

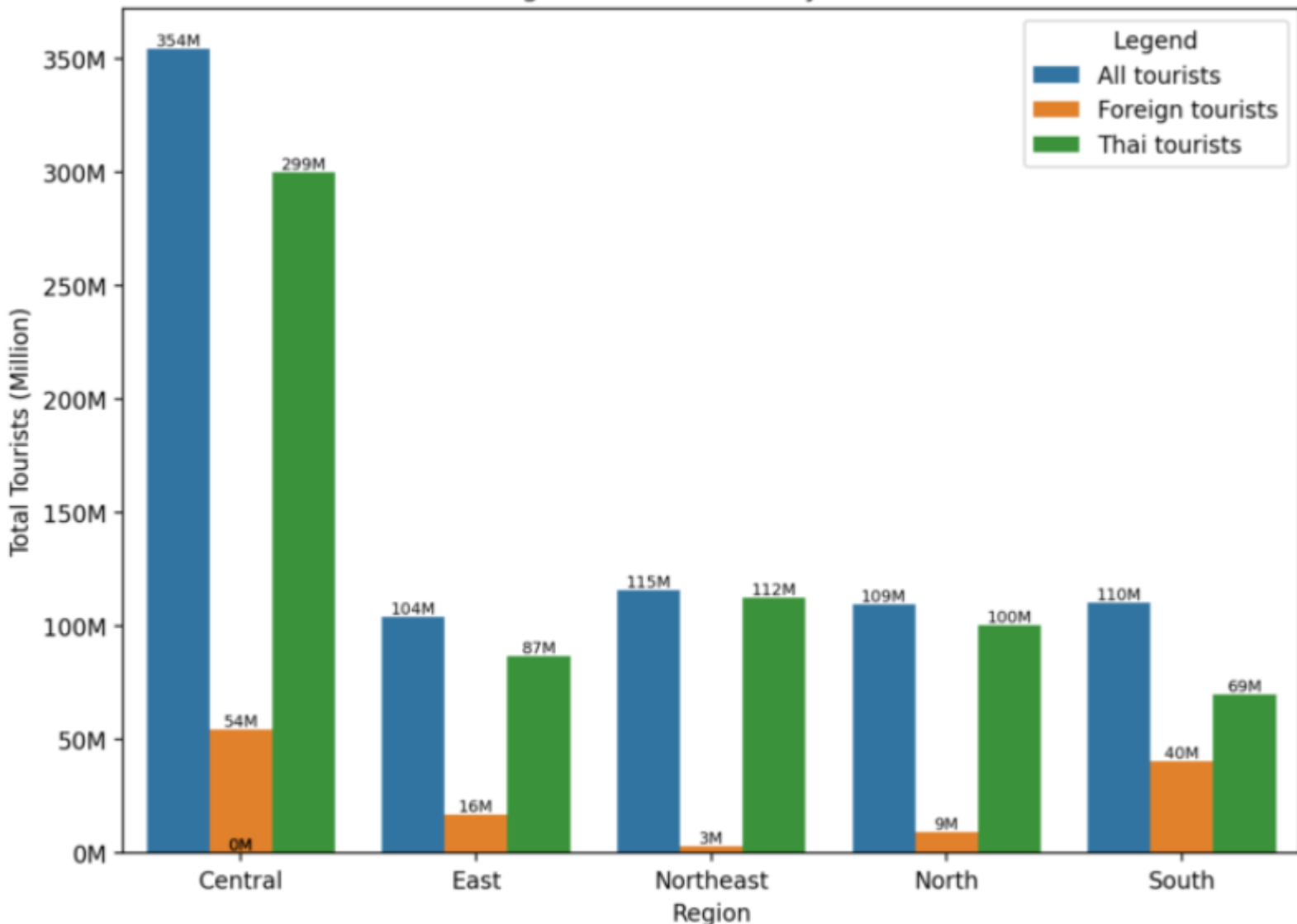
Thailand Domestic Tourism Analysis (2019-2022)

Overview

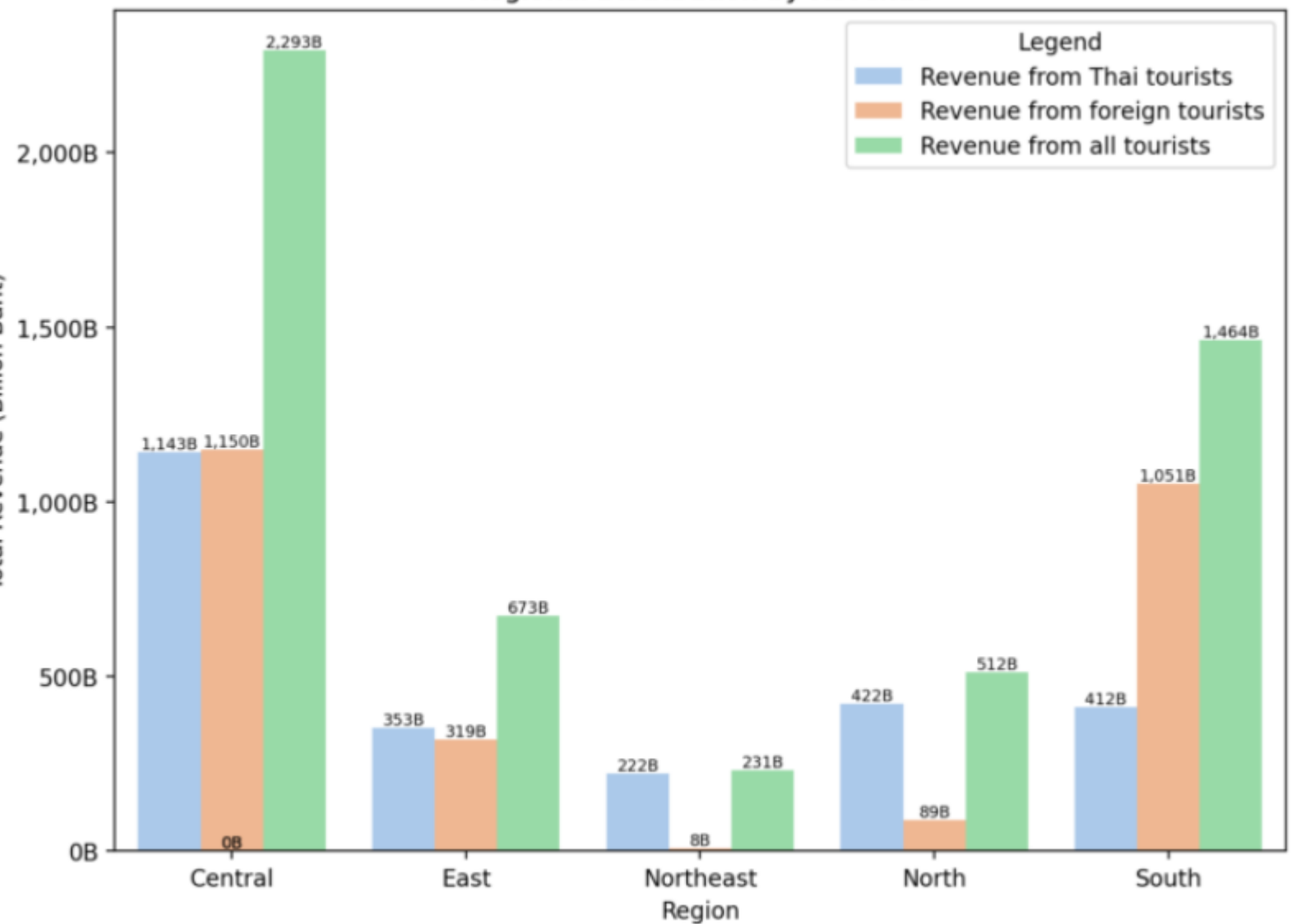
This project aims to analyze domestic tourism statistics in Thailand from January 2019 to February 2023 using data science techniques. This project will explore insights related to the number of tourists, occupancy rates, and profits generated by tourism across different provinces. Additionally, we will categorize the data by the nationality of tourists, differentiating between Thai and foreign visitors.

Regional Distribution

Regional distribution by tourists



Regional distribution by revenue



Insights

There's a significant gap between the central region and others in terms of tourist attraction and revenue generation, indication potential for development in other regions..

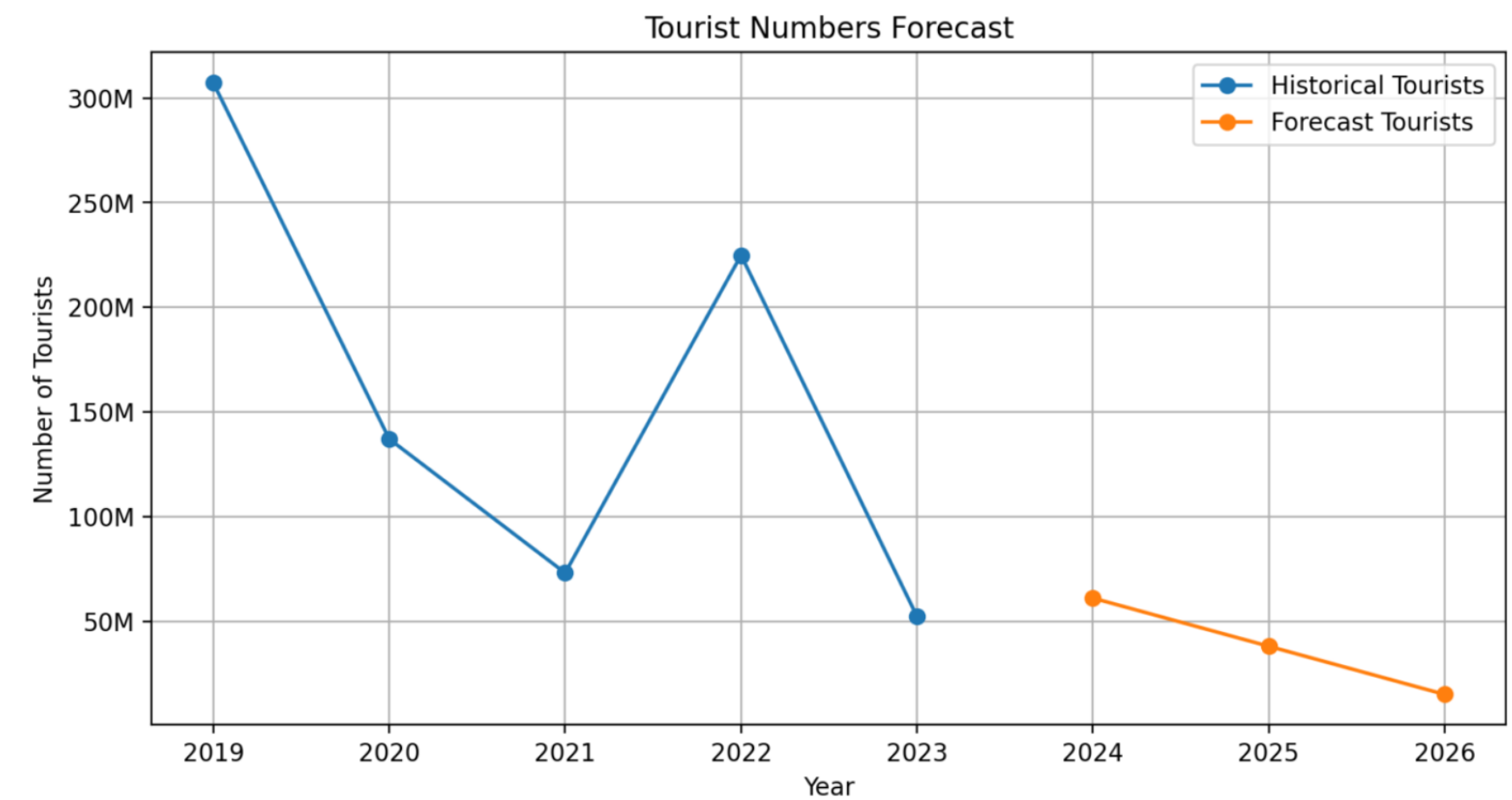
Key Insights

- The COVID-19 pandemic caused a significant drop in tourist numbers and revenue in 2020 and 2021.
- A recovery trend is observed starting from 2022, with varying rates across regions.
- Some regions have shown faster recovery rates than others, potentially due to domestic tourism preferences or local policies.
- The top provinces by tourist numbers in the latest year may indicate shifting travel patterns post-pandemic.
- Overall, the tourism industry has not yet fully recovered to pre-pandemic levels, but shows signs of improvement.

Covid Recovery: Tourism Trends and Forecast

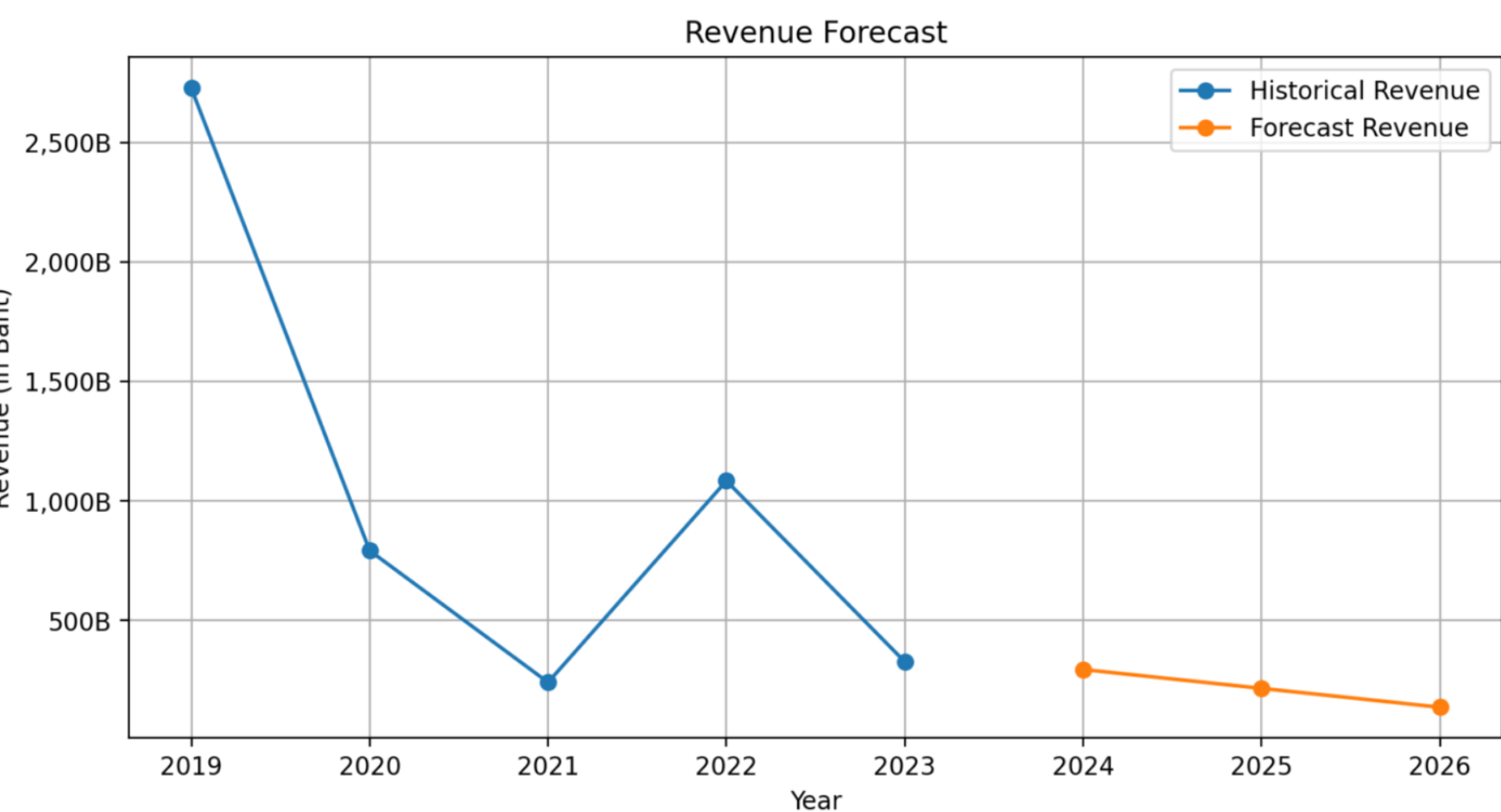
Uses Exponential Smoothing for accurate time-series forecasting.

Tourist Numbers Forecast



Shows a declining trend for 2024–2026 after a partial recovery in 2023.

Revenue Forecast



Reflects similar dynamics, with revenues stabilizing at lower levels compared to pre-pandemic highs.

OpenAI Integration

Prompt

Analyze the following tourism data and provide insights: Total tourists by region: `{tourists_by_region.to_dict()}` Total revenue by region: `{revenue_by_region.to_dict()}` Yearly tourist numbers: `{yearly_data['no_tourist_all'].to_dict()}`

AI-Powered Insights

- The central region of Thailand attracts the highest number of tourists, with over 354 million visitors. This region also generates the highest revenue, totaling over 2.29 trillion baht. This indicates that the central region is a key tourism hub in Thailand.
- The east and south regions also attract a significant number of tourists, with over 104 million and 110 million visitors respectively. However, the south region generates much higher revenue compared to the east region. This could be due to the popularity of beach destinations in the south such as Phuket and Krabi.
- The east-northeast region attracts a moderate number of tourists, but its revenue is relatively low compared to other regions. This suggests that there may be untapped potential for growth in this region, and efforts could be made to promote and develop tourism infrastructure to increase revenue.
- The tourism industry in Thailand experienced a significant drop in tourist numbers in 2020, likely due to the impact of the COVID

Recommendations

- Focus on promoting domestic tourism in regions with slower recovery rates.
- Investigate successful strategies employed by fast-recovering regions and provinces.
- Develop targeted marketing campaigns for top-performing provinces to maintain their appeal.
- Implement safety measures and communicate them effectively to boost traveler confidence.
- Consider developing new tourism products or experiences that cater to changed traveler preferences post-pandemic.

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Repository: <https://github.com/myajali/dads5001-tourism-ai>