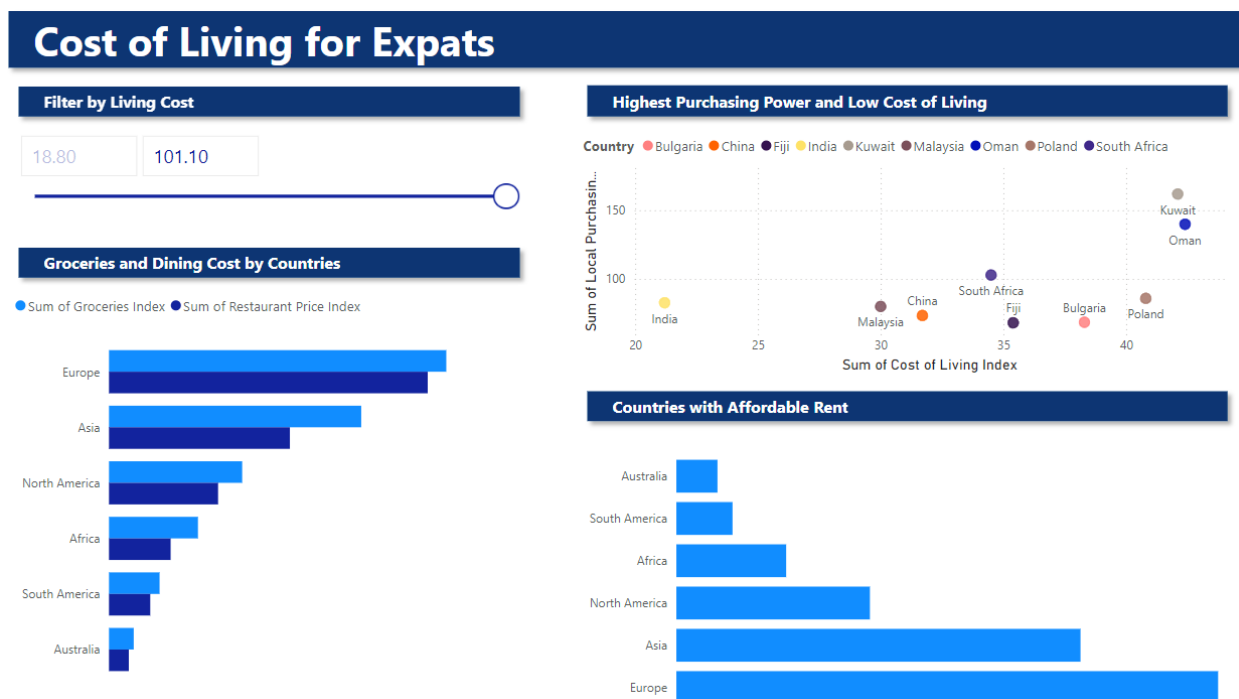


Figure 7-Storyboard 2 (Cost of Living for Expats)

Visual 1 (Filter by Living Cost)

This is a slicer that can adjust the living cost and other visualizations (scatter chart and two clustered bar chart) will filter out the countries that isn't on the range of the living cost. The user can use this visual to filter of countries that aren't in their budget.

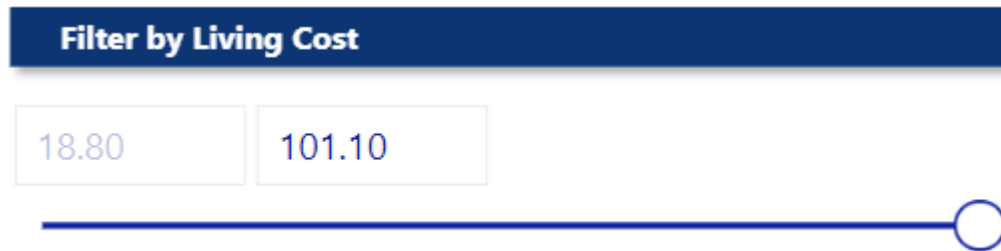


Figure 8-Visual 1 (Filter by Living Cost)

Visual 2 (Highest purchasing power and Low Cost of Living)

This is a scatter chart where is show the countries that has low cost of living and has a high purchasing power.

This visualization has a custom filter where the cost of living index has to below the average and the purchasing power index has to be greater than the average.

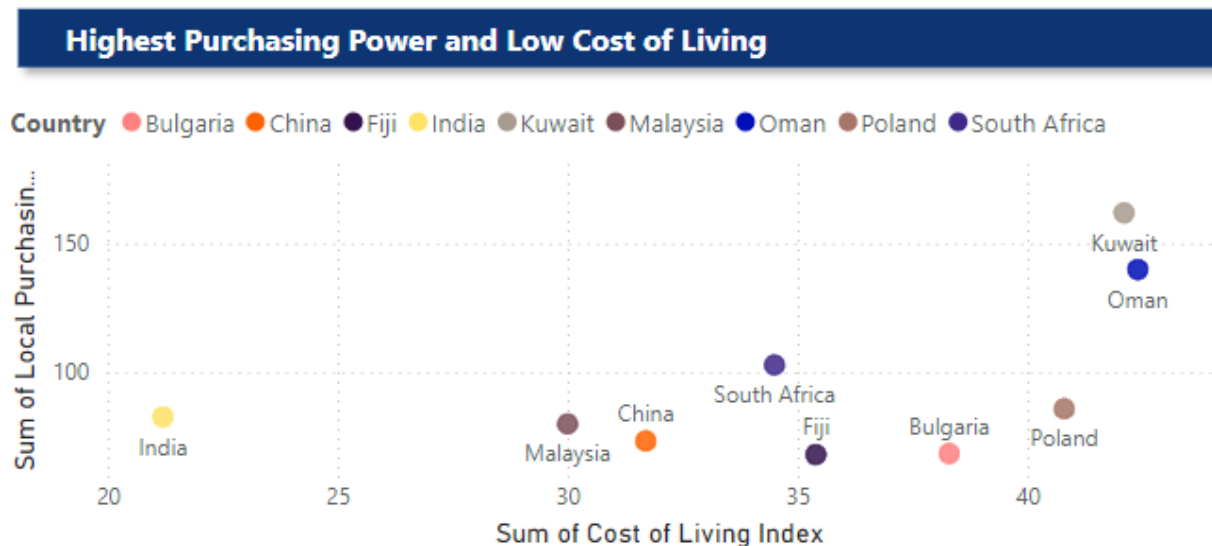


Figure 9-Visual 2 (Highest purchasing power and Low Cost of Living)

Visual 3 (Groceries and Dining cost by Countries)

This is a clustered bar chart where it shows of the countries with the highest groceries and dining cost.

This visualization uses an drill down feature where the countries are organized into regions. The user can click on the regions then the chart will show the countries in that region. This option is added as an ease for the management team.

If the team wants to get rid of this feature they have to select the clustered bar chart and on the top right corner click on the two arrows pointing downwards that says “Go to the next level in the hierarchy”. Now only countries will be appearing in the visualization. To enable filtering by region, click the single arrow facing up that says “Drill up”. Now it be filtered by regions.

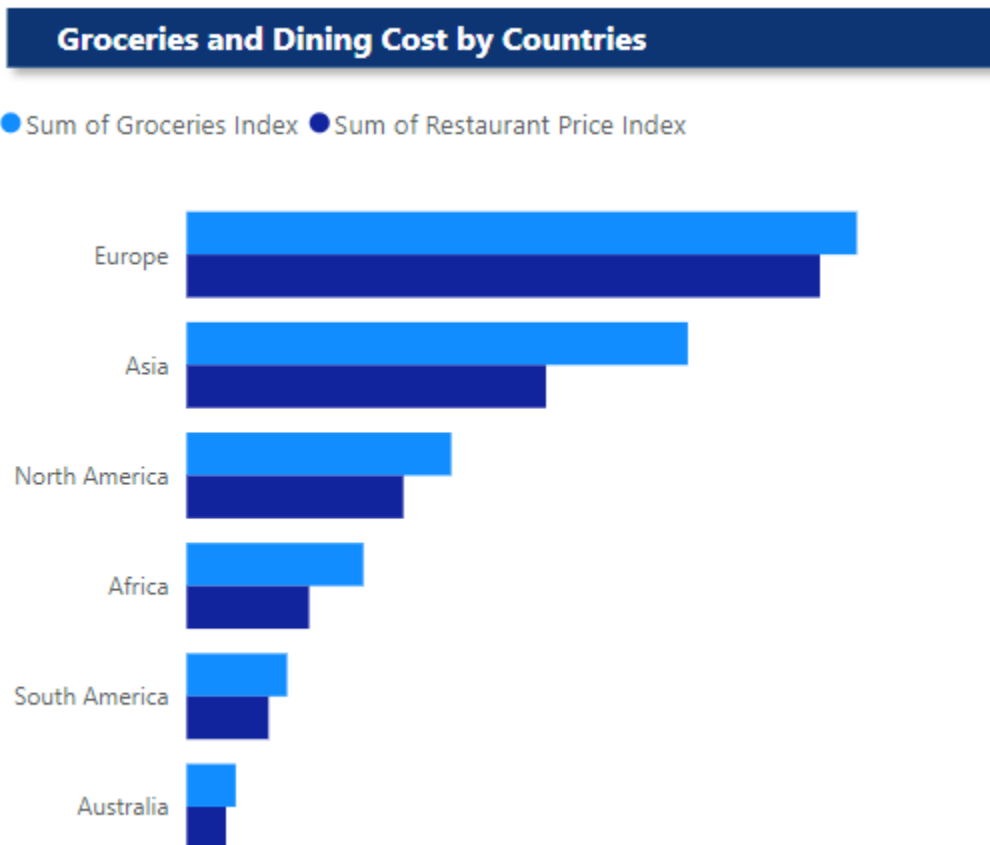


Figure 10-Visual 3 (Groceries and Dining cost by Countries)

Visual 4 (Countries with Affordable Rent)

This is another clustered bar chart that shows the countries with most affordable rent.

This visualization too uses a drilldown feature that filters countries into their respective regions. By selecting the regions user will be able to see the countries in their respective region. To remove the filtering by region, select the clustered bar chart and on the top right corner click on the two arrows pointing downwards that says “Go to the next level in the hierarchy”. Now only countries will be appearing in the visualization. To enable filtering by region, click the single arrow facing up that says “Drill up”. Now it be filtered by regions.

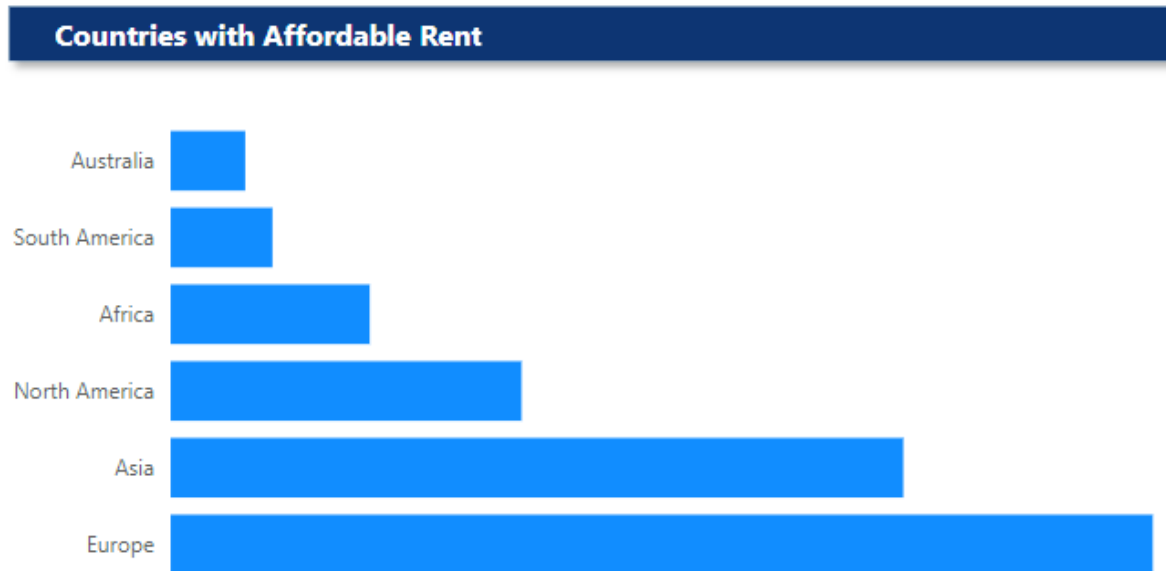


Figure 11-Visual 4 (Countries with Affordable Rent)

Insights

The slicer in this story board shows a range of 18.8 to 101.1 in the cost of living index. This slicer can be used to create a wide variation that will filters out countries that doesn't has a cost of living index within the range.

Countries like Kuwait, Oman, Bulgaria, and Poland offer very high purchasing power and comparatively low cost of living. This means the expats can enjoy a comfortable lifestyle without having very high expenses. Meanwhile countries like India and Malaysia has low cost of living on average but comparatively having fairly low purchasing power.

The grocery and dining index are very high in European countries indicating groceries and dining in Europe is very expensive. Meanwhile South America and Africa has the cheapest groceries and dining cost. Asia offer a balanced range of groceries and dining cost from countries having expensive to cheapest costs.

Recommendations

For expats with high budgets they consider moving to European countries where there is a high standard for living while cost conscious expats has to consider moving to South America or Africa.

Countries like Kuwait and Oman offer very high purchasing power balancing the cost of living. But expats who wishes to move to Europe but disassociate with the expensive western Europe can consider Bulgaria and Poland who has some of the highest purchasing power compared to cheaper living cost.

For tech and finance professional moving to countries like Kuwait and Oman is recommended due to low cost of living compared to high purchasing power. This means these professionals can enjoy higher salary while having an low cost of living.

Expats has to consider less spacious rentals or shared accommodation in Europe and some countries in Asia meanwhile in Africa and South America expats can get spacious rentals or even consider purchasing properties.

Storyboard 3 (Regional Cost of Living Trends)

This story board will help the managements to analyze the different regional living costs. This board is created using living cost and countries data. The visualizations used in this story board are filled maps.

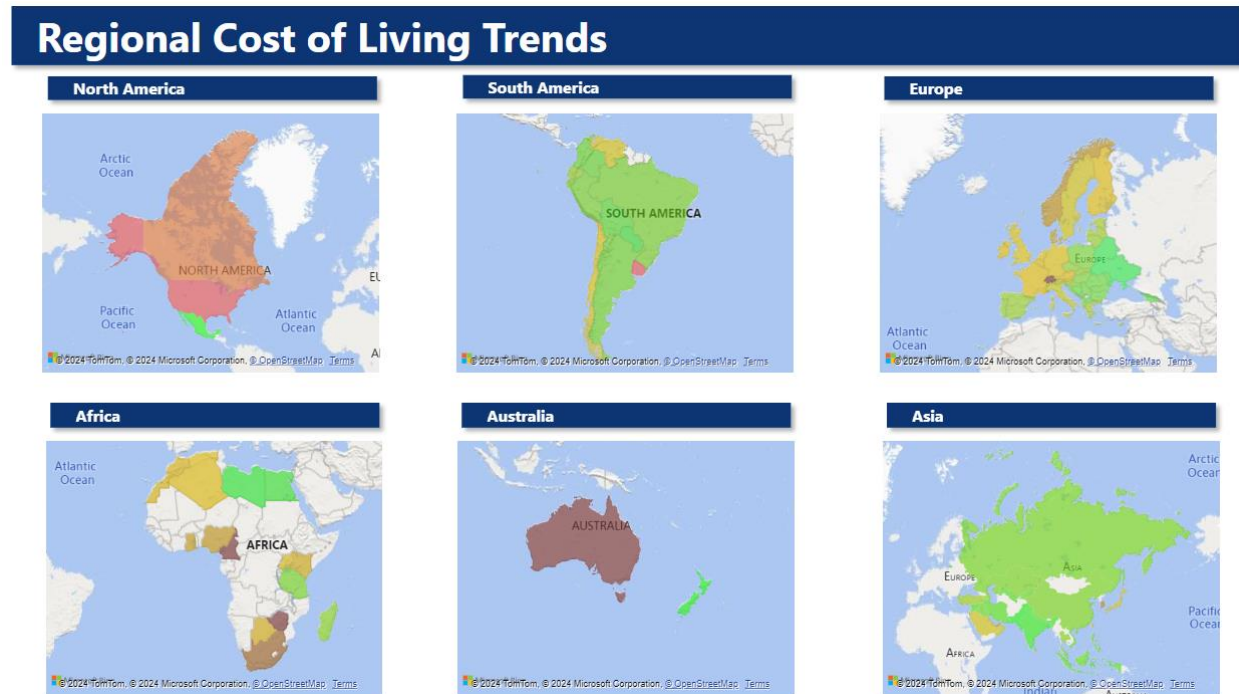


Figure 12-Storyboard 3 (Regional Cost of Living Trends)

Visual 1 (North America)

The visual shows the cost of living across North America. The filled map visual uses a colour gradient from green which has least living cost to red which has highest living cost.



Figure 13-Visual 1 (North America)

Visual 2 (South America)

The visual shows the cost of lining across South America. The filled map visual uses a colour gradient from green which has least living cost to red which has highest living cost.



Figure 14-Visual 2 (South America)

Visual 3 (Europe)

This is a filled map that shows living costs in the European region. The visual shows the cost across the countries in that region. The filled map visual uses a colour gradient from green which has least living cost to red which has highest living cost.

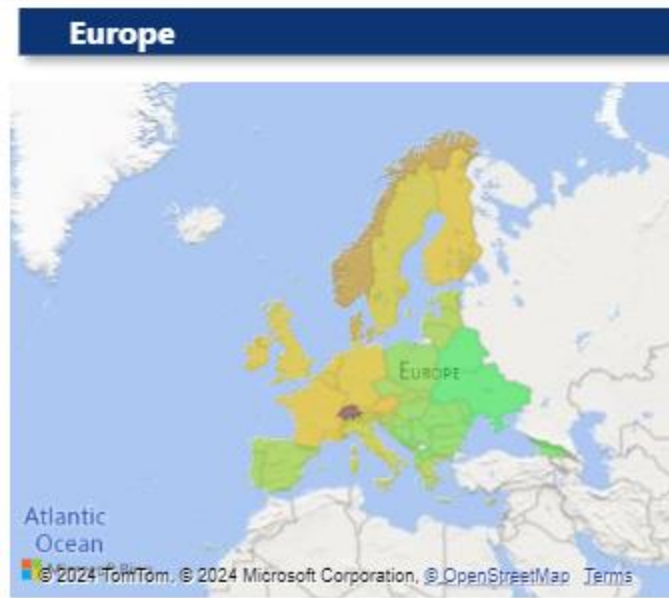


Figure 15-Visual 3 (Europe)

Visual 4 (Africa)

The visual shows the cost of living across Africa. The filled map visual uses a colour gradient from green which has least living cost to red which has highest living cost.

-Note-

The countries presented in white colour in African continent is because of no data collected by that nation.

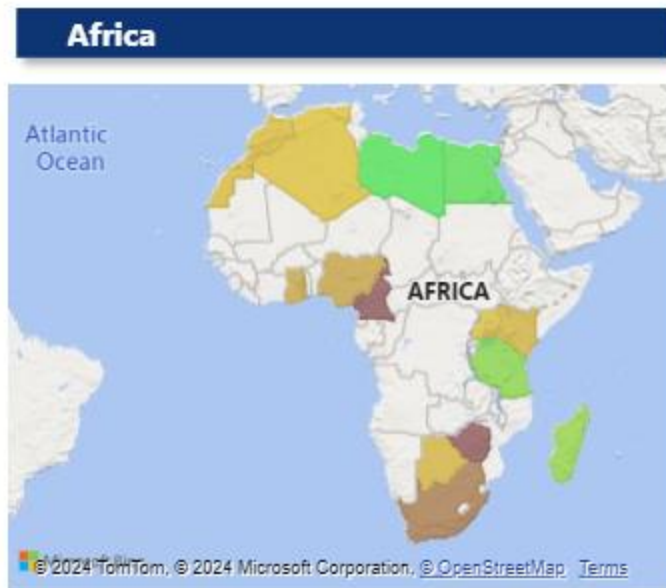


Figure 16-Visual 4 (Africa)

Visual 5 (Australia)

This is a filled map that shows living costs in the Australian region. The visual shows the cost of living in Australian. The filled map visual uses a colour gradient from green which has least living cost to red which has highest living cost.



Figure 17-Visual 5 (Australia)

Visual 6 (Asia)

The visual shows the cost of living across Asia. The filled map visual uses a colour gradient from green which has least living cost to red which has highest living cost.



Figure 18-Visual 6 (Asia)

Insights

The North American map shows the living costs of countries like United States of America and Canada is very high while Mexico is cheaper. Mexico is more affordable option in the North American Region.

The South American map shows yellowish green colour showing average cost of living in South American countries except for Uruguay.

The European map shows that northern and western European are expensive while southern and eastern European are relatively cheaper.

There isn't much data on Africa map but from available it seen the living cost varies from country to country.

The Asian map shows a large variety of countries from having the least expensive countries (Pakistan and India) and very few expensive countries.

Recommendations

High income professionals can consider living in North America by offsetting the higher cost of living. Budget conscious movers or retirees can choose Mexico for the proximity and cultural familiarity of US.

South America is a very tempting option for budget conscious movers.

In Europe the budget conscious movers can choose to move to eastern and southern Europe while those who's budget isn't a problem can move to western and northern Europe.

While in Africa, southern and western African countries are emerging market with unique opportunities. However potential move should consider the stability of the region. The northern and southern Africa offers more developed infrastructure and has higher living costs.

Australia is more suitable for individuals who wants a stable location to raise family where despite high cost of living.

Asia offers a diverse choice where south Asia is very affordable, Middle East for high infrastructure and tapping booming markets like India and China.

Storyboard 4 (Affordability for Digital Nomads)

This story board is created to help the Digital nomads who wants to move overseas. This board is created using living costs, purchasing power and rental cost. There are 4 visualizations in story board. They are two slicers, scatter chart clustered bar chart.

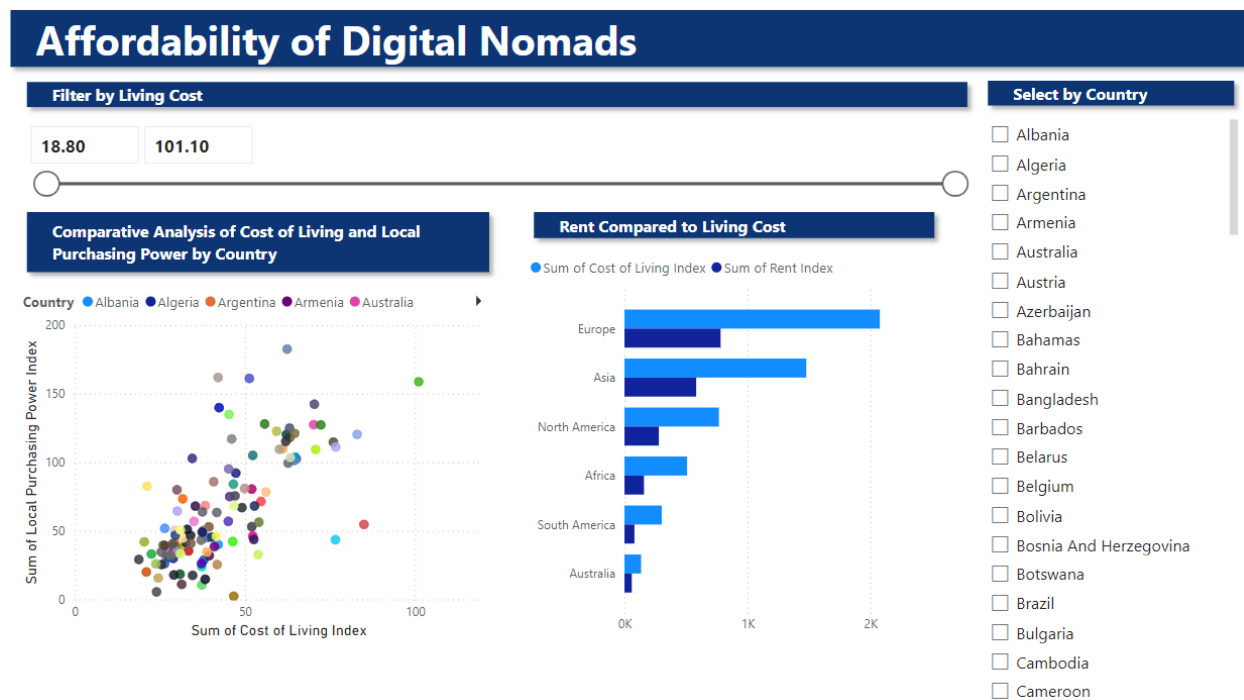


Figure 19-Storyboard 4 (Affordability for Digital Nomads)

Visual 1 (Filter by Living Cost)

This is a slicer that is used to filter other visuals (scatter chart, clustered bar chart and slicer) where by adjusting the slicers other visuals will include the countries that has a living cost within the range in the slicer.



Figure 20-Visual 1 (Filter by Living Cost)

Visual 2 (Comparative Analysis of Cost of Living and Local Purchasing Power by Country)

This is a scatter plot that plots a perfect analysis of countries with cost of living and local purchasing power.

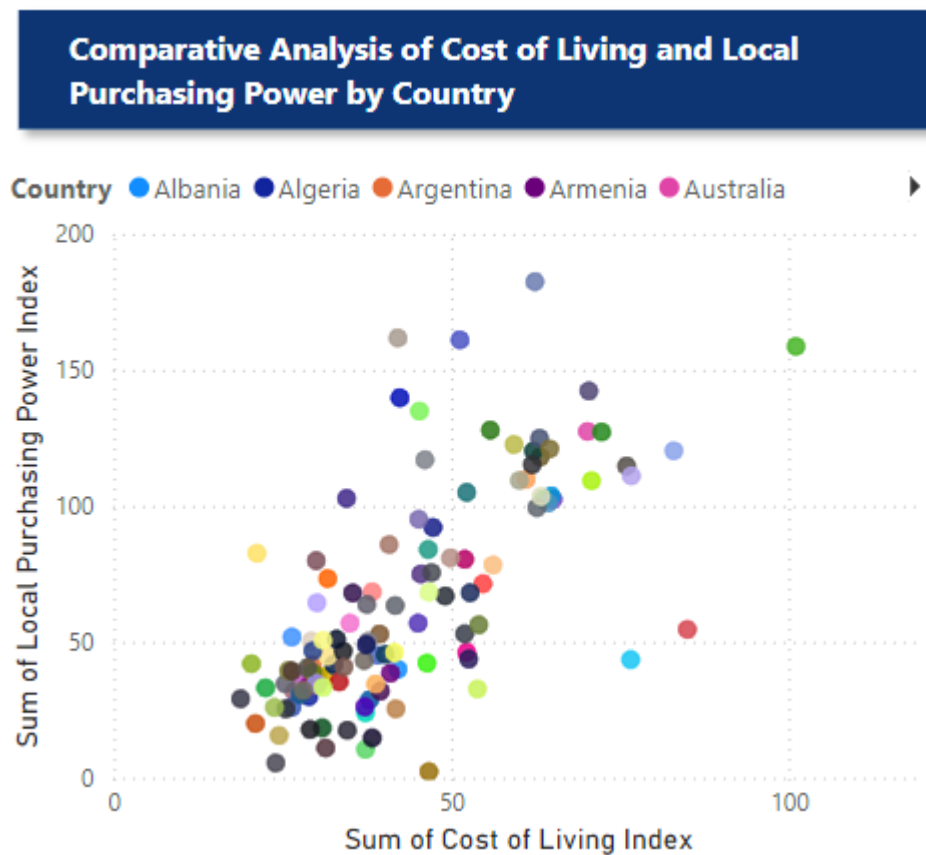


Figure 21-Visual 2 (Comparative Analysis of Cost of Living and Local Purchasing Power by Country)

Visual 3 (Rent Compared to Living Cost)

This is a clustered bar chart that shows of the rent along with living cost to give the viewer a comparison to these two data.

This visual uses a drilldown feature to show of regions and when a particular region is selected the countries of that regions appears. To remove the filtering by region, select the clustered bar chart and on the top right corner click on the two arrows pointing downwards that says "Go to the next level in the hierarchy". Now only countries will be appearing in the visualization. To enable filtering by region, click the single arrow facing up that says "Drill up". Now it be filtered by regions.

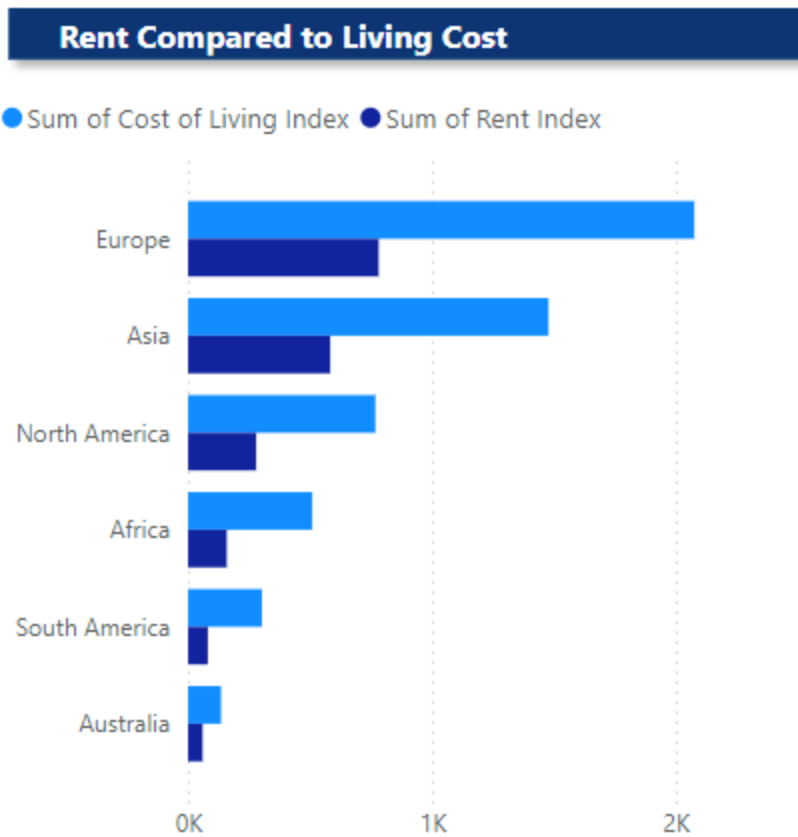


Figure 22-Visual 3 (Rent Compared to Living Cost)

Visual 4 (Select by Country)

This is a slicer that is used to filter other visuals (scatter chart, clustered bar chart and slicer) where by selecting the countries other visual will show relevant results.

Select by Country

- ☐ Albania
- ☐ Algeria
- ☐ Argentina
- ☐ Armenia
- ☐ Australia
- ☐ Austria
- ☐ Azerbaijan
- ☐ Bahamas
- ☐ Bahrain
- ☐ Bangladesh
- ☐ Barbados
- ☐ Belarus
- ☐ Belgium
- ☐ Bolivia
- ☐ Bosnia And Herzegovina
- ☐ Botswana
- ☐ Brazil
- ☐ Bulgaria
- ☐ Cambodia
- ☐ Cameroon

Figure 23-Visual 4 (Select by Country)

Insight

The two slicers tools allow user to filter data by either country or by living cost.

The scatter plot with countries high in y-axis and low in x-axis is favorable for expats since those countries have high purchasing power to low cost of living.

The bar chart show rent of regions (countries) compared to overall living expenses. Europe has the highest rental index compared to living cost. Asia offers a balanced index while Africa and South America seems to be more affordable and Australia been most affordable.

Recommendations

Expats should consider countries with high purchasing power while having a relatively low cost of living. Countries like Luxembourg in Europe and Kuwait and Qatar in Asia offers high purchasing power with relatively low cost of living.

While moving digital nomads has to consider rental costs like Europe when rent is higher, Asia where it is balanced and South America being the most affordable.

Budget conscious mover can filter by the living cost or region-specific movers can use select by country filter data about the countries they wish to move.

Storyboard 5 (Global Cost Analysis for Business Relocation)

This storyboard analysis the cost effectiveness of different countries for relocating the business. There are three visuals in this story board. This story board is built up with cost of living plus rent index, cost of living and countries.

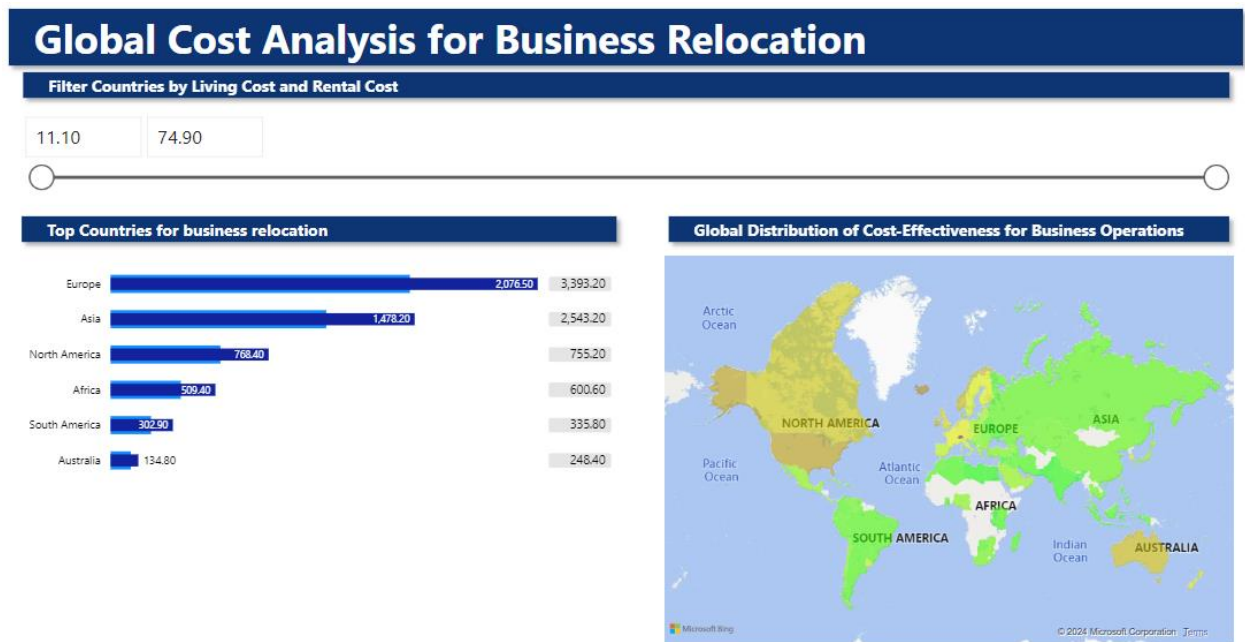


Figure 24-Storyboard 5 (Global Cost Analysis for Business Relocation)

Visual 1 (Filter Countries by Living Cost and Rental Cost)

This is a slicer that can be used to filter data in the other visuals (clustered bar chart and map). This slicer can be used to create a range by moving the 2 points at the end. This range will be used to filter data in the other two visualizations.



Figure 25-Visual 1 (Filter Countries by Living Cost and Rental Cost)

Visual 2 (Top Countries for business relocation)

This is a visual type is called “Horizontal bullet chart with label” is a custom visual from the Power BI custom visual library. This visual show the most desirable (cheap) nations to relocate the business. There is a label to the right corner of the bar in the visual which represents the living cost while the label on the end of the bar represents the cost of living plus rent.

This visual use drill down feature when countries are categorized into regions. To remove the filtering by region, select the clustered bar chart and on the top right corner click on the two arrows pointing downwards that says “Go to the next level in the hierarchy”. Now only countries will be appearing in the visualization. To enable filtering by region, click the single arrow facing up that says “Drill up”. Now it be filtered by regions

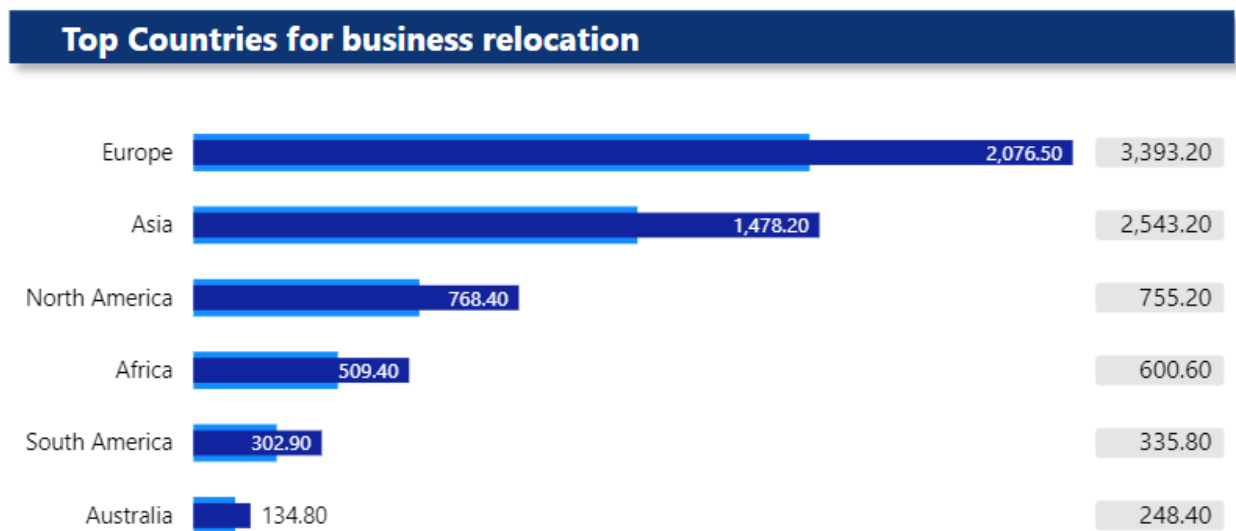


Figure 26-Visual 2 (Top Countries for business relocation)

Visual 3 (Global Distribution of Cost-Effectiveness for Business Operations)

This is a filled map that show countries in a range that most cost effective in darker green and least cost-effective countries in dark red colour. To present this colour gradient cost of living plus rent data is used.

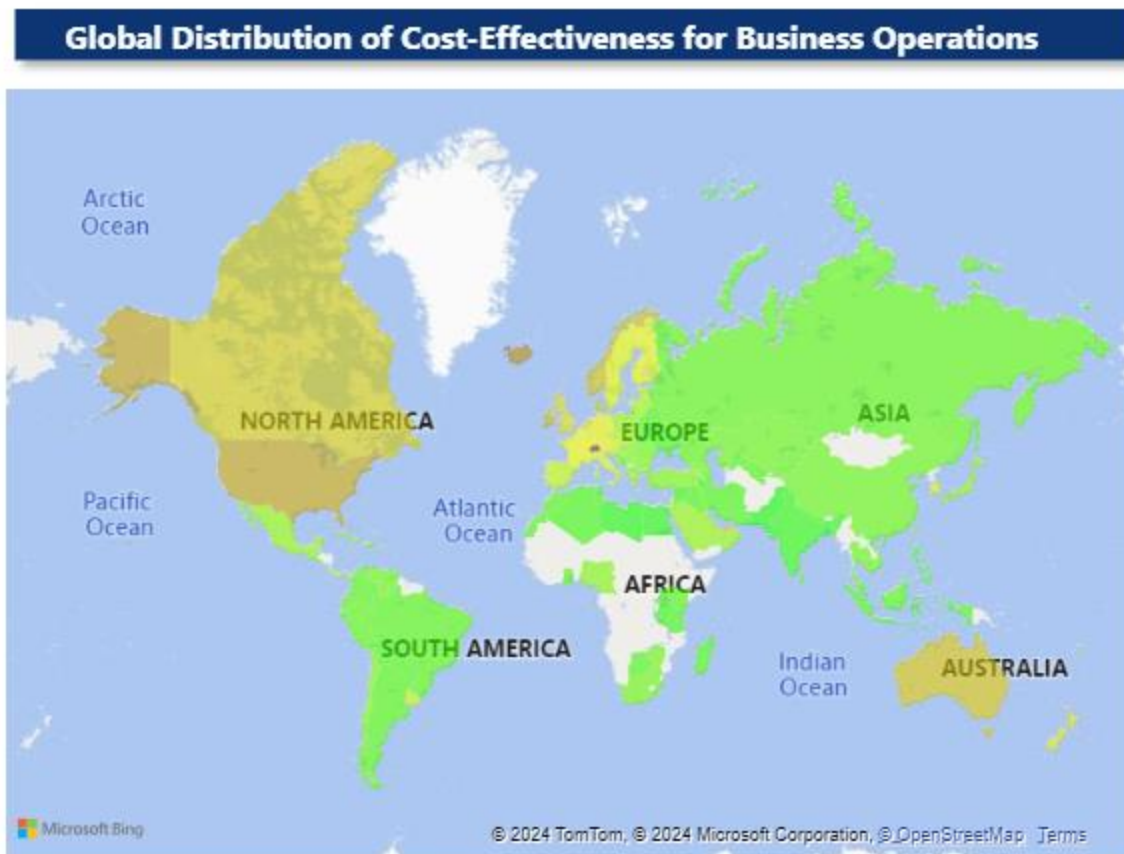


Figure 27-Visual 3 (Global Distribution of Cost-Effectiveness for Business Operations)

Insights

Europe and Asia seem to be better options for businesses to relocate considering their purchasing power and other costs. But business must consider their budgets which they can filter out by using the slicer option choosing a range. This will narrow down the countries that business can relocate for more sales or cheaper production. The map will show all the options of the countries available to relocate with a color gradient showing the most expensive to least expensive countries within the range.

Recommendations

Businesses should consider India, China as a viable option for affordable production while Kuwait, Qatar and Oman if their intention is to sell products due to these countries having higher purchasing power.

In Europe, the eastern region is cheaper in production while countries like northern Europe have high purchasing power.

Conclusion

The data-driven analysis of the Cost of Living index offers individuals and businesses to make informed decisions regarding moving. By understanding the economic situations of different regions, stakeholders can make uniform decisions that will help their finance, lifestyle and priorities.

Bibliography

Numbeo. (2024). *Numbeo*. Retrieved from <https://www.kaggle.com/datasets/myrios/cost-of-living-index-by-country-by-number-2024>